

## Appendix 2: Hospitals databases: characteristics and coverage

This appendix includes information on the National Hospital Morbidity Database, the National Public Hospital Establishments Database, the National Elective Surgery Waiting Times Data Collection, the National Non-admitted Patient Emergency Department Care Database and the National Outpatient Care Database. Also included is information on the hospitals contributing to each of the databases.

### Public and private hospitals

There is some variation between jurisdictions in whether hospitals that predominantly provide public hospital services, and that are privately owned and/or operated, are reported as public or private hospitals. A selection of these hospitals is listed in Table A2.1 with information on whether they are reported as public or private hospitals. These categorisations are the practices used for this report, and reports produced by other agencies may categorise these hospitals differently.

For example, Peel and Joondalup hospitals are private hospitals that predominantly treat public patients under contract to the Department of Health (Western Australia). From 2006–07, two new reporting units (public hospitals) were created to cover the public health services of these two hospitals, whereas in previous years all activity was reported for the private hospitals. The Hawkesbury District Health Service was categorised as a private hospital in *The state of our public hospitals, June 2005 report* (DoHA 2005) and *Australian hospital statistics 2002–03* (AIHW 2004a). However, it has been categorised as a public hospital in AIHW reports since 2003–04 and in *The state of our public hospitals*, since the June 2006 report (DoHA 2006).

**Table A2.1: Selected hospitals included in this report that predominantly provide public hospital services that were privately owned and/or operated, 2008–09**

Hospital	How reported
Hawkesbury District Health Service, NSW	Public hospital
Mildura Base Hospital, Victoria	Public hospital
Noosa Hospital, Qld	Public hospital
Joondalup Hospital, WA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
Peel Hospital, WA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
Southern Districts War Memorial Private Hospital, SA	Public hospital for services provided under the contract and a private hospital for services provided to private patients
May Shaw District Nursing Centre, Tas	Public hospital
Toosey Hospital, Tas	Public hospital
Mersey Community Hospital	Private hospital for admitted patient data; included with public hospitals for elective surgery waiting times, emergency department, outpatient care and other non-admitted patient care.

Other changes in hospital ownership or management arrangements can also affect whether hospital activity is reported as public or private. For example, between 2003–04 and 2004–05, two private hospitals in Western Australia were purchased by the Western Australian Department of Health and were amalgamated with two existing public hospitals. Hence, the activity associated with the former private hospitals is now included in the activity reporting of the two public hospitals.

## **Mersey Community Hospital**

The Mersey Community Hospital in Tasmania, was a public hospital from 2004–05 until the end of October 2007. It was taken over by the Australian Government in November 2007, predominantly providing public hospital services between November 2007 and June 2009. Mersey Community Hospital was reported as a private hospital in this report for that period, however, data for elective surgery waiting times, emergency department, outpatient care and other non-admitted patient services are included with data for Tasmanian public hospitals. This reflects the fact that the Mersey Community Hospital maintained elective surgery waiting lists for its patients and provided emergency department, outpatient care and other non-admitted patient services, as public hospitals do.

## **The National Hospital Morbidity Database**

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals. The database contains data relating to admitted patients in almost all hospitals, including 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).

The data supplied are based on the National Minimum Data Set (NMDS) for Admitted patient care and include demographic, administrative and length of stay data, and data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning.

Information on the quality of the diagnosis, procedure and external cause data, classified using the sixth edition of the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) (NCCH 2008) is presented in *Appendix 1*.

## **NHMD data for this report**

The data presented in this report are for patients treated between 1 July 2008 and 30 June 2009. Almost all public hospitals were included for 2008–09. The exception was a mothercraft hospital in the Australian Capital Territory. Western Australia estimated that about 3,000 separations were not reported to the NHMD. Table A2.2 presents a summary of the coverage of the NHMD by state and territory (accompanying this report on the CD and Internet at <[www.aihw.gov.au](http://www.aihw.gov.au)>).

The great majority of private hospitals were also included. Most of the private facilities that did not report to the NHMD were free-standing day hospital facilities. For 2008–09, data were not provided for private day hospital facilities in the Australian Capital Territory and the Northern Territory, and for a small private hospital in Victoria. Victoria estimated that its data were essentially complete. Counts of private hospital separations presented in this report are therefore likely to be underestimates of the actual counts.

Tables A2.3 and A2.4 (accompanying this report on the Internet at <www.aihw.gov.au>) list the public and private hospitals that contributed to the NHMD for 2008–09. For public hospitals, also included in the Internet tables is information on their average available bed numbers, their peer group (see *Appendix 1*) and the statistical local area and remoteness area of their location. The list of private hospitals includes information on whether each was a private free-standing day hospital facility.

There is some variation between states in what is regarded as a hospital, how facilities are licensed and how this affects the collection. For example between 2001 and 2002–03, the coverage of the Queensland and Victorian collections expanded to include private facilities providing same-day services. The apparent increase for some types of separations in the private sector was affected by the registration of relevant facilities as hospitals for the first time in Queensland in 2001 and in Victoria in 2002–03. These facilities had previously been categorised as non-hospital facilities and were therefore out of scope for the NHMD.

### Coverage estimates for private hospital separations

As noted above, not all private hospital separations are included in the NHMD, so the counts of private hospital separations presented in this report may be slight underestimates.

Over recent years, at the national level there have been slightly fewer separations reported to the NHMD (particularly for private free-standing day hospital facilities) than to the Australian Bureau of Statistics (ABS) Private Health Establishments Collection (ABS 2010) (Table A2.5). 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 2008–09, the difference was 107,563 separations (3.3%).

**Table A2.5: Differences between private hospital separations on the NHMD and reported to the ABS Private Health Establishments Collection, 2004–05 to 2008–09**

Year	Private free-standing day facilities		Other private hospitals		Total	
	Separations	Per cent	Separations	Per cent	Separations	Per cent
2004–05	1,214	0.2	40,286	1.8	39,072	1.4
2005–06	32,437	5.9	46,457	2.0	78,894	2.8
2006–07	60,852	10.7	48,316	2.0	109,168	3.7
2007–08	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2008–09	36,102	5.0	71,461	2.8	107,563	3.3

Note: Private Health Establishments Collection data were not collected for 2007–08.

Source: ABS Private Health Establishments Collection data (PHEC) and National Hospital Morbidity Database (NHMD).

For individual states (tables A2.6a to A2.6o accompanying this report on the CD and Internet at <www.aihw.gov.au>), the patterns of differences between number of separations reported to the NHMD compared with the ABS Private Health Establishments Collection varied. This

reflects the omission of some private hospitals from the NHMD. However, there are differences even when both collections are reported to be complete. The discrepancies may have been due to the use of differing definitions (for example, differing counting rules for *Newborn* episodes of care) or different interpretations of definitions, differing definitions of what is a hospital, or differences in the quality of the data provided for different purposes.

## **The National Public Hospital Establishments Database**

The National Public Hospital Establishments Database (NPHEd) 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 covers hospitals within the jurisdiction of the state and territory health authorities only. Hence, public hospitals not administered by the state and territory health authorities (hospitals operated by the Department of Health and Ageing, Department of Defence or correctional authorities, for example, and hospitals located in offshore territories) are not included. Public hospitals are categorised by the AIHW into peer groups, as described in *Appendix 1*.

The collection is based on the NMDS for Public hospital establishments. Information is included on hospital resources (beds, staff and specialised services), recurrent expenditure (including depreciation), non-appropriation revenue and services to non-admitted patients. Summary information on data quality and comparability is presented in *Chapter 4*.

### **NPHEd data for this report**

Essentially all public hospitals were included for 2008–09. Table A2.2 (accompanying this report on the Internet) lists the public hospitals that contributed to the NPHEd for 2008–09. 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 Non-admitted Patient Emergency Department Care Database**

The National Non-admitted Patient Emergency Department Care Database (NNAPEDCD) is a compilation of episode-level data for emergency department presentations in public hospitals. The database is based on the NMDS for Non-admitted patient emergency department care, as defined in the *National health data dictionary, version 14* (HDSC 2008). It includes data on the type and length of emergency department visit, triage category, waiting times, patient demographics, arrival mode and episode end status.

The NNAPEDCD covers public hospitals that were classified as peer groups A (*Principal referral and Specialist Women's and children's hospitals*) and B (*Large hospitals*) in *Australian hospital statistics 2007–08* (AIHW 2009a). The peer group classification was developed for the cost per casemix-adjusted separation analysis based on admitted patient activity (see *Appendix 1*). The use of this classification as an interim measure to define the scope of this

collection is under review. Data were also provided by some states and territories for hospitals in peer groups other than A and B, as described below.

## **NNAPEDCD data for this report**

The data presented in this report are for patients completing an episode in an emergency department between 1 July 2008 and 30 June 2009.

For 2008–09, all states and territories were able to provide data for all public hospitals in peer groups A and B that have emergency departments.

Some states and territories also provided episode-level data for public hospitals that were classified to peer groups other than A or B, and these data have been included in this chapter. Data were also provided for:

- 19 *Medium hospitals*, 17 *Small hospitals* and 6 *Unpeered/Other hospitals* in New South Wales
- 6 *Medium hospitals* in Victoria
- 4 *Medium hospitals* in Queensland
- 3 *Medium hospitals* and 2 *Small remote acute hospitals* in Western Australia
- 1 *Medium hospital* in South Australia
- 1 *Medium hospital* in Tasmania
- 3 *Small remote acute hospitals* in the Northern Territory.

The data reported for Tasmania included data for the Mersey Community Hospital.

The estimated overall coverage was 80% of all public hospitals accident and emergency occasions of service, including the Mersey Community Hospital.

Summary information on the quality and comparability of the data is included in *Chapter 5*.

The list of public hospitals that contributed to the NPHEd (Table A2.4 accompanying this report on the Internet) includes information on which hospitals were also included in the NNAPEDCD for 2008–09.

All states and territories provided hospital-level data on accident and emergency occasions of service for the NPHEd. These data have wider coverage than data provided for the NNAPEDCD, as detailed in *Chapter 5*.

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

The National Elective Surgery Waiting Times Data Collection (NESWTDC) provides episode-level data on patients waiting for elective surgery on waiting lists managed by public acute hospitals.

The data supplied are based on the NMDS for Elective surgery waiting times (removals and census), as defined in the *National health data dictionary, version 14* (HDSC 2008). Included is information on the length of time waited, the surgical specialty and indicator procedures. For some states and territories, the data are provided linked to the NHMD data on the admitted patient episode of care for which the patient was waiting. Elective surgery census data are not reported in *Australian hospital statistics*.

## NESWTDC data for this report

The data presented in this report are for patients admitted for elective surgery between 1 July 2008 and 30 June 2009.

As noted above, the data collection covers public acute hospitals. However, some public patients treated under contract in private hospitals in Victoria and Tasmania were also included. In addition, data for the Mersey Community Hospital are included with the Tasmanian data.

All public hospitals that undertake elective surgery are generally included, but some are not. Based on the proportions of elective surgery admissions that were covered by the NESWTDC, national coverage was about 91%, and ranged from 99% in Queensland, 98% in New South Wales, Australian Capital Territory and South Australia to about 72% in Tasmania. Coverage for Victoria, Northern Territory and Western Australia was 83%, 81% and 75% respectively. Coverage was highest for *Principal referral and Specialist women's and children's hospitals* at 100%, and progressively lower for the *Large hospitals* and *Medium hospitals* groups (see Table S5.2).

The list of public hospitals that contributed to the NPHEd (Table A2.4 accompanying this report on the Internet) includes information on which hospitals were also included in the NESWTDC for 2008–09.

## The National Outpatient Care Database

The National Outpatient Care Database (NOCD) includes counts of individual occasions of service and group sessions by outpatient clinic type for selected public hospitals.

The data supplied are based on the NMDS for Outpatient care, as defined in the National health data dictionary, version 14 (HDSC 2008). They include data on the number of individual occasions of service and group sessions, by clinic type and establishment.

The scope for the Outpatient care NMDS for 2008–09 was for services provided to non-admitted, non-emergency patients registered for care in outpatient clinics of public hospitals that were classified as either peer group A (*Principal referral and specialist women's and children's hospitals*) or B (*Large hospitals*) in *Australian hospital statistics 2007–08* (AIHW 2009a).

## NOCD data for this report

The data presented in this report are for patients treated between 1 July 2008 and 30 June 2009. Summary information on the quality and comparability of the data is included in Chapter 6.

For 2008–09, all states and territories were able to provide summary data to the NOCD for all public hospitals in peer groups A and B that managed outpatient clinic services. Some states and territories also provided outpatient care data for public hospitals which were classified to other peer groups, and these data have been included in this chapter:

- New South Wales provided data for two *Medium hospitals*
- Victoria provided data for one *Medium hospital*
- Western Australia provided data for six *Medium hospitals*, two *Small remote acute hospitals*, one *Small non-acute hospital* and one *Mothercraft hospital*

- South Australia provided data for one *Medium hospital*
- Tasmania provided data for 1 *Medium hospital*, the Mersey Community Hospital.

Coverage was about 79% of individual public hospital outpatient clinic occasions of service overall and about 63% for group occasions of service (including the Mersey Community Hospital).

The list of public hospitals that contributed to the NPHEd (Table A2.4 accompanying this report on the Internet) includes information on which hospitals were also included in the NOCD for 2008–09.

All states and territories also provided hospital-level data on outpatient clinic occasions of service for the NPHEd. These data have wider coverage than data provided for the NOCD, as detailed in *Chapter 6*.