

1 Introduction

Australian Hospital Statistics 1997–98 follows the Australian Institute of Health and Welfare's (AIHW's) earlier Hospital Utilisation and Costs Study reports and the most recent report in this series, *Australian Hospital Statistics 1996–97* (AIHW 1998a).

The data were supplied to the Institute by the State and Territory health authorities, and by the Department of Veterans' Affairs for the hospital it operated in New South Wales until September 1997. Data were of two main types. The first, collated by the Institute as the National Public Hospital Establishments Database, included information about public hospitals, their resources, expenditure and revenue, and summary information on services provided to admitted and non-admitted patients. The second type, collated as the National Hospital Morbidity Database, was patient-level data on the diagnoses and other characteristics of admitted patients in both public and private hospitals, and on the hospital care they received.

The collection and reporting of the data in this report were undertaken by the Institute under the auspices of the Australian Health Ministers' Advisory Council through the National Health Information Agreement. Most of the data collected were as specified in the National Minimum Data Set for Institutional Health Care and data element definitions were as specified for 1997–98 in the *National Health Data Dictionary, Version 6.0* (National Health Data Committee 1997).

This report

This report summarises 1997–98 data reported to the National Public Hospital Establishments Database and the National Hospital Morbidity Database. This chapter describes the two databases and briefly discusses their overall limitations. It also includes a note about the availability of this report and additional data on the Internet.

Chapter 2 presents hospital performance indicator data, drawn from both the databases and a number of other sources. This information was spread through a number of chapters in *Australian Hospital Statistics 1996–97* but has been consolidated into one chapter for this report. The indicators are those that have been developed by and published in previous years in reports of the National Health Ministers' Benchmarking Working Group (NHMBWG) and have also been adopted by the Steering Committee for the Review of Commonwealth/State Service Provision (SCRCSSP).

Chapter 3 summarises other data on public hospitals, mainly from the National Public Hospital Establishments Database. Chapters 5 to 10 present a range of patient-based information from the National Hospital Morbidity Database. Chapter 4 uses both databases to provide an overview of activity in Australian hospitals based on establishment characteristics.

In all chapters, unless otherwise specified:

- the Department of Veterans' Affairs hospital in New South Wales and the public psychiatric hospitals are included in the public hospital (public sector) category; and
- private psychiatric hospitals and private free-standing day hospital facilities are included in the private hospital (private sector) category.

The appendixes provide more detailed technical notes on the data and analyses than are included in the chapters. Summary information from the Department of Health and Aged Care's 1997–98 National Hospital Cost Data Collection is provided in Appendix 8. This Collection is the source of Australian National Diagnosis Related Group (AN-DRG) cost weight and average cost information used in Chapters 2, 4, 5 and 10.

The National Public Hospital Establishments Database

The National Public Hospital Establishments Database holds a record for each public hospital in Australia. It is collated from the routine administrative collections of public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all States and Territories. The hospital operated in New South Wales until September 1997 by the Department of Veterans' Affairs is also included.

Exceptions within the public sector are hospitals not within the jurisdiction of the State and Territory health authorities (for example, hospitals run by correctional authorities in some jurisdictions and those in off-shore territories). In addition, some records in the Database represent part-year or part-reported data.

Information is included on hospital resources (beds, staff and specialised services), recurrent expenditure, non-appropriation revenue and services to admitted and non-admitted patients. Data on capital expenditure and depreciation are also collected for each jurisdiction. The collection is based on the establishment-level activity and resource data elements, and the system-level data elements, of the National Minimum Data Set for Institutional Health Care.

Validation processes for 1997–98 data involved detailed consultation by the Institute with data providers in each State and Territory, to ensure data quality. Nevertheless, the collection does have some limitations and missing values; although the data collections are based on national data item definitions, in some cases the actual definitions used may have varied among the States and Territories.

The National Hospital Morbidity Database

The National Hospital Morbidity Database is a compilation of electronic summary records collected in admitted patient morbidity data collection systems in Australian hospitals. Data relating to admitted patients in almost all hospitals are included: public acute hospitals, public psychiatric hospitals, private acute hospitals, private psychiatric hospitals and private free-standing day hospital facilities.

- Exceptions within the public sector were hospitals not within the jurisdiction of a State or Territory health authority or the Department of Veterans' Affairs (hospitals operated by the Department of Defence, for example, and hospitals located in off-shore territories). In addition, data were not supplied for some lodges attached to public hospitals in Western Australia, a mothercraft hospital in the Australian Capital Territory, one small 'outpatient clinic' in Queensland and most separations for three small district hospitals in Tasmania.
- In the private sector, exceptions were the one private hospital in the Northern Territory, the private free-standing day hospital facilities in the Australian Capital Territory, about 4500 New South Wales private hospital separations and, in Tasmania, two private free-standing day hospital facilities and one small former public hospital which has recently been privatised.

The data supplied for the National Hospital Morbidity Database were based on the patient-level data items of the National Minimum Data Set for Institutional Health Care. They include demographic, administrative and length of stay data, and data on the diagnoses of the patient, the procedures they underwent in hospital and external causes of injury and poisoning. A process of validation of the morbidity database was jointly undertaken by the Institute and the data providers to ensure data quality. When data were supplied using non-standard definitions or classifications, the Institute mapped them to the *National Health Data Dictionary* definitions, where possible, in collaboration with the data providers.

Records for hospital boarders were removed from the database, in consultation with the data providers, as they are not admitted patients. Records for separations of unqualified neonates (see Glossary) were supplied by all data providers and included in the database. However, as they do not meet admission criteria for all purposes, they have been excluded from this report, except where specified. The exception was for the private hospitals in the Australian Capital Territory, for which unqualified neonates were not able to be identified.

Records for 1997–98 are for hospital separations (discharges, transfers, deaths or changes in type of episode of care) in the period 1 July 1997 to 30 June 1998. Data on patients who were admitted on any date before 1 July 1998 are included, provided that they also separated between 1 July 1997 and 30 June 1998. A record is included for each separation, not for each patient, so patients who separated more than once in the year have more than one record in the database.

Limitations of the data

The major variations from the *National Health Data Dictionary* definitions, substantial differences in scope, the effects of different populations and other major impacts on data quality have been noted within appropriate sections of this report. These general notes should also be used to guide interpretation of the data.

- Although the *National Health Data Dictionary* definitions form the basis of the two databases, the actual definitions used may have varied among the data providers and from one year to another. In addition, fine details of the scope of the data collections may vary from one jurisdiction to another. Comparisons between the Databases, the States and Territories, reporting years and hospital sectors should therefore be made with reference to the accompanying notes.
- Not all private hospital separations are included in the National Hospital Morbidity Database so the counts of private hospital separations presented in this report are likely to be slight underestimates of the actual counts. In 1996–97, the National Hospital Morbidity Database reported 80,695 (4.6%) fewer separations than the Australian Bureau of Statistics' Private Health Establishments Collection, which has wider coverage. This discrepancy is described further in Appendix 3.
- Each State and Territory has a particular demographic structure that differs from other jurisdictions. Population factors such as age and Indigenous status can have a substantial effect on the nature of health care delivery amongst jurisdictions. For example, the average length of stay in hospital, or the frequency of different procedures, can be affected by the demographic composition of the population in a particular region or jurisdiction.
- Although data on separations from the National Hospital Morbidity Database can reflect an aspect of the burden of disease in the community, they do not usually provide measures of the incidence or prevalence of conditions. This is because not all persons with a type or degree of illness are treated in hospital and the number and pattern of

hospitalisations can be affected by differing admission practices, differing levels and patterns of service provision and multiple admissions for some chronic conditions, in addition to the differing patterns of morbidity in the population.

This report and additional data on the Internet

This report is available on the Internet in PDF format at

<http://www.aihw.gov.au/publications/health/ahs97-8.html>

This site also includes additional data from the National Hospital Morbidity Database, in Excel spreadsheets. The spreadsheets provide tables that present further detail on diagnoses, procedures and AN-DRGs, version 3.1 for admitted patients. A short time after this report is published, tables of data on the Australian Refined Diagnosis Related Groups (AR-DRGs), version 4.0 for 1997–98 separations, will also be available on the Internet site. More information about the Internet tables is in Chapters 7, 8 and 10 and Appendix 1.