

1 Introduction

Australian hospital statistics 2007–08 continues the Australian Institute of Health and Welfare's (AIHW) series of summary reports describing the characteristics and activity of Australia's hospitals. The AIHW has previously published reports for the financial years 1993–94 to 2006–07 (AIHW 1997a, 1997b, 1998, 1999, 2000, 2001, 2002, 2003, 2004a, 2005a, 2006a, 2007a, 2008a).

Data sources for this report

The AIHW has undertaken the collection and reporting of the data in these reports 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 Sets relating to hospitals (see *Appendix 2*).

The data supplied by state and territory health authorities are used by the AIHW to assemble five databases that are the foundation for the Institute's statistical reporting on hospitals:

- National Public Hospital Establishments Database, covering resources, expenditure and revenue for public hospitals
- National Hospital Morbidity Database, covering the diagnoses and other characteristics of admitted patients, and the care they receive in public and private hospitals
- National Non-admitted Patient Emergency Department Care Database, covering emergency department care and waiting times for selected public hospitals
- National Elective Surgery Waiting Times Data Collection, covering waiting times and other characteristics of elective surgery in public hospitals
- National Outpatient Care Database, covering services provided to non-admitted, non-emergency department patients in outpatient clinics of selected public hospitals.

Detailed information about the AIHW's hospitals databases is provided in *Appendix 2*.

Terms used

Some of the terms relating to the use of hospitals are detailed in *Box 1.1* and others are outlined in the *Glossary*. Throughout the 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.

Box 1.1: Summary of terms and data sources relating to the use of hospitals

Admitted patients

Statistics on admitted patients are compiled when an admitted patient (a patient who undergoes a hospital's formal admission process) completes an episode of admitted patient care and 'separates' from the hospital. This is because most of the data on the use of hospitals by admitted patients are based on information provided at the end of the patients' episodes of care, rather than at the beginning. The length of stay and the procedures carried out are then known and the diagnostic information is more accurate.

***Separation** is the term used to refer to the episode of admitted patient 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.*

*For each separation, patients are assigned a **principal diagnosis**, which is the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of admitted patient care. If applicable, **procedures** are also reported. These can be surgical or non-surgical, and therapeutic, diagnostic or of a patient-support nature (for example, anaesthesia).*

***Patient day** means the occupancy of a hospital bed (or chair in the case of some same-day patients) by an admitted patient for all or part of a day.*

Although hospital separation data are a valuable source of information about hospital care, they have limitations as indicators of ill health. Sick people who are not admitted to hospital are not counted and those who are admitted more than once are counted on each occasion. Hospital separation data are also affected by variations in admission practices, and in the availability of and access to hospitals.

Non-admitted patients

Hospitals provide services to non-admitted patients through emergency departments, outpatient clinics and a range of other specialised services.

*An **occasion of service** for a non-admitted patient is defined as any examination, consultation, treatment or other service provided to a patient in each functional unit of a health service establishment each time the service is provided. In emergency departments, occasions of service are referred to as **presentations**.*

Definitions used for non-admitted patient hospital care are not completely uniform among the states and territories, and have varied over time.

Matters affecting the interpretation of the statistics

Although the *National health data dictionary* (HDSC 2006) definitions form the basis of the databases, the actual definitions used may have varied among the data providers and over time, for example in relation to reporting of *Newborn* episodes of care. In addition, the detail of the coverage of the data collections may vary, and there is some variation between jurisdictions in how hospitals that predominantly provide public hospital services and that are privately owned and/or operated are reported. Most of these are reported as public hospitals, but some (including the Mersey Community Hospital in Tasmania from November 2007) are reported as private hospitals.

Comparisons between the states and territories, reporting years and hospital sectors should therefore be made with reference to the accompanying notes in *appendixes 1 and 2* and relevant chapters.

For reasons of confidentiality, the patient-level data for private hospitals in Tasmania, the Australian Capital Territory and the Northern Territory have been suppressed.

Structure of this report

The text in each chapter describes the information presented in the tables that are at the end of each chapter, and presents information on matters affecting the interpretation of the data.

Hospitals at a glance provides key statistics from throughout the report, in graphical form.

Chapter 2 presents an overview of hospitals and hospital activity in Australia. This includes a summary of the numbers of hospitals and beds and of non-admitted patient care. It also includes separation statistics for admitted patients based on the state or territory of the hospital, and whether the hospital was public or private.

Chapter 3 presents further data on the characteristics of public hospitals, including the number and type of hospitals, available beds, staff employed, specialised services, expenditure and revenue.

Chapter 4 presents hospital performance indicator data drawn from the AIHW's hospitals databases and other sources. The indicators are presented as they relate to the National Health Performance Framework revised as agreed by the National Health Information Standards and Statistics Committee (NHISSC) in 2008.

Chapter 5 presents information on non-admitted patient care provided in public hospital emergency departments and outpatient clinics.

Chapter 6 presents summary data on access to elective surgery in Australian hospitals. This includes analyses of elective surgery waiting times for patients admitted to public hospitals, and of elective surgery admissions for both public and private hospitals.

Chapter 7 presents administrative data for episodes of admitted patient care in public and private hospitals, including patient election status and funding source; overall type of care received; urgency of admission; and modes of admission and separation.

Chapter 8 presents demographic information for admitted patient care, including separations and patient days by age group, sex, Indigenous status, country of birth, area of usual residence and quintile of socioeconomic advantage/disadvantage (ABS 2008a).

Chapters 9 to 12 present a range of information on episodes of admitted patient care, including the principal diagnoses of the patients (*Chapter 9*), the procedures they underwent (*Chapter 10*), external causes of injury and poisoning (*Chapter 11*), and the Australian Refined Diagnosis Related Groups (AR-DRGs) for the hospital separations (*Chapter 12*).

Appendix 1 includes notes on the presentation of data, the population estimates used to calculate population rates, analysis methods and notes on major aspects of the quality and comparability of the data.

Appendix 2 provides information on the AIHW's hospitals databases, on the hospitals covered by each of the data sources, and on the categorisation of hospitals as public or private.

Appendix 3 provides summary information on the Department of Health and Ageing's 2006–07 National Hospital Cost Data Collection, which is the source of AR-DRG cost weight and average cost information used in *chapters 2, 4, 7* and *12*.

Appendix 4 presents information on episodes of admitted patient care using Service Related Groups and *Appendix 5* presents detailed information on potentially preventable hospitalisations.

Appendix 6 relates to the Department of Health and Ageing's *State of our public hospitals report June 2009 report*. It notes the major differences between the analysis methods used for that report and for *Australian hospital statistics 2007–08*.

Additional data on the Internet

This report is available on the Internet at <www.aihw.gov.au>. The text of the report is presented in PDF format and the tables are presented as downloadable Excel spreadsheets. This site also includes additional data, in Excel spreadsheets, on diagnoses, procedures and AR-DRGs for admitted patients. Some of the report's tables are presented with more detail, such as using 5-year age groups rather than 10-year age groups (see *Chapter 8*). More information on the Internet tables is in *chapters 8, 9, 10* and *12* and in *appendixes 1, 2, 4* and *5*.

Updates

After this report is published, the Internet site will also include updates for the tables in *chapters 2, 4, 7* and *12* that use AR-DRG cost weight and/or average cost information. At the time of writing, 2007–08 cost weights and average costs were not available. Therefore, 2006–07 public and private sector cost weights based on AR-DRG version 5.1 were used for the public and private sectors in most analyses requiring the application of cost weights.

Interactive data cubes

Also included on the site are interactive cubes of data from the National Hospital Morbidity Database which allow users to specify tables and graphs as required:

- Principal diagnoses for:
 - 1993–94 to 1997–98 (using ICD-9-CM to classify diagnoses)
 - 1998–99 to 2007–08 (using ICD-10-AM to classify diagnoses)
 - mental health-related separations for 2001–02 to 2005–06 (using ICD-10-AM to classify diagnoses)
- AR-DRGs for:
 - version 4.0/4.1/4.2 for 1997–98 to 2004–05
 - version 5.0/5.1 for 1998–99 to 2007–08
- Procedures for:
 - 2000–01 and 2001–02 (using ICD-10-AM 2nd edition to classify procedures)
 - 2002–03 and 2003–04 (using ICD-10-AM 3rd edition to classify procedures)
 - 2004–05 and 2005–06 (using ICD-10-AM 4th edition to classify procedures)
 - 2006–07 and 2007–08 (using ICD-10-AM 5th edition to classify procedures).

Each principal diagnosis and AR-DRG cube includes information on the number of separations (same-day and overnight), patient days and average length of stay, by age group and sex and year of separation for each principal diagnosis or AR-DRG. The cube on mental health-related care also includes data on the mental health legal status of the patient and hospital sector for each separation. The procedures cubes include information on numbers of procedures by age group, sex, year of separation and whether undertaken on a same-day basis.

Online interactive data are also available for:

- Public hospital establishments with beds, financial and staffing measures for 2003-04 to 2007-08
- Elective surgery waiting times summary statistics for:
 - Reason for removal from waiting lists (2002-03 to 2007-08)
 - Surgical specialty (2001-02 to 2007-08)
 - Indicator procedure (2001-02 to 2007-08).