

1 Introduction

Australian hospital statistics 2008–09 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 2007–08 (AIHW 1997a, 1997b, 1998, 1999, 2000, 2001, 2002, 2003, 2004a, 2005a, 2006a, 2007a, 2008a, 2009a). This year, the AIHW has also produced a companion report, *Australia's hospitals 2008–09 at a glance* (AIHW 2010a), which presents a summary of information in this report.

Data sources for this report

The AIHW has undertaken the collection and reporting of the data in this report and its companion report under the auspice 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.

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, revenue and non-admitted patient activity 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 hospital databases is provided in *Appendix 2*.

Structure of this report

Australian hospital statistics 2008–09 is substantially different from previous versions of the report. Consequently, regular readers will note that the overall structure of the report has changed, as has the structure of individual chapters within the report.

In previous years, most report chapters presented information from individual databases (such as the National Public Hospital Establishments Database or the National Non-admitted Patient Emergency Department Care Database), or individual data elements within databases (such as Principal diagnoses, Procedures, or External causes of injury and poisoning). This structure supported provision of technical information on each hospital database. However, when more than one database provided information on a service, information on that service tended to be spread across several chapters. This created difficulties in drawing together related information on hospital services.

For this report, the focus of chapters has moved from databases and data elements, to hospital services. In this approach, data from different databases that relate to a particular service are presented within the same chapter.

The broad topics addressed in the report are:

- hospital resources (including the number of hospitals, hospital beds, expenditure, resources and staffing)
- emergency department services
- outpatient services (including non-admitted care in outpatient clinics, and other non-admitted services provided by hospitals)
- admitted patient care, with separate chapters for same-day acute care, overnight acute care, elective surgery and sub- and non-acute care.

Chapter 2 presents an overview of hospitals and hospital activity in Australia between 2004-05 and 2008-09. This includes time series information on hospital resources, accident and emergency services, outpatient services and admitted patient care.

Chapter 3 presents hospital performance indicator data. These indicators are presented according to the National Health Performance Framework revised as agreed by the National Health Information and Statistics Committee (NHISSC) in 2008. Performance indicators reported under the National Healthcare Agreement are also introduced.

Chapter 4 presents data on the characteristics and resources of Australian hospitals. Most of this information is for public hospitals, derived from the National Public Hospital Establishments Database (NPHEd).

Chapter 5 presents information on non-admitted patient care provided in public hospital emergency departments and other accident and emergency services.

Chapter 6 presents information on non-admitted patient care provided in outpatient clinics and other non-admitted patient services.

Chapter 7 presents an overview of admitted patient care services. The chapter presents administrative, demographic and clinical information on all admitted patient care services.

Chapter 8 presents information on same-day acute admitted patient care.

Chapter 9 presents information on overnight acute admitted patient care.

Chapter 10 presents information on elective surgery.

Chapter 11 presents information on sub- and non-acute admitted patient care.

Appendix 1 includes notes on the presentation of data, the population estimates used to calculate population rates, analysis methods, and 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 2007-08 National Hospital Cost Data Collection (NHCDC). The NHCDC is the source of Australian Refined Diagnosis Related Groups (AR-DRG) cost weight and average cost information.

Appendix 4 presents information on episodes of admitted patient care using the Service related group (SRG) classification.

Appendix 5 presents information on potentially preventable hospitalisations.

Appendix 6 is a discussion of the Department of Health and Ageing's *State of our public hospital, June 2010 report*. It notes the major differences between the analysis methods used for that report and for *Australian hospital statistics 2008–09*.

How this report compares to previous reports

Table 1.1 summarises how the structure of *Australian hospital statistics 2007–08* has been transferred into the 2008–09 report.

Table 1.1: Report structure, summary of content by chapter, *Australian hospital statistics 2007–08* and *Australian hospital statistics 2008–09*

<i>Australian hospital statistics 2007–08</i>		<i>Australian hospital statistics 2008–09</i>
Chapter number	Chapter title	Chapter number
Chapter 1	Introduction	Chapter 1
Chapter 2	Overview of Australian hospitals	Chapter 2
Chapter 3	Public hospital establishments	Chapter 4
Chapter 4	Hospital performance indicators	Chapter 3
Chapter 5	Non-admitted patient care (in emergency departments)	Chapter 5
Chapter 5	Non-admitted patient care (in outpatient clinics)	Chapter 6
Chapter 6	Access to elective surgery	Chapter 10
Chapter 7	Administrative data for admitted patients	Relevant sections of chapters 7, 8, 9, 10 and 11
Chapter 8	Demographic data for admitted patients	Relevant sections of chapters 7, 8, 9, 10 and 11
Chapter 9	Principal diagnoses for admitted patients	Relevant sections of chapters 7, 8, 9, 10 and 11
Chapter 10	Procedures for admitted patients	Relevant sections of chapters 7, 8, 9, 10 and 11
Chapter 11	External causes for admitted patients	Chapter 7
Appendix 1	Technical appendix	Appendix 1
Appendix 2	Hospital databases: characteristics and coverage	Appendix 2
Appendix 3	National Hospital Cost Data Collection	Appendix 3
Appendix 4	Service related groups	Appendix 4
Appendix 5	Potentially preventable hospitalisations	Appendix 5
Appendix 6	<i>The state of our public hospitals, June 2010 report</i>	Appendix 6

Chapter structure

In previous years, most chapter titles and chapter section titles of *Australian hospital statistics* described databases and data elements within databases. The text of most chapters addressed full-page tables at the end of each chapter, with substantial technical and caveat information provided with comments on the tables.

In this report, chapters are structured to address a common set of questions concerning the source data for each chapter, with section titles that include:

- *What data are reported?* This section discusses the data sets used to inform the chapter.
- *What are the limitations of the data?* This section provides caveats that should be considered when interpreting the data presented.
- *What methods were used?* This section outlines issues such as inclusions and exclusions of records and calculation methods, with references to more detailed information in the technical appendix.

The data presentations that follow discussion of the data sources address, where possible, the following questions:

- *How has activity changed over time?*
- *How much activity was there in 2008–09?*
- *Who used these services?*
- *How did people access these services?*
- *How urgent was the care?*
- *How long did people wait for care?*
- *Why did people receive the care?*
- *What care was provided?*
- *What was the safety and quality of the care?*
- *How long did patients stay?*
- *What was the cost of the care?*
- *Who paid for the care?*
- *How was the care completed?*

Generally, discussions of what the data show refer to summary tables and figures that are placed immediately below related text. Where appropriate, tables and figures within the chapter are accompanied by footnotes referring readers to the more detailed statistical tables at the end of the chapter. All tables presented in the hardcopy publication are also placed on a Compact Disc (CD) provided with the hardcopy.

Additional data on the Internet and CD

This report is available on the Internet at <www.aihw.gov.au> and on the accompanying CD. The report and the companion *Australia's hospitals 2008–09 at a glance* is presented in PDF format and all tables are presented in downloadable Excel spreadsheets. This site and CD also include 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. For example, some tables present separations in 5-year age groups rather than 10-year age groups.

To maintain time series information selected tables provided to accompany *Australian hospital statistics 2007–08*, are also provided using 2008–09 data.

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 2008–09 (using ICD-10-AM to classify diagnoses)
 - mental health-related separations for 2001–02 to 2006–07 (using ICD-10-AM to classify diagnoses).
- AR-DRGs for:
 - version 4.0/4.1/4.2 for 1997–98 to 2004–05
 - version 5.0/5.1/5.2 for 1998–99 to 2008–09.
- Procedures for:
 - 2000–01 and 2001–02 (using ACHI 2nd edition to classify procedures)
 - 2002–03 and 2003–04 (using ACHI 3rd edition to classify procedures)
 - 2004–05 and 2005–06 (using ACHI 4th edition to classify procedures)
 - 2006–07 and 2007–08 (using ACHI 5th edition to classify procedures)
 - 2008–09 (using ACHI 6th 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, 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 2008–09
- elective surgery waiting times summary statistics for:
 - Reason for removal from waiting lists (2002–03 to 2008–09)
 - Surgical specialty (2001–02 to 2008–09)
 - Indicator procedure (2001–02 to 2008–09).

Updates

After this report is published, the internet site will also include updates for the tables that use AR-DRG cost weight and/or average cost information. At the time of writing, 2008–09 cost weights and average costs were not available. Therefore, 2007–08 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.

Internet tables and interactive data cubes are also updated in the event of errors being found in the report after publication, or if data are resupplied after release of the publication.