

1 Introduction

Australian hospital statistics 2012–13 continues the Australian Institute of Health and Welfare's (AIHW) series of reports describing the characteristics and activity of Australia's hospitals. The AIHW has previously published comprehensive reports for the financial years 1993–94 to 2011–12 (AIHW 2013a and earlier) and smaller summary reports such as *Australia's hospitals 2011–12 at a glance* (AIHW 2013b).

More detailed reports on some aspects of Australia's hospitals have already been published separately in, for example, *Australian hospital statistics 2012–13: emergency department care* (AIHW 2013c), *Australian hospital statistics 2012–13: elective surgery waiting times* (AIHW 2013d) and *Australian hospital statistics 2012–13: Staphylococcus aureus bacteraemia in Australian public hospitals* (AIHW 2013e).

Australia's hospitals 2012–13 at a glance (AIHW 2014) accompanies this report and presents a summary of the information about hospitals from the *Australian hospital statistics* series for 2012–13.

Other reports in this series to be released later in 2014 include a comprehensive report on private hospitals and another on the updated AIHW hospital peer group classification.

The AIHW also reports information on hospital funding and expenditure in its *Health expenditure Australia* series (AIHW 2013f and earlier).

Data sources

The AIHW has undertaken the collection and reporting of the data in this report 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.

The AIHW uses the data supplied by state and territory health authorities to assemble the following databases which form the foundation for the Institute's statistical reporting on hospitals:

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

- the National *Staphylococcus aureus* bacteraemia (SAB) Data Collection, covering counts of cases of SAB for each public hospital covered by SAB surveillance arrangements, and for private hospitals that chose to provide data
- the National Elective Surgery Target Database (NESTD), a calendar year collection, covering waiting times and other characteristics of elective surgery in public hospitals
- the National Emergency Access Target Database (NEATD), a calendar year collection covering emergency department care and length of stay in emergency departments
- The Health Expenditure Database (HED) comprises a wide range of information about health expenditure in Australia, compiled from a wide range of government and non-government sources, including the Government health expenditure National Minimum Data Set (NMDS).

More information about the AIHW's hospital databases is in Appendix A, and in the Data Quality Statements accompanying this report online at <www.aihw.gov.au>. Detailed information about the HED is available in the latest *Health Expenditure Australia* report (AIHW 2013f).

Box 1.1: Data limitations

States and territories are primarily responsible for the quality of the data they provide. However, the AIHW undertakes extensive validations on receipt of data, checking for valid values, logical consistency and historical consistency. Where possible, data in individual data sets are checked with data from other data sets. Potential errors are queried with jurisdictions, and corrections and resubmissions may be made in response to these queries. Except as noted, the AIHW does not adjust data to account for possible data errors or missing or incorrect values.

Variations in reporting practices across states and territories and over time may affect these statistics. Where possible, variations have been noted in the text. Comparisons between states and territories and reporting years should be made with reference to the accompanying notes in the chapters and in the appendixes. The AIHW takes active steps to improve the consistency of these data over time.

Structure of this report

The broad topics addressed in the report are:

- changes to resources and activity over time (Chapter 2)
- performance indicators (Chapter 3)
- hospital resources (including the number of hospitals, hospital beds, expenditure, resources and staffing) (Chapter 4)
- non-admitted patient care (Chapter 5)
- admitted patient care including:
 - admitted patient overview (Chapter 6)
 - same-day acute separations (Chapter 7)
 - overnight acute separations (Chapter 8)
 - surgical separations for elective and emergency admissions (Chapter 9) and
 - subacute and non-acute care (Chapter 10).

Appendix A provides summary information on the AIHW's hospitals databases, the hospitals included in each of the databases, the categorisation of hospitals as public or private and other issues affecting the quality or comparability of the data.

Appendix B includes notes on definitions and classifications, the presentation of data, the population estimates used to calculate population rates and analysis methods.

Appendix C presents information on the hospital peer groups used in this report.

Appendix D presents information on episodes of admitted patient care using the Service Related Group (SRG) classification.

Appendix E provides summary information on the Independent Hospital Pricing Authority's (IHPA) 2010–11 and 2011–12 National Hospital Cost Data Collection (NHCDC). The NHCDC is the source of Australian Refined Diagnosis Related Groups (AR-DRG) cost weight information.

Chapter structure

The 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? – which outlines the data sets used to inform the chapter.
- What are the limitations of the data? – which provides caveats that should be considered when interpreting the data presented.
- What methods were used? – which 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 these sections address, where possible, the following questions:

- How has activity changed over time?
- How much activity was there in 2012–13?
- 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, summary tables and figures are placed immediately below the discussion in related text. Where appropriate, tables and figures within the chapter are accompanied by footnotes referring readers to more detailed statistical tables at the end of the chapter, or accompanying the report online at <www.aihw.gov.au/hospitals/>.

Changes in separation rates due to changes in underlying population data

All populations, except those used for analyses by Indigenous status, are based on the 2011 Census data. The age-standardised separations rates (per 1,000 population) presented in this report for the years 2008–09 to 2011–12 in time series tables have been calculated using ‘rebased’ estimated resident populations. Therefore, the separation rates reported for 2008–09 to 2011–12 in this report are not comparable to the separation rates presented in earlier *Australian hospital statistics* reports.

Comparisons between public and private hospitals

Most chapters contain data for both public and private hospitals. However, Chapter 5 presents information only for public hospital non-admitted patient care including emergency department care and outpatient clinics.

In particular, chapters 6 to 10 on admitted patient care present many comparisons of the numbers of separations, patient days and separations per 1,000 population for public and private hospitals.

Additional online data

This report is available on the AIHW website at <www.aihw.gov.au/hospitals/>.

The report and the companion summary *Australia’s hospitals 2012–13 at a glance* are presented in PDF format and all tables are available as downloadable Excel spread sheets. *Australia’s hospitals 2012–13 at a glance* is also available in HTML format on the website, and is updated whenever new data are available.

The website also includes additional data in Excel spread sheets on diagnoses, procedures and AR-DRGs for admitted patients. Some of the report’s tables are presented with more detail online. For example, some online tables present separations in 5-year age groups rather than 10-year age groups.

Interactive data cubes

The website also has interactive cubes of data from the NHMD, which allow users to specify tables and graphs as required. These include:

- Principal diagnoses:
 - 1993–94 to 1997–98 (using ICD-9-CM to classify diagnoses)
 - 1998–99 to 2012–13 (using ICD-10-AM to classify diagnoses)
- AR-DRGs:
 - version 4.0/4.1/4.2 for 1997–98 to 2004–05
 - version 5.0/5.1/5.2 for 1998–99 to 2009–10
 - version 6.0/6.0x for 2010–11, 2011–12 and 2012–13.

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.

- Procedures:
 - 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 and 2009–10 (using ACHI 6th edition to classify procedures)
 - 2010–11 to 2012–13 (using ACHI 7th edition to classify procedures).

The procedures cubes include information on numbers of procedures by age group, sex, year of separation and whether the procedure was undertaken on a same-day basis.

Online interactive data are also available for elective surgery waiting times summary statistics for 2001–02 to 2012–13, including information on:

- reason for removal from waiting lists
- surgical specialty
- indicator procedures.

Updates

Online tables and interactive data cubes will be updated in the event of errors being found in this report after publication, or if data are resupplied by states and territories after its release.