

# 1. Introduction

## Background

Over the last decade, governments and other hospital funders have taken an increasing interest in the monitoring and planning of hospital service provision in Australia and, specifically, in containing the costs of hospitals, measuring their outputs and ensuring their services are efficient, appropriate and of high quality (Palmer & Short 1994). As a result, statistics on Australian hospitals and their patients have had an increasingly important role to play at the Commonwealth and State and Territory level, and within the private sector. The role of the Commonwealth in funding hospital services through the Medicare agreements has, in particular, driven a need for better hospital statistics at the national level.

Before the mid-1980s, hospital statistics were not regularly compiled on a national basis. There had been few efforts to ensure that definitions and terms used in the States and Territories were consistent, and attempts at comparing the performance of the public hospital sectors of the States and Territories had been difficult.

In 1985, however, the Australian Health Ministers' Advisory Council (AHMAC) requested that the (then) Australian Institute of Health (now the Australian Institute of Health and Welfare) conduct a national study on hospital utilisation and costs. The hospital statistics report that resulted, the *Hospital Utilisation and Costs Study*, was based on 1985–86 data and released by the Institute in 1988 (Harvey & Mathers 1988; Mathers & Harvey 1988). It was the first comprehensive analysis of available information on the provision of public hospital, private hospital, nursing home and hostel services in Australia.

In addition to presenting analysis of the available data, the report drew attention to the need for better and more comparable statistics to be collected on Australian hospital services. It identified gaps and deficiencies in national hospital statistics which were able to inform the Taskforce on National Hospital Statistics, established by AHMAC to review data collections and to make recommendations on the development of a national statistics system covering health and health related institutions. The Taskforce's efforts led the Institute, in collaboration with the Commonwealth, State and Territory health authorities, to develop a National Minimum Data Set for Institutional Health Care. This Data Set, endorsed by AHMAC in 1990, specified the information to be collected on hospital resources and activities, and agreed national definitions for each data item. This process marked a major advance in hospital statistics, with agreement achieved for the definitions of essential terms including inpatients (now referred to as admitted patients), outpatients (now termed non-admitted patients), available beds and hospitals.

Further development of the definitions for hospital data items has continued since then, under the auspices of the National Minimum Data Set Review Committee and then the National Health Information Agreement, through the National Health Data Committee. In particular, patient-level (morbidity) data items have been progressively reviewed and developed in connection with the Casemix Development Program of the (now) Commonwealth Department of Health and Family Services. This program has, for example, sponsored improved coding and collection of data on diagnoses and procedures enabling morbidity records to be used to measure the output of hospitals, using the Australian National Diagnosis Related Group (AN-DRG) classification.

The developments in data definitions and the improvements in data quality that have accompanied their implementation in hospitals throughout Australia have contributed greatly to the national hospital data collections and reports that AHMAC has requested of the

Institute since the 1985–86 report. The reports have become based on the National Minimum Data Set and, since 1991–92, have used its standard definitions, as published in the *National Health Data Dictionary* (Australian Institute of Health and Welfare 1996a).

Also reflected as an improvement in the Institute's national hospital statistics reports has been the increasing coverage of the morbidity data collection. Public acute hospital coverage did not initially include Tasmanian hospitals, but they have been included since 1989–90. Private hospital data were also not incorporated in the first report; overnight stay private hospitals were included for some States from 1987–88, and private free-standing day hospital facilities have been progressively included in more recent reports. Since the 1993–94 data collection, all private hospital data have been included, with the exceptions only of some Victorian separations in 1993–94 and 1994–95, the private hospital in the Northern Territory and the free-standing day hospital facilities in the Australian Capital Territory.

For 1995–96, a further expansion of the scope has occurred, with morbidity data for public psychiatric hospitals included for all but Queensland. This has enabled the scope of morbidity data collection for the public sector to correspond more closely with that for the establishment-based data collection, which has collected resource and activity data on both public acute and psychiatric hospitals throughout the period of the reports.

## This report

This report continues the Hospital Utilisation and Costs Study reports of the Institute and follows the most recent in this series, *Australian Hospital Statistics 1993–95: An Overview* (Australian Institute of Health and Welfare 1997a). The collection and reporting of the data were undertaken by the Institute under the auspices of the National Health Information Agreement as part of the National Health Information Work Program.

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 operates in New South Wales. Most of the data collected was as specified in the National Minimum Data Set for Institutional Health Care and data item definitions were as specified for 1995–96 in the *National Health Data Dictionary* (summarised in the Glossary).

Data were supplied in two parts, one at establishment level and the other at patient level. The establishment- (hospital-) level data were compiled into the National Public Hospital Establishments Database at the Institute. Chapter 2 of this report includes further details of this Database and summary statistics providing an overview of the resources, services and other characteristics of Australian public hospitals.

The patient-level (hospital morbidity) data were collated to form the National Hospital Morbidity Database at the Institute and are the basis of chapters 3 to 9 of this report. Most of these chapters incorporate the data supplied for each admitted patient separation on the State or Territory of the hospital, whether it was a public or private hospital, whether the patient was public or private and the patient's length of stay in hospital.

Specifically, chapter 3 includes further details of the Database and an overview of the separation, patient day and length of stay statistics for 1995–96 and previous years. The data on the patient's sex, age group and Indigenous status are summarised in chapter 4. The principal diagnosis and principal procedure (coded using the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) (National Coding Centre 1995) reported for each separation are summarised in chapters 5 and 6, respectively. Chapter 7 is a summary of the data on reported external causes and places of occurrence (coded to ICD-9-CM) and chapter 8 presents summary statistics based on the AN-DRG (version 3.0) and Major Diagnostic Category as reported by the data providers, or derived by the Institute. Chapter 9 collates information reported on a number of other variables—mode of separation, insurance status, compensable status, type of episode of care and State or Territory of usual residence.

The accompanying diskette contains extended tables of separation, patient day and length of stay statistics for the 200 most frequently reported principal diagnoses and principal procedures and for all reported AN-DRGs.

## Limitations 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 caution, and with reference to the scopes of the collections detailed in chapters 2 and 3. In particular, the data from the National Hospital Morbidity Database should be interpreted taking into account the inclusion for the first time in 1995–96 of public psychiatric hospital data for all areas except Queensland.

The major variations from the *National Health Data Dictionary* definitions and from the scopes used by most data providers have been noted within this report. However, for further information on the use of data definitions, the detail of the scope of the data collection and the collection practices, readers should contact the Institute or the data providers.

Other deficiencies, including inconsistency between categorical data and totals, are evident in some tables. These remain even after validation procedures undertaken with providers, and indicate continuing problems with the quality of some data. Now that timing problems have been overcome, to meet joint commitments which the Institute and data providers have made in accordance with the National Health Information Agreement, the Institute will be able to give more attention to data quality in the design and implementation of the 1996–97 and future data collections

## Notes on the tables

Data presented by State or Territory refer to the State or Territory of the hospital, not to the State or Territory of the usual residence of the patient. The exception is Table 9.2, in which the State or Territory of usual residence of the patient is reported against the State or Territory of hospitalisation.

References to public hospitals include the Department of Veterans' Affairs hospital in New South Wales.

Where totals are provided in the tables, they include data only for those States and Territories for which data were available, as indicated in the tables.

Population rates were derived using Australian Bureau of Statistics' total population estimates for 31 December 1995 and projections of the Indigenous population for 30 June 1995 (Appendix).

Symbols used in the tables are:

n.a. not available

.. not applicable.

## Related publications

*Australian Hospital Statistics, 1995–96* is complemented by several other national hospital statistics publications. Notably, establishment-level data on the resources and activities of private hospitals are compiled and published annually as *Private Hospitals Australia* (Australian Bureau of Statistics 1996a) and comprehensive reports based on the AN-DRG classification have been published as the *Australian Casemix Report on Hospital Activity series* (Department of Health and Family Services 1996). The *First National Report on Health Sector Performance Indicators* reported national hospital data against a range of indicators of hospital performance (National Health Ministers' Benchmarking Working Group 1996) while the *National Mental Health Report* provides details on hospital psychiatric services (Commonwealth of Australia 1996). Statistics on the hospital-based pharmaceutical, nursing and medical workforces are included in various issues of the Institute's *National Health Labour Force Bulletin* (Australian Institute of Health and Welfare 1996b, 1997b, 1997c).