# 1 Introduction

*Mental Health Services in Australia 1999–00* is the third in the Australian Institute of Health and Welfare's (AIHW) series of annual reports describing the activity and characteristics of Australia's mental health care services and presents data from collections based at the AIHW and other organisations. Previous reports in this series have focused on data collected through the National Minimum Data Sets (NMDSs)—Mental Health Care (see Appendix 1 for description). This report includes, alongside the NMDS data, a broad range of other data to better reflect the complexity and diversity of mental health-related service delivery in Australia.

A wide range of organisations is involved in providing treatment and care for people with mental health disorders. These include specialist mental health services, general health services and other non-health care services, provided in both residential and ambulatory care settings. Many are government services, but private hospitals, non-government organisations and private medical practitioners are also responsible for substantial amounts of mental health-related care. This report attempts to give an overview of these services.

The report presents detailed data on the mental health-related services provided for patients admitted to hospital. The characteristics and hospital care of patients who were treated by specialised psychiatric admitted patient services are described, and data are also presented on admitted patients who had a mental health-related principal diagnosis but were not reported as receiving specialised psychiatric care. As in previous years, staffing and expenditure data are presented for public community mental health services and for psychiatric hospitals, both public and private.

This report extends the scope of the mental health services series with the inclusion of additional sources of mental health-related care data. Data on the mental health-related consultations and prescriptions provided by psychiatrists and general practitioners are presented. While national data are lacking on the mental health-related activity of most non-government organisations, some available snapshot data for disability support services are also presented. Unfortunately there are other areas where there are little or no available national data for 1999–00. These include staffing and expenditure data for psychiatric units and wards in public acute care hospitals, and client characteristic and service activity data for hospital outpatient and community mental health services.

## Background

### Mental health disorders and disability

Investigations into the prevalence and impact of mental disorders have found that these disorders are a significant life issue for many Australians. The adult component of the National Survey of Mental Health and Wellbeing found that in 1997, 18% of Australians aged 18 and over reported that they had experienced the symptoms of a mental disorder at some time during the 12-month period before interview (ABS 1998a). Similarly, results from the child and adolescent component of the National Survey of Mental Health and Wellbeing

indicated that 14% of young people aged 4–17 years had a mental health problem in the prior 6 months (Sawyer et al. 2000).

Using the adult prevalence rate, it was estimated that approximately 2.4 million Australian adults had a mental disorder within the previous 12 months (Andrews et al. 1999). Almost 10% of respondents reported experiencing symptoms of anxiety disorder. The percentage reported for affective disorders and substance use disorders were 6% and 8%, respectively. Of those adults with a mental disorder, 43.9% or 1.1 million adults had a mild, moderate or severe disability.

From March to May 1998, the Australian Bureau of Statistics (ABS) conducted the National Survey of Disability, Aging and Carers, the fourth comprehensive national survey of disability in Australia (ABS 1998b). Based on the survey results for all age groups, it was estimated that there were 610,000 people with a disability as a result of a psychiatric disorder. A disability was recorded where a respondent had one or more impairments or activity restrictions, which had lasted, or were likely to last, for at least 6 months or more. Of those with a psychiatric disability, 46% or 281,000 experienced a severe or profound core activity restriction as a result.

There were significant differences in the methods used to measure disability between the National Survey of Mental Health and Wellbeing and the National Survey of Disability, Aging and Carers. For example, the mental health survey used a definition of disability based on disabilities being present during the 4 weeks before interview, whereas the disability survey used a definition based on the disabilities that had lasted, or were likely to last, for at least 6 months. Also, the disability survey included people living in cared accommodation services, unlike the mental health survey.

For the disability survey, the classification of mental and behavioural disorders corresponded with the mental and behavioural disorders chapter in International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10) (F00–F99) excluding developmental disorders and intellectual disability-related disorders. This differed from the National Survey of Mental Health and Wellbeing of Adults, which utilised affective, substance use and anxiety disorder subsets of the mental and behavioural disorders chapter. Further information on the methods and instruments used to obtain these survey data is available in the relevant ABS documentation (ABS 1997, 1998a, 1998b).

Mental disorders were also recognised as considerable in the Burden of Disease and Injury in Australia study, which attempted to measure and compare the burden for all diseases and injuries in Australia (AIHW: Mathers et al. 1999). The study utilised a health summary measure called a disability-adjusted life year, or DALY, developed by Murray & Lopez (1996). This measure was designed to combine the concept of years of life lost (YLL) due to premature death with a similar concept of years of equivalent healthy life lost through disability (YLD). One DALY represents one lost year of healthy life.

The study found that mental disorders (ICD-9-CM Chapter V) were a major burden in Australia, accounting for 13% of the total DALYs in 1996. Mental disorders were the third leading cause of burden after cardiovascular diseases and cancer. They accounted for 1% of all deaths and 1% of the total years of life lost due to mortality, but were associated with 27% of the years lost due to disability. Most of this burden was attributed to affective disorders, with 34% of the calculated burden, anxiety disorders with 23%, and substance use disorders with 13%.

## Health service utilisation

There is evidence that many people with a mental disorder do not regularly attend health services for mental health-related problems. The National Survey of Mental Health and Wellbeing found that of those adults with a mental disorder, 38% had used a health service for a mental health problem in the 12 months before interview (ABS 1998a). The proportion of women who utilised a health service for their mental health problem was 46%, compared to 29% for men. The child and adolescent component of the survey found that only 25% of children and adolescents with a mental health disorder had attended one or more health services for help with emotional and behavioural problems in the previous 6 months (Sawyer et al. 2000).

There is evidence that community-based services and general practice are more frequently utilised than admission to hospital. General practice was the most frequently utilised health service type reported in the National Survey of Mental Health and Wellbeing. Of adults with a mental health disorder, 29% had visited a general practitioner about a mental health problem in the 12 months before interview. Adult hospital admissions for mental health problems were rare, with less than 1% admitted over the 12-month period. The health services most frequently attended for mental health problems by children in the 4–12 year age group were general practitioners and paediatricians. For adolescents, the most frequently attended health services for mental health problems were school-based counsellors, general practitioners and community health services.

Severe levels of disability associated with mental disorder reported in the National Survey of Mental Health and Wellbeing correlated with higher levels of health service utilisation. For adults, the rate of health service utilisation was 31% for those with no disability and ranged to 57% for those with severe disability. The second component of the National Survey of Mental Health and Wellbeing focused on adults living with low prevalence, psychotic disorders such as schizophrenia (Jablensky et al. 1999). This study found that almost 52% of these respondents had been admitted overnight to a psychiatric unit in the preceding year. Over 45% had been admitted on an involuntary basis and 24% had more than one admission during the year. The study also found that 60% of respondents with psychotic disorders had had contact with a psychiatric outpatient services or community mental health service in the preceding twelve months. A large proportion of these respondents (43%) maintained regular contact with a psychiatric outpatient service or community mental health service.

# Report structure

Chapter 1 describes the background to this report and outlines the data sources used for this report and their respective strengths and weaknesses.

Chapter 2 summarises the available data on ambulatory mental health care and related services, including general practice, private psychiatrist services, specialist psychiatric outpatient services, and ambulatory disability support services that were funded under the Commonwealth/State Disability Agreement (CSDA).

Chapter 3 summarises the available data on community residential and admitted patient mental health care, including hospital admitted patient data and data on the community residential care activity of public community mental health care services and CSDA-funded residential disability support services.

Chapter 4 presents data on the staffing and expenditure of public and private hospitals and public community mental health care establishments that provide specialised psychiatric

care. This chapter also presents information on the public and private psychiatrist labour force, the Medicare expenditure on private psychiatrists and Pharmaceutical Benefits Scheme (PBS) expenditure on mental health-related medications.

The appendixes provide more detailed technical notes on the data and analyses than are included in the chapters. Appendix 1 details the data elements specified in the NMDSs—Mental Health Care. Appendix 2 provides information on the codes used to define mental health-related care and medications. Appendix 3 lists the Australian Refined Diagnosis Related Groups (AR-DRGs) used in the publication. Appendix 4 provides details on methods used for calculating estimates of 1999–00 patient days and length of stay statistics for the admitted patient data. Appendix 5 includes the population estimates used for separation rate calculations and a summary of the indirect age-standardisation procedure used throughout the publication. Appendix 6 provides information on the data collected for the National Survey of Mental Health Services (NSMHS) and how it compares with the data collected for the National Public Hospital Establishments Database (NPHED) and National Community Mental Health Establishments Database (NCMHED).

# Data sources

In order to present a broad picture of mental health-related care in Australia, this report has used data drawn from a variety of AIHW and other data sources. These data sources included AIHW databases such as the National Hospital Morbidity Database (NHMD) and the NCMHED which were supplied data under the National Health Information Agreement and specified as the NMDSs—Mental Health Care (see Appendix 1). The range of the mental health-related care services provided in Australia is broader and more diverse than is currently included in the scope of the NMDSs? Mental Health Care. Therefore, this report presents data from the other AIHW data collections such as the NPHED, the Bettering the Evaluation And Care of Health (BEACH) survey of general practice activity, and the CSDA Minimum Data Set collection. Data from collections external to the AIHW were also utilised, including the ABS Private Hospital Establishments Collection (PHEC), and the Department of Health and Ageing (DHA) Medicare and PBS data collections. Each of these data sources have different characteristics that need to be considered when interpreting the data, as reviewed below.

Overall, there is potential for inconsistency when collections rely on data extracted from the information systems of different State and Territory health authorities and private providers. In these situations NMDSs, based on agreed data definitions as specified in the *National Health Data Dictionary*, are often used to enhance the consistency of the data obtained. However, the quality of NMDS reporting by State and Territory health authorities and private providers may be affected by variations from the *National Health Data Dictionary* definitions and differences in scope. The definitions used for originally recording the data 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. Comparisons between different State and Territory health authorities, reporting years and sectors should therefore be made with reference to the accompanying notes.

Service utilisation data can reflect an aspect of the burden of disease in the community but they are not a measure of the incidence or prevalence of specific disease conditions. This is because not all persons with an illness receive the same treatment, and the number and pattern of services received can reflect admission or registration practices, regional differences in service provision and repeat service provision for some chronic conditions.

Each State and Territory has a particular demographic structure that differs from other jurisdictions. Factors such as the geographic spread of the population and the proportion of Aboriginal and Torres Strait Islander peoples can have a substantial effect on the delivery of health care.

## National Hospital Morbidity Database

The NHMD is a compilation of electronic summary records collected in admitted patient morbidity data collections in Australian hospitals. It includes demographic and diagnosis data related to the patient, data on procedures undertaken and length of stay, and the AR-DRG for each hospital separation (see glossary).

Records for 1999–00 are for hospital separations in the period from 1 July 1999 to 30 June 2000. Data on patients who were admitted on any date before 1 July 2000 are included, provided that they separated between 1 July 1999 and 30 June 2000. A record is included for each separation, not for each patient, thus patients who separated more than once in the year have more than one record in the database.

Data relating to admitted patients in almost all hospitals are included. However, the collection covers only public hospitals within the jurisdiction of the State and Territory health authorities. Hence, public hospitals not administered by the State and Territory health authorities (e.g. some hospitals run by correctional authorities in some jurisdictions and those in off-shore territories) are not included. In addition, there remains a small proportion of private hospitals that do not report to the NHMD. The coverage is described in detail in *Australian Hospital Statistics 1999–00*.

Patients receiving specialised mental health care are identified through recording the fact that they had one or more psychiatric care days, i.e. care received in a specialised psychiatric hospital, unit or ward. In acute care hospitals, a 'specialised' episode of care or separation may comprise some psychiatric care days and some days in general care, or psychiatric care days only. An episode of care from a public psychiatric hospital is deemed to comprise psychiatric care days only and to be 'specialised', unless some care was given in a unit other than a psychiatric unit, such as a drug and alcohol unit.

States and Territories have confirmed that all public hospitals with specialised psychiatric facilities reported psychiatric care days to the NHMD for 1999–00, with estimates that between 95% and 100% of psychiatric care days were reported. Data on psychiatric care days for Western Australia were available for the first time for 1999–00. Previous years' data for Western Australia included only a flag indicating that a separation included some psychiatric care days, without specifying the number of days. Private hospital reporting of psychiatric care days for 1999–00 improved upon last year's coverage, with the inclusion of Tasmanian private hospitals. There are no estimates available on the proportion of psychiatric care days that were reported by private hospitals in each jurisdiction.

There are several other data elements that are collected only for patients who have received specialised psychiatric care, and these are shown in Table A1.1 in Appendix 1. Some jurisdictions, or sectors within jurisdictions, were unable to provide data for all of these data elements. Table A1.2 in Appendix 1 provides a summary of the data provision by jurisdiction for each data element in the NMDS—Admitted Patient Mental Health Care for 1999–00. Data quality was deemed too poor for publication if the total number of separations with missing data exceeded 50%. Using this criterion, data for the *Type of usual accommodation, Employment status* and *Referral to further care (psychiatric patient)* data elements were not included in this report.

Unless otherwise specified, the State and Territory of the hospital is reported, rather than the State and Territory of the patient's usual residence. Additional notes are provided in the descriptive commentary throughout this report highlighting data quality and interpretation issues in specific instances. For greater detail on the scope, definitions and quality of data obtained from the NHMD, refer to *Australian Hospital Statistics 1999–00* (AIHW 2001a). Lists of the public psychiatric hospitals and public acute hospitals with specialised psychiatric units contributing to this report are presented in Appendix 7.

## National Community Mental Health Establishments Database

This database includes data on the number of community mental health establishments, and their expenditure and staffing. For community residential facilities, data on beds and 'separations' are also collected. Within this database, the term separation refers to episodes of non-admitted patient residential care in community-based residential services. The data collated in the NCMHED is specified by the NMDS—Community Mental Health Establishments. Additional information on this NMDS and the NCMHED are presented in Appendix 1.

For this NMDS, community mental health care refers to all specialised mental health services dedicated to the assessment, treatment, rehabilitation or care of non-admitted patients. The scope is both residential and ambulatory public community mental health care establishments, both adult and adolescent and child community mental health services, and non-admitted services in hospitals such as specialised psychiatric outpatient services. The scope excludes admitted patient mental health care services, support services that are not specialised mental health care services (e.g. accommodation support services) and services provided by non-government organisations. Only community residential services that were staffed 24 hour per day were included.

A list of the public community mental health establishments contributing to this report is presented in Appendix 7.

## National Public Hospital Establishments Database

The AIHW is the data custodian of the NPHED, which holds a record for each public hospital in Australia. The data are collected by State and Territory health authorities from the routine administrative collections of public acute hospitals, psychiatric hospitals, drug and alcohol hospitals and dental hospitals in all States and Territories. The database does not include private hospital data, which are collated by the ABS in the PHEC.

The collection covers only hospitals within the jurisdiction of the State and Territory health authorities. Hence, public hospitals not administered by the State and Territory health authorities (e.g. some hospitals run by correctional authorities in some jurisdictions and those in off-shore territories) are not included.

Information is included on hospital resources (beds, staff and specialised services), recurrent expenditure, non-appropriation revenue and summary information on services to admitted and non-admitted patients. Limitations have been identified in the financial data reported to the NPHED. In particular, some States and Territories have not yet fully implemented accrual accounting procedures and systems, which means the expenditure and revenue data are a mixture of expenditure/payments and revenue/receipts, respectively. A need for further development has been identified in the areas of capital expenditure, expenditure at the area health service administration level and group services expenditure (e.g. central

laundry and pathology services). Refer to *Australian Hospital Statistics 1999–00* for further detail on the data quality for the NPHED (AIHW 2001a).

Unlike the NCMHED, the NPHED includes the data for *Full-time-equivalent staff*, *Salaries and wages* and the *Non-salary operating costs* subcategory data elements (types of staff and types of non-salary expenditure). The public acute hospital establishments that contain one or more specialised psychiatric units or wards are flagged in NPHED. However, no financial or staffing data are available for these specialised psychiatric wards, as these data are not provided for separate units or wards.

Additional notes are provided in the descriptive commentary throughout this report highlighting data quality and interpretation issues in specific instances. For greater detail on the scope, definitions and quality of data obtained from the NPHED, refer to *Australian Hospital Statistics 1999–00* (AIHW 2001a).

A list of the public psychiatric hospitals contributing to this report is presented in Appendix 7.

## Private Health Establishments Collection

The ABS conducts an annual census of all private acute care hospitals and private psychiatric hospitals licensed by State and Territory health authorities and all free-standing day hospital facilities approved by the DHA. The collection contains data on the staffing, finances and activity of these establishments. Differences in accounting policy and practices and the administration of property and fixed asset accounts by parent organisations may have resulted in some inconsistencies in the financial data (ABS 2001).

The data definitions used in the PHEC are largely based on definitions in the *National Health Data Dictionary*, Version 8.0 (NHDC 1999), which makes comparison between the NPHED and NCMHED possible. The ABS definition for private psychiatric hospitals is 'those establishments that are licensed/approved by each State or Territory health authority and cater primarily for admitted patients with psychiatric or behavioural disorders'. The term 'cater primarily' applies when 50% or more of total patient days are for psychiatric patients.

Additional information on the PHEC can be obtained from the annual ABS publication on private hospitals (ABS 2001).

## Bettering the Evaluation And Care of Health

The BEACH survey is a collaborative study between the AIHW and the University of Sydney. It is a continuous survey of general practice with three primary aims:

- to provide a reliable and valid data collection process for general practice that is responsive to the needs of information users;
- to establish an ongoing database of information on encounters between general practitioners and patients; and
- to assess patient risk factors and health states and the relationship between these factors and health service activity (Britt et al. 2000).

For each year's data collection, a random sample of about 1,000 general practitioners each reported details of 100 consecutive general practice encounters of all types on structured paper encounter forms. Each form collects information about the consultation (e.g. date, type of consultation), the patient (e.g. date of birth, sex, reasons for encounter), the patient's

presenting problems (e.g. diagnoses, status of each problem), and the management for each problem (e.g. treatment provided, prescriptions, referrals). Patient risk factors and health state data, and general practitioner characteristics data are also collected. Data for 1999–00 are used in this report.

At least one diagnosis or problem is identified for each encounter, although up to four problems can be reported for each. Problems are coded according to ICPC-2 PLUS, an extension of the International Classification of Primary Care, 2nd Edition (ICPC-2), and classified using ICPC-2. Additional information on the BEACH survey can be obtained from *General Practice Activity in Australia 1999–00* (Britt et al. 2000).

## Commonwealth/State Disability Agreement Minimum Data Set collection

The CSDA allocates the responsibility for specific types of disability support services between Commonwealth and State and Territory governments. The AIHW manages the CSDA MDS to collate nationally consistent data on services funded under the CSDA and their clients. Data are collected on the service providers and clients on a single 'snapshot' day each year. For 2000, the snapshot day varied between jurisdictions but fell within the May to June period.

The collection covers disability support services receiving funding under the CSDA in 2000. Services that do not receive CSDA funding are specifically excluded. Not every specialist psychiatric disability support service is included in the CSDA MDS collection as some are not funded through the CSDA.

- In New South Wales, psychiatric disability services are provided by the New South Wales Department of Health and are not included in the CSDA MDS collection.
- South Australia and Tasmania do not report data for psychiatric disability services to the CSDA MDS collection.
- In Victoria, psychiatric disability services are included in the CSDA MDS collection.
- In Queensland, psychiatric disability services funded by Queensland Health are included in the CSDA MDS collection. Non-recurrent grants funded by Queensland Treasury under the Gaming Machine Community Benefit Fund are not.
- In the Australian Capital Territory and the Northern Territory, only some psychiatric disability services are included in the CSDA MDS collection.
- In Western Australia, only some psychiatric disability services are included in the CSDA MDS collection. The Health Department is the main provider of services for people with a psychiatric disability and these services are not included.

However, even in those States where specific psychiatric services are not CSDA-funded, people with a psychiatric disability do receive various CSDA disability support services.

Given these limitations with respect to the coverage of psychiatric disability support services in the CSDA MDS, these data need to be interpreted with caution. Additional information on the data from the CSDA MDS collection can be obtained from the publication *Disability Support Services 2000: National Data on Services Provided under the Commonwealth/State Disability Agreement* (AIHW 2001b).

## National Medical Labour Force Survey data

The AIHW National Medical Labour Force Survey has been conducted each year since 1993, in conjunction with the annual registration renewal of medical practitioners with the medical boards in each State and Territory. Coverage in some jurisdictions may exclude medical practitioners who registered for the first time during the survey year. Practitioners with conditional registration, usually for a fixed term, are also excluded in many jurisdictions. These conditional registrants include interns and temporary resident doctors, who are not required to renew their registration at the standard renewal date. The statistics reported in this publication relate to registration renewals during the period October–December 1998. Additional information on the survey is provided in *Medical Labour Force 1998* (AIHW 2000b).

## Medicare data

The Health Insurance Commission (HIC) collects data on all medical services funded through Medicare and provides these data to DHA. Information collected includes the type of service provided (Medicare Item number) and the benefit paid by Medicare for the service. The figures presented in this report on services provided by private psychiatrists include only those services that are performed by a registered provider, for services that qualify for Medicare benefit and for which a claim has been processed by the HIC. They do not include services provided to public patients in public hospitals or services that qualify for a benefit under the Department of Veteran's Affairs National Treatment Account.

The State or Territory is determined according to the address at the time of claiming of the patient to whom the service was provided. The year is determined by the date the service was processed by the HIC, not the date the service was provided.

Time series data presented in this report are based on the mapping of old item numbers to current item numbers. For example, item 144 (private psychiatrist home visit of less than 15 minutes) was renumbered to item 330 during 1996. This publication reports all 144 and 330 items as item 330. Refer to Appendix 2 for a description of the item codes used in this report.

## Pharmaceutical Benefits Scheme data

The HIC collects data on most prescriptions funded through the PBS and provides these data to DHA. Details are collected on the medication prescribed (e.g. type and cost of medication), the prescribing practitioner (e.g. speciality) and the supplying pharmacy (e.g. location). The figures reported in this publication relate to the prescription costs funded by the PBS and the number of prescriptions that have been processed by the HIC. They refer only to paid services processed from claims presented by approved pharmacies. They do not include any adjustments made against pharmacists' claims, any manually paid claims or any benefits paid as a result of retrospective entitlement or refund of patient contributions. Items supplied to general patients, costing less than $21.90, do not receive a PBS benefit and are therefore not included. The PBS data do not contain Section 100 items, highly specialised drugs available through hospital pharmacies for outpatients.

The State or Territory is determined according to the address of the pharmacy supplying the item. The year was determined as the date the service was processed by the HIC, not the date of prescribing or the date of supply by the pharmacy. The data presented in this report

exclude medications provided to war veterans through the Repatriation Pharmaceutical Benefit Scheme (RPBS).

## This report and data on the Internet

This report and accompanying tables are available on the Internet at www.aihw.gov.au/publications/hse/mhsa99-00/index.html. Some of the national data on admitted patients from the NHMD are also available in an interactive data cube format at that site. Users can access this database to create customised tables based on the age group, sex, principal diagnosis, and mental health legal status of patients who received specialised psychiatric care in 1998–99 or 1999–00.