

Appendix 1: Data sources

Introduction

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 include AIHW databases such as the National Hospital Morbidity Database (NHMD) and the National Community Mental Health Establishments Database (NCMHED) which were supplied data under the National Health Information Agreement and specified as the National Minimum Data Sets (NMDSs) for Mental Health Care in the *National Health Data Dictionary*, Version 10.0. For a description of the component data sets of the NMDSs for Mental Health Care, refer to the next section in this appendix.

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 for Mental Health Care. Therefore, this report presents data from other AIHW data collections such as the National Public Hospital Establishments Database (NPHEd), the Bettering the Evaluation and Care of Health (BEACH) survey of general practice activity, and the Commonwealth, State and Territory Disability Agreement Minimum Data Set collection. Data from collections external to the AIHW were also used, including the Australian Bureau of Statistics' (ABS) Private Hospital Establishments Collection (PHEC), and the Department of Health and Ageing (DHA) and Health Insurance Commission (HIC) Medicare and Pharmaceutical Benefits Scheme (MBS and PBS) data collections. Each of these data sources has 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 text and footnotes.

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 persons can have a substantial effect on the delivery of health care.

Data collections

National Hospital Morbidity Database (NHMD)

The NHMD is a compilation of electronic summary records from admitted patient morbidity data collections in Australian hospitals. It includes demographic, administrative and length of stay data, and data on the diagnoses of the patient, the procedures they underwent in hospital, external causes of injury and poisoning, and the AR-DRG for each hospital separation (see Glossary).

Records for 2001–02 are for hospital separations in the period from 1 July 2001 to 30 June 2002. Data on patients who were admitted on any date before 1 July 2001 are included, provided that they separated between 1 July 2001 and 30 June 2002. 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. The coverage is described in greater detail in *Australian Hospital Statistics 2001–02* (AIHW 2003c).

This report contains data specified under the NMDs for Admitted Patient Mental Health Care, which represents a subset of the data collated in the NHMD (Table A1.1).

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 2001–02, with estimates that between 95% and 100% of psychiatric care days were reported.

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. Some jurisdictions, or sectors within jurisdictions, were unable to provide data for all of these data elements.

The majority of data elements were reported for at least 95% of all mental health-related separations that received specialised psychiatric care. However, the data element *Marital status* was coded to 'Not reported' for 6.6% of public acute hospital separations and 8.1% of private hospital separations nationally. *Employment status* was not recorded for public acute hospitals in New South Wales and Victoria, for private hospitals in New South Wales, Victoria, South Australia and the Australian Capital Territory, and for public psychiatric hospitals in New South Wales. *Type of usual accommodation* was not recorded for public acute hospitals in Victoria and the Northern Territory, for private hospitals in Victoria, and was not reported for 27.9% of public psychiatric hospital separations nationally. *Referral to further care (psychiatric patient)* was not reported for 53% of separations with care in a specialised psychiatric unit or hospital. Data quality was deemed to be too poor for publication due to the high numbers coded to the 'Not reported' category for the data elements *Marital status*, *Type of usual accommodation*, *Employment status* and *Referral to further care (psychiatric patient)*.

Data for 2001–02 on source of referral and on the average and median length of stay by AR-DRG as presented in previous *Mental Health Services in Australia* reports are now on the Internet at <www.aihw.gov.au>.

Other mental health-related separations (for which the patient did not receive specialised psychiatric care) were identified by a mental health-related principal diagnosis. These separations did not fall within the scope of the NMDS for Admitted Patient Mental Health Care and therefore information on these data elements may or may not have been collected.

Unless otherwise specified, the state and territory of the hospital is reported, rather than the state or 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 2001–02* (AIHW 2003c). Lists of the public psychiatric hospitals and public acute hospitals with specialised psychiatric units contributing to this report can be found on the Internet at <www.aihw.gov.au>.

National Community Mental Health Establishments Database (NCMHED)

The NCMHED includes data on public community mental health establishments, and their expenditure and staffing (Table A1.2). For 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 for Community Mental Health Establishments.

For this NMDS, community mental health care refers to all specialised public 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, including adult, aged 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 residential services that were staffed 24 hours per day were included.

For more information on the NMDS for Community Mental Health Establishments, refer to *Mental Health Services in Australia 2000–01* (AIHW 2003a). A list of the public community mental health establishments contributing to this report can be found on the Internet at <www.aihw.gov.au>.

National Community Mental Health Care Database (NCMHCD)

The NCMHCD includes data on ambulatory service contacts provided by public community mental health establishments. The data collated in the NCMHCD are specified by the NMDS for Community Mental Health Care. NCMHCD contains data on the date of service contact and on the characteristics of the patient ranging from demographic information such as the age and sex to clinically relevant information such as principal diagnosis and mental health legal status (Table A1.3).

The scope for this collection is all ambulatory service contacts provided by the public community mental health establishments that are in-scope for the NMDS for Community

Mental Health Establishments. A list of the public community mental health establishments contributing this patient-level data to NCMHCD can be found on the Internet at <www.aihw.gov.au>.

A service contact for the purposes of this collection was defined as a contact between a patient or client and an ambulatory mental health care service (including hospital and community-based services) which resulted in a dated entry being made in the individual's record.

In 2001-02, there were 139 establishments contributing data to the National Community Mental Health Care Database (NCMHCD) and 15 mental health care establishments that provided ambulatory care services but did not contribute data to the NCMHCD. These comprised two services in Queensland, eight services in South Australia, 4 services in Tasmania and one in the Australian Capital Territory. Several jurisdictions had establishments that did not report data for several of the months during the collection period (see Chapter 3 for more details).

Review of the 2000-01 data identified inconsistencies in the definition of a service contact actually used across jurisdictions. Variation between states' and territories' reporting practices have been identified with respect to:

- whether a service contact can be reported if the patient has not provided personal details
- how many service contacts are to be reported when there are multiple service providers and/or multiple patients present at the service contact (e.g. group sessions)
- whether a patient receiving numerous services during one day should be recorded as one or more service contacts
- what extent telephone and written correspondence are included as service contacts
- whether indirect contacts such as contacts between service providers should be included
- whether consultation-liaison activities (i.e. specialist mental health providers who liaise with general hospital units when they treat patients with mental disorders) are included as service contacts.

There were inconsistencies in the reporting of principal diagnosis across jurisdictions. Principal diagnosis in this collection refers to the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of care in hospital, or attendance at a health care facility.

It is known that there are the following differences between states' and territories' reporting practices:

- New South Wales reported current diagnosis for each service contact rather than the principal diagnosis for a longer period of care and used a combination of ICD-10-AM and ICD-10-PC;
- Queensland was unable to report principal diagnosis for 2001-02;
- all other jurisdictions used ICD-10-AM; and
- Australian Capital Territory and Northern Territory reported principal diagnosis using the 'Mental and behavioural disorders' chapter of the ICD-10-AM classification only.

Over 33% of all service contacts had an unspecified principal diagnosis, comprising records coded to F99 *Mental disorder not otherwise specified*, or not stated/not reported (Table 3.20). The state and territory data show that the proportion of service contacts reported with an unspecified principal diagnosis ranged from 0.7% to 50.1% (Table A4.2).

These issues are expanded on in the *Community Mental Health Care 2000–01: Review of the data collected under the National Minimum Data Set for Community Mental Health Care* (AIHW 2004b).

Although it is anticipated that the data collected will allow records for service contacts within individual establishments to be linked for individual patients so that estimates of number of patients treated can be made, this has not been undertaken for this report. A discussion of the extent to which this may be possible is included in the *Community Mental Health Care 2000–01: Review of the data collected under the National Minimum Data Set for Community Mental Health Care* (AIHW 2004b).

NCMHCD data are presented in Chapter 3 and Appendix 4.

National Public Hospital Establishments Database (NPHEd)

The AIHW is the 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 2001–02* for further detail on the data quality for the NPHEd (AIHW 2003c).

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 2000–01* (AIHW 2002a).

A list of the public psychiatric hospitals contributing to this report can be found on the Internet at <www.aihw.gov.au>.

Private Health Establishments Collection (PHEC)

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 freestanding 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 2003b).

The data definitions used in the PHEC are largely based on definitions in the *National Health Data Dictionary*, Version 10.0 (NHDC 2001), which makes comparison between the NPHEC 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 2003b).

Bettering the Evaluation and Care of Health (BEACH)

The BEACH survey is a collaborative study between the AIHW and the University of Sydney. For each year's data collection, a random sample of about 1,000 general practitioners each reports 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 problems managed 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 2002–03 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 2002–03* (Britt et al. 2003).

Commonwealth/State Disability Agreement (CSDA) Minimum Data Set collection

The CSDA allocates the responsibility for specific types of disability support services between Australian, 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 2002, 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 2002. 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, specialist psychiatric and other disability support 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 included.
- 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 2002: National Data on Services Provided under the Commonwealth/State Disability Agreement* (AIHW 2003f).

The 2002 collection was the final 'snapshot'-based collection. From the 2002–03 reporting period, ongoing data are collected for all Commonwealth, State and Territory Disability Agreement-funded services for the full year.

National Medical and Nursing Labour Force Survey data

The AIHW conducts the National Medical Labour Force Survey and the National Nursing Labour Force Survey, in conjunction with the annual registration renewal of these practitioners with the relevant registration boards in each state and territory. The AIHW has conducted the medical practitioner survey annually since 1993 and the nursing survey since 1995.

The figures produced from the Medical Labour Force Survey and the Nursing Labour Force Survey are estimates only. Not all medical practitioners or nurses who were sent a questionnaire responded to the survey, and estimates of the whole medical practitioner and nursing populations are based on survey data weighted to match available registration information.

Coverage in some jurisdictions may exclude some 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 latest information on these surveys is provided in *Medical Labour Force 2001* (AIHW 2003d) and the *Nursing Labour Force 2001* (AIHW 2003e) reports.

Medicare data

The Health Insurance Commission (HIC) collects data on all medical services funded through Medicare and provides these data to the 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 Veterans' Affairs National Treatment Account.

The state or territory is determined according to the patient's mailing address postcode at the time of making the claim. In some cases this will not be the same as the patient's residential address postcode. 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.

Pharmaceutical Benefits Scheme (PBS) data

The HIC collects data on most prescriptions funded through the PBS and provides these data to the 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 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 \$23.10, do not receive a PBS benefit and are therefore not included. The PBS data do not contain Section 100 items, i.e. highly specialised drugs available through hospital pharmacies for outpatients.

The state or territory is determined as the address of the pharmacy supplying the item. The year is 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 Benefits Scheme as these data were unavailable at the time the data extraction was required.

Table A1.1: Data elements^(a) that constitute the NMDs for Admitted Patient Mental Health Care for 2001–02

Data element	Specific to specialised mental health care	Knowledgebase^(b) identifier
Identifiers		
Establishment identifier (made up of)		000050
<i>State identifier</i>		000380
<i>Establishment sector</i>		000379
<i>Region code</i>		000378
<i>Establishment number</i>		000377
Person identifier		000127
Sociodemographic items		
Sex		000149
Date of birth		000036
Country of birth		000035
Indigenous status		000001
Marital status	✓	000089
Employment status	✓	000317
Area of usual residence		000016
Pension status—psychiatric patients	✓	000121
Type of usual accommodation	✓	000173
Service and administrative items		
Care type (previously <i>Type of episode of care</i>)		000168
Previous specialised treatment		000139
Admission date		000008
Separation date		000043
Total leave days		000163
Mode of admission (previously <i>Source of referral to acute hospital or private psychiatric hospital</i>)		000385
Mode of separation		000096
Source of referral to public psychiatric hospital	✓	000150
Referral to further care (psychiatric patients)	✓	000143
Total psychiatric care days	✓ ^(c)	000164
Mental health legal status	✓ ^(c)	000092
Clinical items		
Principal diagnosis		000136
Additional diagnosis		000005
Diagnosis Related Group		000042
Major Diagnostic Category		000088
Intended length of stay		000076

(a) All data elements are defined in the *National Health Data Dictionary*, Version 10.0 (NHDC 2001).

(b) The Knowledgebase: Australia's Health, Community Services and Housing Metadata Registry can be accessed through the AIHW website at <www.aihw.gov.au>.

(c) Collected for all patients but relevant only to specialised psychiatric care.

Table A1.2: Data elements^(a) that constitute the NMDS for Community Mental Health Establishments for 2001–02

Data element	Knowledgebase ^(b) identifier
Establishment identifier (made up of)	000050
<i>State identifier</i>	000380
<i>Establishment sector</i>	000379
<i>Region code</i>	000378
<i>Establishment number</i>	000377
Separations ^(c)	000205
Geographic location of establishment	000260
Number of available beds	000255
Total full-time-equivalent staff	000252
Total salaries and wages	000254
Total non-salary operating costs	000360
<i>Payments to visiting medical officers</i>	000236

(a) All data elements are defined in the *National Health Data Dictionary*, Version 10.0 (NHDC 2001).

(b) The Knowledgebase: Australia's Health, Community Services and Housing Metadata Registry can be accessed through the AIHW website at <www.aihw.gov.au>.

(c) The term 'separations' refers to periods of care for non-admitted patients in public community-based residential mental health care establishments.

Table A1.3: Reporting of data elements^(a) that constitute the NMDS for Community Mental Health Care for 2001-02

Data element	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Area of usual residence	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Country of birth	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Date of birth	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Establishment identifier	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Indigenous status	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Marital status	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Mental health legal status	Yes	Yes	Yes	Not permitted to be reported	Yes	Yes	Yes	Yes
Person identifier	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Principal diagnosis	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Service contact date	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sex	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

(a) All data elements are defined in the *National Health Data Dictionary*, Version 10.0 (NHDC 2001).

Appendix 2: Codes used to define mental health-related care and medications

With the exception of NCHMED and NCMHCD, the health care data collections used in this report contain data on more than just mental health care, so a mental health-related subset of the data needed to be defined. For some data collections this was relatively simple. For NPHEd and PHEC data, mental health-related care was defined by hospital type (psychiatric hospital) or specialised unit flag (e.g. specialised psychiatric unit in acute care hospital). Medicare and National Medical Labour Force Survey data were defined as mental health-related based on the profession of the medical practitioner (e.g. psychiatrist).

For other data collections, it was necessary to use the classifications in the collections for diagnoses, problems or disabilities to define mental health-related care. The principal and additional diagnosis data in the NHMD are classified using the ICD-10-AM classification, the BEACH data set uses ICPC-2 for coding reasons for encounters (RFEs) and problems, and the CSDA Minimum Data Set collection uses a simple customised classification to classify disabilities. Details are provided below for each classification for which codes were used to define a mental health-related principal or additional diagnosis, a mental health-related problem or RFE, or mental health-related disability.

The definition of a mental health-related medication was based on the ATC classification for PBS data. Details are provided in Table A2.1.

National Hospital Morbidity Database

The definition of a mental health-related diagnosis included all ICD-10-AM second edition codes which were either clinically or statistically relevant to mental health. The ICD-9-CM codes used to define mental health-related separations for 1995–1996 through to 1997–1998 are available on request.

This list was developed in consultation with the National Mental Health Working Group Information Strategy Committee and the Clinical Casemix Committee of Australia. The list of codes and further information can be found in *Mental Health Services in Australia 2000–01* (AIHW 2003a).

Bettering the Evaluation and Care of Health

For the purposes of this report, mental health-related RFEs and problems managed were defined as those included in the ICPC-2 *Psychological* chapter. The same set of codes was used for both RFEs and problems. For the list of the codes used refer to *Mental Health Services in Australia 2000–01* (AIHW 2003a). Additional information on the BEACH survey can be obtained from *General practice activity in Australia 2002–03* (Britt et al. 2003).

Commonwealth/State Disability Agreement Minimum Data Set

The CSDA Minimum Data Set questionnaire has an item that asks the user of a service or their carer 'what is your (the consumer's) primary disability group?'. The survey form also asks respondents to tick all applicable other significant disability groups. For both questions, the 12 disability categories are listed in tick-a-box format. The list of categories can be found in *Mental Health Services in Australia 2000–01* (AIHW 2003a).

Data are presented in this report on those consumers with a psychiatric primary disability or a psychiatric disability as one of their other significant disabilities. Additional information on the data from the CSDA Minimum Data Set collection can be obtained from the publication *Disability Support Services 2002: National Data on Services Provided under the Commonwealth/State Disability Agreement* (AIHW 2003f).

Pharmaceutical Benefits Scheme

Prescription data from the PBS are coded using the ATC classification. Table A2.1 contains the list of the codes used to define mental health-related medications. Not all medications included in each code group are used solely for mental health-related conditions. For example Prochlorperazine (N05AB06), which is classified under the ATC classification as an antipsychotic medication (N05A), is frequently prescribed as an anti-nausea treatment.

Table A2.1: Anatomical Therapeutic Chemical codes used to define mental health-related medication prescribed by general practitioners and non-psychiatrist medical specialists in PBS data^(a)

ATC code	Description
N05	Psycholeptics
N05A	Antipsychotics
N05B	Anxiolytics
N05C	Hypnotics and sedatives
N06	Psychoanaleptics
N06A	Antidepressants

Appendix 3: Separations that could be considered equivalent to ambulatory mental health care

Previous *Mental Health Services in Australia* reports have presented all same day mental health-related hospital separation data in the chapter on admitted patient care. However, it could be considered that some of these data would be more appropriately placed in the chapter on ambulatory care. This concern was raised in the Mental Health Classification and Service Costs Study conducted under the National Mental Health Strategy. The study found that episodes intending to be same day were more similar to community care than admitted patient care in terms of cost and type of care provided (Buckingham et al. 1998).

A definition of same day mental health-related separations that could be considered to be equivalent to ambulatory mental health care (termed 'ambulatory equivalent mental health-related separations') was then developed and used as a basis for organising *Mental Health Services in Australia 2001–02*. Ambulatory-equivalent mental health-related separation data now appear in the ambulatory mental health care chapter (Chapter 3), rather than the admitted patient care chapters (Chapters 4, 5 and 6).

This appendix provides an overview of the definition of ambulatory-equivalent mental health-related separations used in this report and data quality concerns to be considered when interpreting the data.

Overview of same day mental health-related separations

In 2001–02 there were 118,179 same day mental health-related hospital separations from Australian hospitals. Figure A3.1 presents the number of these separations per 1,000 population by hospital type and jurisdiction. This figure shows there are significant differences between jurisdictions in the rates of same day separations across hospital types, which may indicate differences in reporting, admission practices or treatment arrangements. The majority of the variation between jurisdictions occurred within the private sector.

Table A3.1 presents the number of same day mental health-related separations by jurisdiction and specialised psychiatric care status. There were 2,460 same day mental health-related separations that involved specialised psychiatric care in public psychiatric hospitals (94.4%), 65,520 in private hospitals (87.5%) and 17,745 (43.6%) in public acute care hospitals. The table shows that the majority of same day mental health-related separations with specialised psychiatric care came from private hospitals (76.4%). There were comparatively few same day public psychiatric hospital separations. For this reason, public hospitals and public psychiatric hospitals separations were combined for the remainder of this appendix.

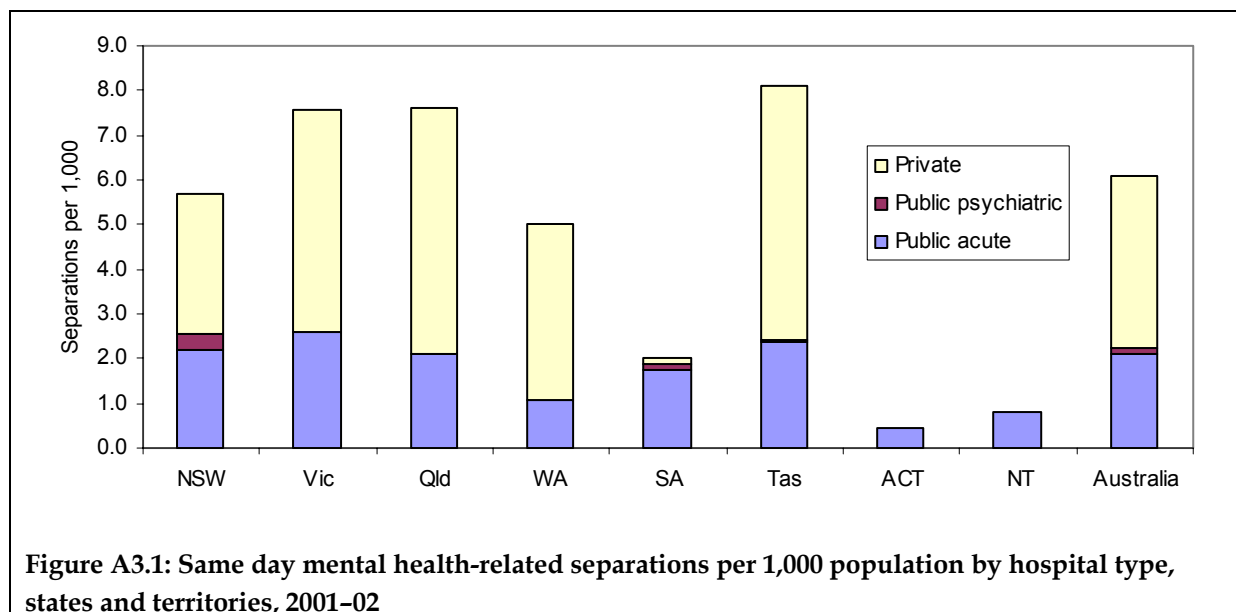


Figure A3.1: Same day mental health-related separations per 1,000 population by hospital type, states and territories, 2001-02

Table A3.1: Same day mental health-related separations by hospital type and specialised psychiatric care status, states and territories, 2001-02

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Public acute care hospitals									
With specialised psychiatric care	8,074	1,606	5,549	649	942	789	81	55	17,745
Without specialised psychiatric care	6,402	10,921	2,020	1,333	1,741	333	65	100	22,915
<i>Total</i>	<i>14,476</i>	<i>12,527</i>	<i>7,569</i>	<i>1,982</i>	<i>2,683</i>	<i>1,122</i>	<i>146</i>	<i>155</i>	<i>40,660</i>
Private hospitals									
With specialised psychiatric care	17,851	22,121	16,494	7,255	175	1,624	0	n.a.	65,520
Without specialised psychiatric care	2,616	1,926	3,516	244	38	1,052	1	n.a.	9,393
<i>Total</i>	<i>20,467</i>	<i>24,047</i>	<i>20,010</i>	<i>7,499</i>	<i>213</i>	<i>2,676</i>	<i>1</i>	<i>n.a.</i>	<i>74,913</i>
Public psychiatric hospitals									
With specialised psychiatric care	2,227	0	1	24	202	6	2,460
Without specialised psychiatric care	146	0	0	0	0	0	146
<i>Total</i>	<i>2,373</i>	<i>0</i>	<i>1</i>	<i>24</i>	<i>202</i>	<i>6</i>	<i>..</i>	<i>..</i>	<i>2,606</i>
All hospitals									
With specialised psychiatric care	28,152	23,727	22,044	7,928	1,319	2,419	81	55	85,725
Without specialised psychiatric care	9,164	12,847	5,536	1,577	1,779	1,385	66	100	32,454
Total	37,316	36,574	27,580	9,505	3,098	3,804	147	155	118,179

.. Not applicable.

Defining separations that could be considered equivalent to ambulatory mental health care

For this report, ambulatory-equivalent mental health-related separations were defined by excluding those same day separations unlikely to involve the type of activity to be undertaken in ambulatory mental health care. Excluded were separations for which:

- electroconvulsive therapy and/or general anaesthesia procedures were reported;
- other procedures that would not be expected to be undertaken in ambulatory mental health care were reported;
- a mode of admission of care type change or transfer was reported; or
- a mode of separation of transfer, care type change, left against medical advice or death was reported.

The data related to each of these exclusions were examined and are reported below.

In addition, intended length of stay was examined in order to exclude separations where the stay was intended to be overnight. However the quality of the data for this data element was assessed as insufficient to justify exclusion of this group from separations that could be considered to be ambulatory-equivalent.

Procedures

In general, separations were excluded from the ambulatory-equivalent category if they were reported with procedures that were considered unlikely to be undertaken in ambulatory mental health care. The procedures used as the basis for excluding separations were mainly electroconvulsive therapy (ECT) and general anaesthesia. A smaller number of separations were excluded on the basis that they had other procedures, other than selected non-invasive interventions (as detailed below), that were also unlikely to be undertaken in ambulatory mental health care.

There were 66,126 same day mental health-related separations for which no procedures or interventions were reported, 25,195 in public hospitals and 40,931 in private hospitals. Specialised psychiatric care was reported for 53,305, 14,119 in public hospitals and 39,186 in private hospitals. The total of 66,126 was 56% of all same day mental health-related separations for 2001–02. These separations were included as ambulatory-equivalent mental health-related separations, as it was assumed that they had either psychosocial interventions that were not recorded, or they had no procedures performed. It is also possible that procedures not expected to be undertaken in ambulatory mental health care were performed, but not reported for these separations.

Procedures not used to exclude separations

A small number of procedures were identified as probably equivalent to the ambulatory mental health care provided by specialised community mental health services. Separations for which only these procedures were reported were not excluded from the ambulatory-equivalent category (unless they were excluded for another reason).

The procedures were mostly psychosocial interventions, located in ICD-10-AM procedure chapter 19, *Non-invasive, cognitive and interventions, not elsewhere classified*. They are as follows:

- 1822 Assessment of personal care and other activities of daily/independent living
- 1823 Psychobehavioural or psychosocial assessment
- 1829 Neuropsychological assessment
- 1867 Counselling or education relating to personal care and other activities of daily/independent living
- 1868 Psychosocial counselling
- 1869 Other counselling or education
- 1872 Alcohol and drug rehabilitation
- 1873 Psychological therapies
- 1874 Psychosocial therapies
- 1875 Skills training in relation to learning, knowledge and cognition
- 1878 Skills training for personal care and other activities of daily/independent living
- 1879 Other psychobehavioural or psychosocial therapies, skills training
- 1916 Generalised allied health interventions as follows:
 - 95550-01 Allied health intervention, social work
 - 95550-02 Allied health intervention, occupational therapy
 - 95550-10 Allied health intervention, psychology.

There were a total of 33,328 same day mental health-related separations in 2001–02 for which the only procedures reported were from the list above. Most of these separations were classified as ambulatory-equivalent, although there were some excluded due to their mode of separation or admission.

ECT and general anaesthesia

ECT and general anaesthesia were the two most frequently reported procedures for same day mental health-related separations. In 2001–02 there were 12,023 same day mental health-related separations with ECT and/or general anaesthesia reported (see Table A3.6). Over 94% of the separations with ECT also had general anaesthesia recorded and almost 97% of the separations with general anaesthesia also had ECT. Most were reported for public hospitals.

Other procedures that would not be expected to be undertaken in ambulatory mental health care

In 2001–02 there were 1,314 mental health-related same day separations that had procedures that were considered unlikely to be undertaken in ambulatory mental health care services (Table A3.2). Some of these were apparently unrelated to either mental health or psychiatric care (e.g. endoscopy) and it is possible that some were miscoded data. The highest number of separations excluded because of these procedures were those with imaging services reported (473 separations) and non-invasive, cognitive and interventions, not elsewhere classified (other than those listed above; 591 separations).

Table A3.2: Separations with procedures not expected to be undertaken in ambulatory mental health care for same day mental health-related separations, excluding separations with ECT and GA procedures, by sector and psychiatric care days, 2001–02

Procedure group (procedure block codes)	Public hospitals			Private hospitals			Total		
	Specialised psychiatric care			Specialised psychiatric care			Specialised psychiatric care		
	With	With-out	Total	With	With-out	Total	With	With-out	Total
Nervous system (1–86)	1	29	30	1	2	3	2	31	33
Eye and adnexa (160–256)	1	1	2	0	0	0	1	1	2
Ear and mastoid process (300–333)	0	0	0	1	0	1	1	0	1
Nose, mouth and pharynx (370–422)	0	16	16	0	2	2	0	18	18
Dental services (450–490)	0	2	2	0	1	1	0	3	3
Respiratory system (520–569)	1	18	19	0	0	0	1	18	19
Cardiovascular system (600–767)	0	3	3	0	1	1	0	4	4
Blood and blood-forming organs (800–817)	0	0	0	0	1	1	0	1	1
Digestive system (850–1011)	1	11	12	0	38	38	1	49	50
Urinary system (1040–1128)	0	7	7	0	1	1	0	8	8
Male genital organs (1160–1203)	1	0	1	0	0	0	1	0	1
Obstetric procedures (1330–1347)	0	19	19	0	0	0	0	19	19
Musculoskeletal system (1360–1579)	0	1	1	0	0	0	0	1	1
Dermatological and plastic procedures (1600–1718)	39	49	85	0	2	2	36	51	87
Chemotherapeutic and radiation oncology procedures (1780–1799)	2	1	3	0	0	0	2	1	3
Non-invasive, cognitive and interventions, not elsewhere classified (1820–1916) ^(a)	120	23	143	334	114	448	454	137	591
Imaging services (1940–2016)	16	437	453	0	20	20	16	457	473
Total	182	617	796	336	182	518	515	799	1,314

(a) Excluding procedures not used to exclude separations, as detailed in the text.

Mode of admission and separation

Separations that had a mode of admission that included care type change or transfer, or a mode of separation that included care type change, transfer, left against medical advice or death, were identified as unlikely to be equivalent to ambulatory mental health care. This is because these modes of admission and separation indicate that the same day care was part of a period of care that was, or was expected to be longer than same day. For this reason, separations for which these modes of separation or admission were reported were not considered to be ambulatory-equivalent mental health-related separations.

There were 3,183 separations excluded on the basis of mode of admission involving a care type change (104) or transfer (3,079) (Table A3.3). There were 9,065 separations excluded on the basis of a mode of separation other than *Other* (i.e. the patient was not discharged to usual residence, their own accommodation or a welfare institution). This included 6,205 separations where the patient was transferred to another hospital, 470 separations with a care type change and 6 separations where the patient had died (Table A3.4).

Table A3.3: Mode of admission for same day mental health-related separations, by state and territory, 2001-02

Mode of admission	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Admitted patient transferred from another hospital	385	1,944	111	116	93	426	2	2	3,079
Statistical admission – care type change	5	79	13	0	1	6	0	0	104
Other	36,926	34,551	27,456	9,389	2,829	1,735	145	153	113,184
Not reported	0	0	0	0	175	1,637	0	0	1,812
Total	37,316	36,574	27,580	9,505	3,098	3,804	147	155	118,179

Table A3.4: Mode of separation for same day mental health-related separations, by state and territory, 2001-02

Mode of separation	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Discharge/transfer to an(other) acute hospital	965	2,450	626	81	476	486	11	17	5,112
Discharge/transfer to a residential aged care service	29	17	97	2	11	10	1	0	167
Discharge/transfer to an(other) psychiatric hospital	657	0	8	208	218	0	0	2	1,093
Discharge/transfer to other health care accommodation	31	29	53	1	13	63	0	7	197
Statistical discharge – care type change	32	393	25	9	2	5	0	4	470
Left against medical advice	1,185	156	344	181	108	17	2	5	1,998
Statistical discharge from leave	0	0	12	9	0	1	0	0	22
Died	3	0	2	1	0	0	0	0	6
Other (includes discharge to usual residence/own accommodation/welfare institution)	34,414	33,529	26,413	9,013	2,260	3,222	133	120	109,104
Not reported	0	0	0	0	10	0	0	0	10
Total	37,316	36,574	27,580	9,505	3,098	3,804	147	155	118,179

Intended length of stay

The Mental Health Classification and Service Costs Study found that episodes intending to be same day were more similar to community care than admitted patient care (Buckingham et al. 1998). Based on this, it was envisaged that the definition of an ambulatory-equivalent mental health-related separation would exclude separations where the intended length of stay was overnight.

In 2001-02, the proportion of mental health-related same day separations that were intended to be same day ranged from 21.3% to 91.2% across jurisdictions (Table A3.5). This indicates that the quality of the data on intended length of stay varied. Given that apparent variation, it was assessed as unlikely that *Intended length of stay* would be reliable enough to use in the definition of ambulatory-equivalent mental health-related separations.

Table A3.5: Intended length of stay for same day mental health-related separations, by state and territory, 2001–02

Intended length of stay	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Intended same day	30,552	33,358	20,478	7,558	1,835	2,704	83	33	96,601
Intended overnight	6,757	3,216	7,102	1,947	1,263	1,087	64	122	21,558
Not reported	7	0	0	0	0	13	0	0	20
Total	37,316	36,574	27,580	9,505	3,098	3,804	147	155	118,179
% of same day separations that were intended to be same day	81.9	91.2	74.3	79.5	59.2	71.1	56.5	21.3	81.7

Summary

The number of same day mental health-related separations excluded using the methods described above totalled 20,383 (Table A3.6). Most were excluded because they included ECT and/or general anaesthesia (12,023 separations) or an excluded mode of separation (9,065 separations). Most excluded separations were in public hospitals (17,768) and did not have specialised psychiatric care (11,847).

There were 97,796 ‘ambulatory-equivalent’ separations remaining after exclusions (Table A3.7). The majority were in private hospitals (71,298) and most had specialised psychiatric care (77,189). The proportion of same day separations that were categorised as ambulatory-equivalent varied among the states and territories, ranging from 53.5% in South Australia to 89.7% in Western Australia.

It is important to note that there could have been some misclassification with this process. Therefore, the ambulatory and non-ambulatory-equivalent split should be seen as indicative and not exact. This is particularly the case given the relatively large number of separations with no procedures reported.

Table A3.6: Summary of separations excluded from the ambulatory-equivalent mental health-related category, by hospital type and specialised psychiatric care status, 2001–02

	Mode of admission	Mode of separation	ECT and/or general anaesthetic	Other ‘non-ambulatory’ procedure	Total
Public hospitals					
With specialised psychiatric care	1,038	1,809	3,819	182	5,585
Without specialised psychiatric care	2,093	6,636	5,543	617	11,183
<i>Total</i>	<i>3,131</i>	<i>8,445</i>	<i>9,362</i>	<i>796</i>	<i>16,768</i>
Private hospitals					
With specialised psychiatric care	44	527	2,337	336	2,951
Without specialised psychiatric care	8	93	324	182	664
<i>Total</i>	<i>52</i>	<i>620</i>	<i>2,661</i>	<i>518</i>	<i>3,615</i>
All hospitals					
With specialised psychiatric care	1,082	2,336	6,156	515	8,536
Without specialised psychiatric care	2,101	6,729	5,867	799	11,847
Total	3,183	9,065	12,023	1,314	20,383

Note: The sum of the columns does not equal the total number excluded as a separation may have been excluded for more than one reason.

Table A3.7: Same day mental health-related separations by ambulatory-equivalent status, by hospital type and specialised psychiatric care status, states and territories, 2001-02

Category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Non-ambulatory-equivalent									
Public hospitals									
With specialised psychiatric care	1,552	538	1,979	257	498	719	28	14	5,585
Without specialised psychiatric care	2,841	5,871	885	484	887	149	27	39	11,183
Private hospitals									
With specialised psychiatric care	1,072	749	930	167	33	0	0	n.a.	2,951
Without specialised psychiatric care	174	127	193	68	24	77	1	n.a.	664
All hospitals									
With specialised psychiatric care	2,624	1,287	2,909	424	531	719	28	14	8,536
Without specialised psychiatric care	3,015	5,998	1,078	552	911	226	28	39	11,847
<i>Total non-ambulatory-equivalent</i>	<i>5,639</i>	<i>7,285</i>	<i>3,987</i>	<i>976</i>	<i>1,442</i>	<i>945</i>	<i>56</i>	<i>53</i>	<i>20,383</i>
Ambulatory-equivalent									
Public hospitals									
With specialised psychiatric care	8,749	1,068	3,571	416	646	76	53	41	14,620
Without specialised psychiatric care	3,707	5,050	1,135	849	854	184	38	61	11,878
Private hospitals									
With specialised psychiatric care	16,779	21,372	15,564	7,088	142	1,624	0	n.a.	62,569
Without specialised psychiatric care	2,442	1,799	3,323	176	14	975	0	n.a.	8,729
All hospitals									
With specialised psychiatric care	25,528	22,440	19,135	7,504	788	1,700	53	41	77,189
Without specialised psychiatric care	6,149	6,849	4,458	1,025	868	1,159	38	61	20,607
<i>Total ambulatory-equivalent</i>	<i>31,677</i>	<i>29,289</i>	<i>23,593</i>	<i>8,529</i>	<i>1,656</i>	<i>2,859</i>	<i>91</i>	<i>102</i>	<i>97,796</i>
Total	37,316	36,574	27,580	9,505	3,098	3,804	147	155	118,179
% of same day separations that were considered ambulatory-equivalent	84.9	80.1	85.5	89.7	53.5	75.2	61.9	65.8	82.8