Appendix 1: Data sources

To present a broad picture of mental health-related care in Australia, this report uses data drawn from a variety of sources. These data sources include AIHW databases such as the National Hospital Morbidity Database (NHMD) and the National Mental Health Establishments Database (NMHED), for which data were supplied under the National Health Information Agreement and specified in the National Minimum Data Sets (NMDSs) for Mental Health Care in the *National health data dictionary, Version 13* (HDSC 2006).

This report also presents data from other AIHW data collections such as the AIHW labour force surveys, the Bettering the Evaluation and Care of Health (BEACH) survey of general practice activity, the Supported Accommodation Assistance Program (SAAP) National Data Collection and the Commonwealth State/Territory Disability Agreement (CSTDA) National Minimum Data Set collection.

Data from collections external to the AIHW were also used, including the Australian Bureau of Statistics' Private Health Establishments Collection (PHEC) and the DoHA's Medicare, Pharmaceutical and Repatriation Pharmaceutical Benefits Schemes (MBS, PBS and RPBS) data collections.

The characteristics of each of the data sources used in this report should be considered when interpreting the data. The data sources used in this report are briefly described below.

AIHW labour force surveys: Medical Labour Force Survey and Nursing and Midwifery Labour Force Survey (Chapter 13)

The AIHW Medical Labour Force Survey and the Nursing and Midwifery Labour Force Survey are conducted by the state and territory departments of health with the cooperation of the medical and nursing registration boards in each jurisdiction, and in consultation with the AIHW. The AIHW is the data custodian for these national collections and is responsible for collating, editing and weighting the survey data.

The Medical Labour Force Survey is a census of all registered medical practitioners in each state and territory in Australia. The Nursing and Midwifery Labour Force Survey is a census of all registered nurses and midwives in each state and territory in Australia. The surveys are a mail-out survey conducted in association with the annual registration renewal process. The Medical Labour Force Survey has been conducted annually since 1993. The Nursing and Midwifery Labour Force Survey has been conducted every 2 years from 1995 to 2003, and annually since then.

In the surveys, information on demographic details, main areas and specialty of work, qualifications and hours worked are collected from registered professionals. The data collected generally relate to the 4 weeks before the survey for medical practitioners and to the week before the survey for nurses. Average weekly hours worked refers to average total hours worked per week in the main, second and third medical job for medical practitioners, and the main and second nursing jobs for nurses.

Survey responses are weighted by state, age and sex (and the number of registered and enrolled nurses for nursing) to produce state and territory and national estimates of the total medical and nursing and midwifery labour force. Benchmarks for weighting come from registration information provided by state and territory registration boards.

The response rates to these surveys vary from year to year and across jurisdictions. In 2005, the estimated national response rate for the Medical Labour Force Survey was 71.3%, and it ranged from 63.0 for Tasmania to 83.8% for Queensland. Estimates for the Northern Territory should be treated with caution as they are derived from responses to the 2004 Medical labour force survey, weighted to 2005 benchmark figures. The estimated 'response rate' for Northern Territory in 2005 is 31.8%.

There has been a decline in the response rate for the Nursing and Midwifery Labour Force Survey from 77.2% in 2001 to 55.0% in 2005 (excluding Victoria due to the manner in which Victorian estimates were derived). In 2005, response rates in the Northern Territory (13.7%) and Western Australia (26.9%) were particularly low. As a result, no estimates have been published for the Northern Territory. Estimates for Western Australia have been included in this report, but should be treated with care. The national estimates are based on census results from all jurisdictions, as the impact of any bias in responses from Western Australia and the Northern Territory is likely to be relatively small at the national level. As Victoria could not provide data for 2005, estimates for that year are based on responses to the 2006 AIHW Nursing and Midwifery Labour Force Census, weighted to registration/enrolment benchmark figures for 2005.

It should also be noted that, for both surveys (although more so for the nursing than for the medical survey), the questionnaires have varied over time and across jurisdictions. Mapping of data items has been undertaken to provide time series data. However, because of this and the variation in response rates, some caution should be used in interpreting change over time and differences across jurisdictions. This is particularly the case for mental health nurses, as the definition of these is reliant on the responses to one particular question within the questionnaire.

More detailed information about how these surveys were conducted is available from the *Medical labour force 2005* (AIHW 2008a) and *Nursing and midwifery labour force 2005* (AIHW 2008b).

Bettering the Evaluation and Care of Health survey (Chapter 2)

The BEACH survey of general practice activity 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 report details of 100 consecutive general practice encounters of all types on structured encounter forms. Each form collects information about the consultations (for example, date and type of consultation), the patient (for example, date of birth, sex, and reasons for encounter), the problems managed and the management of each problem (for example, treatment provided, prescriptions and referrals). Data on patient risk factors, health status and general practitioner characteristics are also collected.

Additional information on the 2006–07 BEACH survey can be obtained from *General practice activity in Australia 2006–07* (AIHW: Britt et al. 2008).

Commonwealth State/Territory Disability Agreement National Minimum Data Set collection (Chapter 10)

Data pertaining to the Commonwealth State/Territory Disability Agreement (CSTDA) are collected through the CSTDA National Minimum Data Set (NMDS). This NMDS, which is managed by the AIHW, enables the annual collation of nationally comparable data about CSTDA-funded services. Services within the scope of the collection are those for which

funding has been provided during the specified period by a government organisation operating under the CSTDA. A funded agency may receive funding from multiple sources. Where a funded agency is unable to differentiate service users according to funding source (that is, CSTDA or other), they are asked to provide details of all service users or to apportion the number of service users against the amount of funding provided (that is, if 50% of funding is from CSTDA then services are asked to report 50% of their service users).

With the exceptions noted below, agencies funded under the CSTDA are asked to provide information about:

- each of the service types they are funded to provide (that is, service type outlets they operate);
- all service users who received support over a specified period; and
- the CSTDA NMDS service type(s) the service users received.

However, certain service type outlets (such as those providing advocacy or information and referral services) are not requested to provide any service user details while other service type outlets (such as recreation and holiday programs) are only asked to provide minimal service user details.

The 2003–04 collection was the first full financial year of data available, with an overall service type outlet response rate of 93%. The data were reported in *Disability support services 2003–04* (AIHW 2005a). The most recent data available is for the 2005–06 collection period, and were released in *Disability support services 2005–06* (AIHW 2007a). For the 2005–06 collection, there was an overall service type outlet response rate of 94%.

The collection includes disability support service providers that receive funding under the CSTDA, including psychiatric-specific disability service providers, as well as other disability service providers that may be accessed by persons with a psychiatric disability. It should be noted that the CSTDA does not apply to the provision of services with a specialist clinical focus. In addition, the collection does not include psychiatric-specific disability support services that are not funded through the CSTDA.

There is some variation between jurisdictions in the services included under the CSTDA as follows:

- In New South Wales, psychiatric-specific disability services are provided by the New South Wales Department of Health and are not included in the CSTDA NMDS collection.
- In Victoria, psychiatric-specific disability services are included in the CSTDA NMDS collection and all service users accessing these services are identified as having a psychiatric disability.
- In Queensland, psychiatric-specific disability services that receive CSTDA funding through Disability Services Queensland are included in the CSTDA NMDS collection.
- In Western Australia, only some psychiatric disability services are included in the CSTDA NMDS collection. The health department is the main provider of services for people with a psychiatric disability and these services are not included.
- Tasmania, the Australian Capital Territory and the Northern Territory do not include any services classified as *psychiatric disability services*. However, these jurisdictions do provide *mental health services*. There appears to be no sharp distinction between what is classified as a psychiatric disability service and a mental health service, with some mental health services providing support to people with psychiatric disability.

Medicare Benefits Schedule data (Chapters 2, 6 and 14)

Medicare Australia collects data on the activity of all providers making claims through the Medicare Benefits Schedule (MBS), and provides this information to DoHA. Information collected includes the type of service provided (MBS item number) and the benefit paid by Medicare Australia for the service. The item number and benefits paid by Medicare Australia are based on the *Medicare Benefits Schedule book* (DoHA 2007a). Services that are not included in the MBS are not included in the data.

The MBS items included in the 2002 *Better Outcomes in Mental Health Care,* the 2004 *Enhanced Primary Care* and 2006 *Better Access to Psychiatrists, Psychologists and GPs through the MBS initiatives*, as well as existing psychiatrist items are at Table A1.1.

Table A1.1: MBS items (2002 Better Outcomes in Mental Health Care, 2004 Enhanced Primary Care and 2006 Better Access to Psychiatrists, Psychologists and GPs)

Initiative and item group	MBS Group and Subgroup	MBS item numbers
Better Outcomes in Mental Health Care, 2002		
3 Step Mental Health Process—GPs	Group A18 Subgroup 4	2574, 2575, 2577, 2578
3 Step Mental Health Process—OMPs	Group A19 Subgroup 4	2704, 2705, 2707, 2708
Focussed Psychological Strategies	Group A20 Subgroup 2	2721, 2723, 2725, 2727
Case conferencing—psychiatrists		855, 857, 858, 861, 864, 866
Enhanced Primary Care, 2004		
Enhanced Primary Care—mental health workers	Group M3	10956
Enhanced Primary Care—registered psychologists	Group M3	10968
Better Access to Psychiatrists, Psychologists and GPs through the MBS, 2006		
GP Mental Health Care Plans	Group A20 Subgroup 1	2710, 2712, 2713
Psychological Therapy Services—clinical psychologists	Group M6	80000, 80005, 80010, 80015, 80020
Focussed Psychological Strategies (Allied Mental Health)	Group M7	
—registered psychologists		80100, 80105, 80110, 80115, 80120
—occupational therapists		80125, 80130, 80135, 80140, 80145
—social workers		80150, 80155, 80160, 80165, 80170
Initial consultation for a new patient—psychiatrists	Group A8	296, 297, 299
Existing psychiatrist items		
Patient attendances—consulting room	Group A8	291, 293, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 319
Patient attendances—hospital	Group A8	320, 322, 324, 326, 328
Patient Attendances—other locations	Group A8	330, 332, 334, 336, 338
Group psychotherapy	Group A8	342, 344, 346
Interview with non-patient	Group A8	348, 350,352
Telepsychiatry	Group A8	353, 355, 356, 357, 358, 364, 366, 367, 369, 370
Case conferencing	Group A15 Subgroup 2	855, 857, 858, 861, 864, 866
Electroconvulsive therapy	Group T1 Subgroup 13	14224

The MBS data presented in this report relate to services provided on a fee-for-service basis for which MBS benefits were paid. The year is determined from the date the service was processed by Medicare Australia, rather than the date the service was provided. The state or territory is determined according to the postcode of the patient's mailing address at the time of making the claim. In some cases, this will not be the same as the postcode of the patient's residential address.

Mental health-related emergency department data (Chapter 3)

While there is no national agreement on the collection of information on mental health-related services provided by emergency departments in hospitals in Australia, states and territories agreed to provide the AIHW with aggregate data to compile national information on mental health-related occasions of service provided by emergency departments in public hospitals.

All state and territory health authorities collect a core set of nationally comparable information on most of the emergency department occasions of service in public hospitals within their jurisdiction. The AIHW compiles these episode-level data annually to form the National Non-admitted Patient Emergency Department Care Database (NAPEDCD) (AIHW 2006b). The data are collected by state and territory health authorities according to definitions in the NAPEDC National Minimum Data Set (NMDS) and cover occasions of service provided in emergency departments of public hospitals categorised in the previous financial year as peer groups A (that is, principal referral and specialist women's and children's hospitals) and B (large hospitals). For 2005–06, data were also collected by some states and territories for hospitals in peer groups other than A and B.

The total number of emergency department occasions of service for all public hospitals in 2005–06 was 6.3 million. Episode-level data were collected by state and territory health authorities departments for 78% of these occasions of service (a total of 4.9 million occasions of service) (AIHW 2006b). Episode-level data were available for 100% of all emergency department occasions of service for public hospitals in peer groups A and B, and approximately 30% of emergency department occasions of service for other public hospitals.

Definition of mental health-related emergency department occasions of service

While there is a national data compilation of episode-level data on emergency department occasions of service (NAPEDCD), there is currently no national agreement to collect information on the principal diagnosis for emergency department occasions of service. In addition, there is no standard or agreed classification for diagnoses in use across emergency departments that could be used uniformly to identify mental health-related care, or any other data item (such as, based on referral, reason for the occasion of service, intentional self-harm codes, mental health flags) collected in a nationally consistent manner that would allow for the identification of mental health-related occasions of service in emergency departments. Thus, it is difficult to identify and report on mental health-related emergency department occasions of service in a comparable manner across jurisdictions.

However, in 2005–06, all jurisdictions did collect some information on the principal diagnosis of an estimated 91% of emergency service department occasions of service for which they reported episode-level data to the NAPEDCD. As a result, it was determined that a definition of 'mental health-related' based on the collected diagnosis information could be applied nationally, for the purposes of compiling data for this publication.

Data on mental health-related emergency department occasions of service reported in Chapter 3 of this report have been provided by the state and territory health authorities according to the following definition: 'occasions of service in public hospital emergency departments that have a principal diagnosis of 'Mental and behavioural disorders' (i.e., codes F00–F99) in ICD-10-AM or the equivalent codes in ICD-9-CM'.

This definition does not capture all mental health-related presentation to emergency departments, and the caveats listed below should be taken into consideration when interpreting the data presented on mental health-related emergency department occasions of service.

Table A1.2: Mental health-related emergency department occasions of service, principal diagnosis codes included, ICD-10-AM and ICD-9-CM

ICD–10–AM[(a)] codes	ICD–9-CM[(b)] codes
F00–F09: Organic, including symptomatic, mental disorders	290, 293, 294, 310
F10–F19: Mental and behavioural disorders due to psychoactive substance use	291, 292, 303, 304, 305 (excluding 305.8 and 305.9)
F20–F29: Schizophrenia, schizotypal and delusional disorders	295, 297, 298 (excluding 298.0, 298.1, 298.2), 301.22
F30–F39: Mood (affective) disorders	296, 298.0, 298.1, 300.4, 301.1, 311
F40–F48: Neurotic, stress-related and somatoform disorders	2982, 300 (excluding 300.4, 300.19), 306 (excluding 306.3, 306.51, 306.6), 307.53, 307.80, 307.89, 308, 309 (excluding 309.21, 309.22)
F50–F59: Behavioural syndromes associated with physiological disturbances and physical factors	302.7, 305.8, 305.9, 306.3, 306.51, 306.6, 307.1, 307.4, 307.5 (excluding 307.53), 316, 648.44
F60–F69: Disorders of adult personality and behaviour	300.19, 301 (excluding 301.1, 301.22), 302 (excluding 302.7), 312.3
F70–F79: Mental retardation	317, 318, 319
F80–F89: Disorders of psychological development	299, 315, 330.8
F90–F98: Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	307.0, 307.2, 307.3, 307.6, 307.7, 307.9, 309.21, 309.22, 312 (excluding 312.3), 313, 314
F99: Unspecified mental disorder	—

(a) International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification.

(b) International Classification of Diseases, 9th revision, Clinical Modification.

Most jurisdictions had coded the principal diagnosis of emergency department occasions of service in 2005–06 using ICD-10-AM. However, for those using ICD-9-CM, mapping of the relevant ICD-10-AM codes to ICD-9-CM codes was undertaken (Table A1.2).

Aggregate data on the demographic characteristics of the patients, the triage category, departure status and the diagnosis category were provided by all states and territories to AIHW for occasions of service that met the definition of a mental health-related occasion of service.

Caveats

To ensure that the data on emergency department mental health-related occasions of service are interpreted correctly, the following should be noted:

- There is no nationally agreed-upon method of identifying mental health-related occasions of service in emergency departments.
- There is no standard diagnosis classification in use across states and territories in relation to emergency department data.
- There is no standard way to disaggregate those occasions of service identified as mental health-related into subcategories of mental health conditions.
- Not all potential mental health-related emergency department occasions of service are represented in the data, for the following reasons:
  - not all emergency department occasions of service are collected by state and territory authorities at the episode-level;
  - not all occasions of service episode-level data collected by state and territory authorities include diagnosis information;
  - the principal diagnosis codes included in the definition do not cover all mental health-related conditions; and
  - the mental health-related condition or illness may not have been coded as the diagnosis, if it was either not diagnosed by the emergency department or was not recognised as a reason for presentation at an emergency department.
- The definition is based on a single diagnosis only. As a result, if a mental health-related condition was reported as a second or other diagnosis and not as the *principal diagnosis*, the occasion of service will not be included as mental health-related.
- The data refer to occasions of service and not to individuals. An individual may have had multiple occasions of service within the same year.

Coverage

As noted above, episode-level data were available for 78% of public hospital emergency department occasions of service for public hospitals in 2005–06, and these data are mainly from the larger metropolitan hospitals (Table A1.3). Of the data available on emergency department occasions of service, it is estimated that 92% had a diagnosis code.

Using these figures, and assuming that mental health-related occasions of service are evenly distributed, it can be roughly estimated that the number of mental health-related occasions of service reported in this publication represents 72% of all public hospital emergency department mental health-related occasions of service as defined above. Taking this into account, the actual number of such occasions of service would be just over 200,000 rather than the reported 144,006 (Table A1.3).

In addition, it should be noted that coverage of the data are biased toward the larger metropolitan emergency departments; mental health-related occasions of service in smaller rural hospitals may differ from those in the larger metropolitan hospitals.

Table A1.3: Emergency department occasions of service in public hospitals, estimated coverage and estimated actual number, states and territories, 2005–06

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Estimated per cent of total public hospital emergency department occasions of service with episode-level data for the following hospital groups:[a]									
Peer group A and B[b]	*100*	*100*	*99*	*100*	*100*	*99*	*100*	*100*	*100*
Other hospitals	*45*	*36*	*n.a.*	*32*	*22*	*n.a.*	*n.a.*	*100*	*30*
Total estimated per cent	**81**	**89**	**65**	**68**	**68**	**86**	**100**	**100**	**78**
Estimated per cent of occasions of service reported at episode-level that have a principal diagnosis code[c]	95	90	100	74	91	100	100	94	92
Estimated per cent of total emergency department occasions of service with a principal diagnosis[d]	77	80	65	50	62	86	100	94	72
Number of emergency department occasions of service with a mental health-related principal diagnosis[e]	53,360	31,329	24,306	11,279	12,996	4,517	2,737	3,482	144,006
Estimated actual number of emergency department occasions of service with a mental health-related principal diagnosis[f]	69,344	39,112	37,394	22,415	21,002	5,252	2,737	3,704	200,438

(a) The proportion of all occasions of service in emergency departments in public hospitals in 2005–06 that are reported at episode-level to the NAPEDCD.

(b) Peer group A: Principal referral and specialist women's and children's hospitals; Peer group B: Large hospitals.

(c) The proportion of emergency department occasions of service reported at episode-level to the NAPEDCD that had a diagnosis. Total is estimated based on state and territory proportions and numbers.

(d) Calculated by multiplying the total per cent of all occasions of service in emergency departments in public hospitals in 2005–06 that are reported at episode-level to the NAPEDCD by the per cent of emergency department occasions of service reported at episode-level to the NAPEDCD that had a diagnosis (divided by 100).

(e) Number of *mental health-related emergency department occasions of service* as defined for the purposes of this publication, and provided by state and territory health authorities.

(f) Estimate of the actual number of *mental health-related emergency department occasions of service*, as defined for the purposes of this publication, if coverage were 100 per cent.

n.a. Not available.

Source: Data provided by state and territory health authorities, AIHW 2007.

National Community Mental Health Care Database (Chapter 4)

Scope

The National Community Mental Health Care Database (NCMHCD) contains data on all ambulatory mental health service contacts provided by government-operated community mental health services as specified by the Community Mental Health Care National Minimum Data Set (CMHC NMDS). Data collated include information relating to each individual service contact provided by the relevant mental health services. Examples of data elements are demographic information of patients such as age and sex and clinical information like principal diagnosis and mental health legal status. Detailed data specifications for the CMHC NMDS can be found in METeOR, the AIHW's online metadata registry, at <www.aihw.gov.au>.

The scope for this collection is all services mentioned above that are included in the newly established Mental Health Establishments National Minimum Data Set. A list of the government-operated community mental health services that contribute patient-level data to NCMHCD can be found online in the 'Internet only tables' section that accompanies this publication on the AIHW website <www.aihw.gov.au/mentalhealth/> (follow the link to *Mental health services in Australia 2005–06*).

A mental health service contact for the purposes of this collection is defined as the provision of a clinically significant service by a specialised mental health service provider(s) for patient/clients, other than those admitted to psychiatric hospitals or designated psychiatric units in acute care hospitals, and those resident in 24-hour staffed specialised residential mental health services where the nature of the service would normally warrant a dated entry in the clinical record of the patient/client in question. Any one patient can have one or more service contacts over the relevant period (that is, 2005–06). Service contacts are not restricted to face-to-face communication but can include telephone, video link or other forms of direct communication. Service contacts can also either be with the patient or with a third party, such as a carer or family member, and/or other professional or mental health workers or other service providers.

It should be noted that there are variations across jurisdictions on the scope and definition of a service contact. For example, New South Wales, Queensland, South Australia and Tasmania may include written correspondences as service contacts while others do not. Data on contacts with unregistered clients are not included by all jurisdictions.

Coverage

Data collection for the NCMHCD began in July 2000. Each year of the collection has seen an increase in the number of service contacts, probably reflecting, to some degree, improved coverage of the data collection.

States and territories provided comments or estimates of their coverage for 2005–06 as a proportion of full coverage:

- New South Wales estimated their coverage for 2005–06 to be around 70% of full coverage;
- Victoria and Western Australia did not provide estimates of their coverage for 2005–06;
- Queensland estimated that 100% of in-scope services have reported service contact data. In early 2006, an estimation of the level of compliance was conducted based on the number of full-time-equivalent staff employed over the year. The process revealed a compliance rate between 50–60% across the State;
- South Australia estimated their coverage to be 91%, with the figure derived as the number of organisations with incomplete or no patient level data for this NMDS divided by the number of organisations reporting community services via the National Survey of Mental Health Services for 2005–06;
- Tasmania stated that all service units that were in scope for the collection provided service contact data. However, a significant number of clinicians in some community teams were found not to be providing consistent service contact data. No estimated coverage was provided;
- the Australian Capital Territory reported their coverage to be 99.2%; and
- the Northern Territory estimated 90% coverage based on all in-scope services reporting, but there may be some missing data due to non-compliance of some clinicians.

Quality of Indigenous identification

Data from the NCMHCD on Indigenous status should be interpreted with caution. Across the jurisdictions, the data quality and completeness of Indigenous identification varies or is unknown.

All states and territories provided information on the quality of the Indigenous data for the NCMHCD 2005–06 as follows:

- New South Wales stated that the quality of Indigenous data has not been evaluated;
- Victoria considered the quality of Indigenous data was not acceptable due to lack of consistency in data entry across its services;
- Queensland reported that the quality of Indigenous data is acceptable at the broad level, that is, in distinguishing Aboriginal and Torres Strait Islander peoples and other Australians. However, they believed that there were quality issues in the coding of more specific details (that is, Aboriginal, Torres Strait Islander, or both Aboriginal and Torres Strait Islander). Queensland reported that several strategies have been carried out to improve the quality of Indigenous data and noted that a replacement for the existing collection system with in-built validation checks would further improve the quality of this data;
- Western Australia reported that the quality of Indigenous status data for 2005–06 was acceptable. However, the data could be improved with the appropriate resources, training and reporting standards;
- South Australia indicated that there has been limited analysis of the quality of Indigenous status data. Therefore, the quality of the data is uncertain at this stage;
- Tasmania reported the quality of its data to be acceptable;
- the Australian Capital Territory considered the quality of its Indigenous status data to be acceptable, noting that there is some room for improvement regarding the reporting of the 'Not stated' category; and
- the Northern Territory indicated its Indigenous status data to be of acceptable quality.

Principal diagnosis data quality

The quality of principal diagnosis data in the NCMHCD may also be affected by the variability in collection and coding practices across jurisdictions. In particular, there are:

- differences among states and territories in the classification used. Six of the state and territory health authorities used the complete ICD-10-AM classification to code principal diagnosis. However, New South Wales used a combination of ICD-10-AM, International Statistical Classification of Diseases and Related Health Problems, 10th revision, Primary Care (ICD-10-PC), and local codes where there are no ICD-10-PC equivalents. The Northern Territory used only the Mental and behavioural disorders chapter of the ICD-10-AM classification;
- differences according to the size of the facility (for example, large versus small) in the ability to accurately code principal diagnosis;
- differences in the availability of appropriate clinicians to assign principal diagnoses (diagnoses are generally to be made by psychiatrists, whereas service contacts are mainly provided by non-psychiatrists); and
- differences according to whether the principal diagnosis is applied to an individual service contact or to a period of care. New South Wales mainly reported the current diagnosis for each service contact rather than a principal diagnosis for a longer

period of care. The remaining jurisdictions mainly reported principal diagnosis as applying to a longer period of care.

Estimating the number of patients

The estimated number of patients in the NCMHCD has been calculated by counting the number of unique person identifier–establishment identifier combinations. Within each establishment or facility, a patient is allocated a unique identifier. However, this means that people who used services in more than one establishment will be counted more than once; therefore, the number of patients may be overestimated.

National Hospital Morbidity Database (chapters 5 and 7)

The National Hospital Morbidity Database (NHMD) is a compilation of electronic summary separation records from admitted patient morbidity data collections in Australian hospitals. It includes demographic, administrative and length of stay data for each hospital separation. Clinical information such as diagnoses, procedures undergone, external causes of injury and poisoning and the Australian Refined Diagnosis Related Group information are also recorded.

The 2005–06 collection contains data for hospital separations that occurred between 1 July 2005 and 30 June 2006. Data on separations that occurred before 1 July 2005 are included, provided that the discharge dates fell within the collection period (2005–06). A record is generated for each separation rather than each patient. Therefore, patients who separated more than once in the reference 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 2005–06* (AIHW 2007a).

Specialised mental health care is identified through the fact that a patient had one or more psychiatric care days recorded—that is, care was received in a specialised psychiatric 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.

Before interpreting any NHMD data presented in this report, note that mental health care for admitted patients in Australia is provided in a large and complex system, and there are state and territory differences in the scope of services provided for admitted patients. Differences in the data presented by jurisdiction may reflect different service delivery practices, differences in admission practices, and/or differences in the types of establishments categorised as hospitals. Therefore, caution should be used in the interpretation of the differences between jurisdictions. For example, there are some differences in the approach that states and territories and the public and private sectors take to the formal admission and separation of people attending hospital on a same-day basis (such as for group therapy sessions or day programs). In Tasmania and the territories, these attendances are recorded as non-admitted patient occasions of service. In other jurisdictions, patients are formally admitted for this care and therefore this care is reported as same-day separations.

National Residential Mental Health Care Database (Chapter 8)

Scope

The National Residential Mental Health Care Database (NRMHCD) contains data on episodes of residential care provided by government-funded residential mental health services as specified by the Residential Mental Health Care National Minimum Data Set (RMHC NMDS). Data collated include information relating to each episode of residential care provided by the relevant mental health services. Examples of data elements are demographic information of residents, such as age and sex, and clinical information, such as principal diagnosis and mental health legal status. Detailed data specifications for the RMHC NMDS can be found in METeOR, the AIHW's online metadata registry, at <www.aihw.gov.au>.

The scope for this collection is all episodes of residential care for residents in all government-funded and operated residential mental health services in Australia, except those residential care services that are in receipt of funding under the Aged Care Act and subject to Commonwealth reporting requirements (that is, they report to the System for the Payment of Aged Residential Care collection). Government-funded, non-government-operated services and non-24-hour staffed services could be included optionally. For the 2005–06 data collection, all the data providers have mental health-trained staff on site 24 hours a day except for one South Australian facility which was staffed for 8 hours a day. Data from two Tasmanian non-government organisations staffed 24 hours a day were also included in the 2005–06 collection. A list of the residential mental health services contributing data to the NRMHCD can be found online in the 'Internet only tables' section that accompanies this publication on the AIHW website <www.aihw.gov.au/mentalhealth/> (follow the link to *Mental health services in Australia 2005–06*).

Queensland and the Northern Territory do not have any in-scope government-operated residential mental health services and therefore do not report to this collection.

Coverage

States and territories provided estimates of their coverage for 2005–06 as a proportion of full coverage:

- New South Wales, Victoria and Western Australia did not report any undercounting of residential care from service units within scope;
- South Australia, the Australian Capital Territory and Tasmania estimated their data coverage to be 100%.

Indigenous data quality

Data from the NRMHCD on Indigenous status should be interpreted with caution due to the varying quality and completeness of Indigenous identification across all jurisdictions. Only Western Australia, Tasmania and the Australian Capital Territory considered their Indigenous status data of acceptable quality. New South Wales have not evaluated the quality of their Indigenous data. Likewise, limited analysis was done on the quality of Indigenous data in South Australia. Victoria considered the quality of Indigenous data not acceptable due to the lack of consistency in data entry across their services.

Principal diagnosis coding

All but one jurisdiction used the complete ICD-10-AM classification to code principal diagnosis. New South Wales used a combination of ICD-10-AM, the International Statistical Classification of Diseases and Related Health Problems, 10th revision, Primary Care (ICD-10-PC) and some local codes.

Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data (Chapters 11 and 14)

Medicare Australia collects data on prescriptions funded through the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) and provides the data to DoHA. Information collected includes the characteristics of the person who is provided with the prescription, the medication prescribed (for example, type and cost), the prescribing practitioner and the supplying pharmacy (for example, location). The figures reported in this publication relate to the number of mental health-related prescriptions processed by Medicare Australia in the reporting period, the number of the persons provided with the prescriptions and their characteristics, as well as the prescription costs funded by the PBS and RPBS.

Although the PBS and RPBS data capture the majority of prescribed medicines dispensed in Australia, it has the following limitations:

- It refers only to prescriptions scripted by registered medical practitioners who are approved to work within the PBS and RPBS and to paid services processed from claims presented by approved pharmacists who comply with certain conditions (DoHA 2006d). It excludes adjustments made against pharmacists' claims, any manually paid claims, or any benefits paid as a result of retrospective entitlement or refund of patient contributions.
- It excludes non-subsidised medications, such as private and below copayment prescriptions (where the patient copayment covers the total costs of the prescribed medication) and over-the-counter medications.
- The level of the copayment increases annually, which means that some medicines that were captured in previous years might be below the copayment level and thus excluded in following years.
- There are a number of programs paid for using payment mechanisms other than Medicare Australia processed payments, including:
  - most section 100 drugs funded through public hospitals (though the pharmaceutical reform measures for public hospitals under the Australian Health Care Agreement and the Chemotherapy Pharmaceutical Access Program are paid for through Medicare Australia);
  - Aboriginal health services;
  - Opiate Dependence Treatment Program;
  - Special Authority Program;
  - Botox (including Dysport);
  - in vitro fertilisation; and
  - human growth hormones

  The only one of these that has a significant bearing on the data published in Chapters 11 and 14 is the Aboriginal health services program. Most affected are the data for remote and very remote areas and the data for the Northern Territory, which will not fully

reflect government expenditure. The total expenditure for the Aboriginal Health Services program in 2006–07 was $27.5 million and most of this is in remote areas. Around one-third of PBS total expenditure for the Northern Territory is through the Aboriginal health services program.

The number of prescriptions issued through community pharmacies that are not covered by the PBS and RPBS is estimated through the Pharmacy Guild Survey, which is an ongoing survey of 250 community pharmacies that provide records of all dispensed prescriptions for medicines listed on the PBS/RPBS (AIHW 2007). These survey data are combined with PBS and RPBS data from Medicare Australia in the Drug Utilisation Sub-Committee (DUSC) database. Tabulation of the data from this database shows the number and proportion of scripts covered by the PBS and RPBS within each of the mental health-related Anatomical Therapeutic Chemical (ATC) groups (Table A1.4).

Table A1.4: Community dispensed scripts by patient category group for mental health-related ATC groups

	PBS	RPBS	*Subtotal (PBS + RPBS)*	Under co-payment	Private	Total
Number of scripts						
N05A	1,927,541	88,683	*2,016,224*	28,659	82,495	**2,127,378**
N05B	3,064,220	212,393	*3,276,613*	491,130	461,367	**4,229,110**
N05C	2,411,965	363,803	*2,775,768*	380,670	1,170,977	**4,327,415**
N06A	11,365,317	677,271	*12,042,588*	2,574,051	163,616	**14,780,255**
N06B	279,438	1,088	*280,526*	115,961	198,407	**594,894**
Total	**19,048,481**	**1,343,238**	***20,391,719***	**3,590,471**	**2,076,862**	**26,059,052**
Percent of scripts						
N05A	90.6	4.2	*94.8*	1.3	3.9	100.0
N05B	72.5	5.0	*77.5*	11.6	10.9	100.0
N05C	55.7	8.4	*64.1*	8.8	27.1	100.0
N06A	76.9	4.6	*81.5*	17.4	1.1	100.0
N06B	47.0	0.2	*47.2*	19.5	33.4	100.0
Total	**73.1**	**5.2**	***78.3***	**13.8**	**8.0**	**100.0**
Per cent (excluding private)						
N05A						
N05B	94.3	4.3	*98.6*	1.4	. .	100.0
N05C	81.3	5.6	*87.0*	13.0	. .	100.0
N06A	76.4	11.5	*87.9*	12.1	. .	100.0
N06B	77.8	4.6	*82.4*	17.6	. .	100.0
Total	**70.5**	**0.3**	***70.8***	**29.2**	**. .**	**100.0**

. . Not applicable.

Source: Drug Utilisation Sub-Committee database. Date of service basis. PBS Schedule ATC used except for some private scripts where the item does not exist in the PBS schedule and WHO ATC was used.

The ATC classification version used is the primary classification as it appears in the Schedule of Pharmaceutical Benefits. This can differ slightly from the WHO version. There are two differences between the WHO ATC classification and the PBS Schedule classification that

have a bearing on Mental health data. Prochlorperazine is regarded as an *Other antiemetics* (A04AD) in the PBS Schedule while it is an *Antipsychotic* according to the WHO classification. Lithium carbonate on the other hand is classified as an *Antidepressant* in the PBS Schedule while it is an *Antipsychotic* according to the WHO classification (Table A1.5).

Table A1.5: Differences between the WHO ATC classification and the PBS Schedule Classification

Drug Name	WHO ATC Code	PBS Schedule Code	Scripts dispensed in 2006–07
Prochlorperazine	N05AB04	A04AD	623,859
Lithium carbonate	N05AN01	N06AX	91,257

Source: Date of service basis from Drug Utilisation Sub-Committee database.

The data published in Chapters 11 and 14 are slightly different from that published in earlier editions of *Mental Health Services in Australia*. Private hospital Clozapine Section 100 data and N06B Psychostimulants and nootropics have been included which were not previously included. This makes the data in this publication more comparable with that published by DoHA in the annual *National Mental Health Report* (DoHA 2005).

There has also been a slight methodological change compared with previous editions to include records with unknown state/territory or unknown provider specialty (though in tables 11. 2 and 11.3 the data for unknown specialty is only recorded in the footnote).

To avoid double counting in the demographic tabulations, patients are allocated to the last category in which they appear. The category most affected by this will be the age group data as the age is calculated at the time of supply, and patients ages will be one year greater for scripts supplied after their birthday than before it.

State and territory are determined by DoHA according to the patient's residential address. If the patient's state/territory is unknown, then the state or territory of the pharmacy supplying the item is reported. If the pharmacy's state/territory details are also missing then the data are not included by DoHA. The data are also excluded by DoHA when the specialty of the prescribing provider is not known. These exclusions accounted for about 0.2% of all the mental health-related prescriptions reported for 2005–06.

The year was determined from the date the service was processed by Medicare Australia, rather than the date of prescribing or the date of supply by the pharmacy.

Mental Health Establishments Database (Chapter 12)

Collection for the National Minimum Data Set for Mental Health Establishments (MHE NMDS) commenced on 1 July 2005, replacing the Community Mental Health Establishments NMDS (CMHE NMDS) and the National Survey of Mental Health Services. The main aim of the development of the MHE NMDS was to expand on the CMHE NMDS and replicate the data previously collected by the National Survey of Mental Health Services. The Mental Health Establishments Database is compiled as specified by the MHE NMDS.

The scope of the MHE NMDS includes all specialised mental health services managed or funded by state or territory health authorities. Specialised mental health services are those with a primary function to provide treatment, rehabilitation or community health support targeted towards people with a mental disorder or psychiatric disability. These activities are delivered from a service or facility that is readily identifiable as both specialised and serving a mental health care function.

The concept of a specialised mental health service is not dependent on the inclusion of the service within the state or territory mental health budget nor is it defined as a specialised mental health service solely because its clients include people affected by a mental illness or psychiatric disability. The definition excludes specialist drug and alcohol services and services for people with intellectual disabilities, except where they are established to assist people affected by a mental disorder who also have drug and alcohol related disorders or intellectual disability. Services can be a sub-unit of a hospital even where the hospital is not a specialised mental health establishment itself (for example, designated psychiatric units and wards, outpatient clinics etc).

The AIHW validates the data provided by states and territories using a series of anomaly, exceptional and historical edit checks. As 2005–06 is the first year of the MHE NMDS, these checks are continually being refined and improved. Consequently, there may be changes to state and territory data following the release of this report.

Private Health Establishments Collection (Chapters 12 and 14)

The ABS conducts an annual census of all private hospitals licensed by state and territory health authorities and all freestanding day hospitals facilities approved by DoHA. As part of that census, data on the staffing, finances and activity of these establishments are collected and compiled in the Private Health Establishments Collection.

The data definitions used in the Private Health Establishments Collection are largely based on definitions in the *National health data dictionary*, *Version 13* (HDSC 2006). The ABS definition for private psychiatric hospitals is 'those establishments that are licensed or approved by a 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 Private Health Establishments Collection can be obtained from the annual ABS publication *Private Hospitals, Australia* (ABS 2007b).

Supported Accommodation Assistance Program National Data Collection (Chapter 9)

The Supported Accommodation Assistance Program (SAAP) National Data Collection (NDC) is a nationally consistent information system that combines information from SAAP agencies, state and territory and Australian Government funding departments. The AIHW manages the collection.

The scope of the SAAP NDC includes all agencies that receive funding through the national SAAP agreement and/or state and territory SAAP funds. In 2005–06, 1,300 non-government, community and local government agencies were funded nationally under the program. Of the agencies required to participate in the collection, 93% participated in the data collection.

The data presented in this report were extracted from the Client Collection component of the SAAP NDC, which includes information about all clients receiving SAAP accommodation or support that is of an ongoing nature or that generally lasts for more that 1 hour on a given day. Data are recorded by service providers during or immediately following contact with clients and are then forwarded to the AIHW after the clients' support periods have ended or, for ongoing clients, at the end of the reporting period (30 June of each year). Data collected include basic socio-demographic information and information on the services needed by,

and provided to, each client. Information about each client's situation before and after receiving SAAP services is also collected.

There are high levels of non-response to particular questions in the data collection forms received by the AIHW. This means that caution should be exercised when interpreting the data because the results may not fully reflect the entire population of interest.

Furthermore, the protocols established for the NDC require that SAAP clients provide information in a climate of informed consent. If a client's consent is not obtained, only a limited number of questions can be completed on data collection forms. In 2005–06, valid consent was obtained from clients in 82% of support periods in participating agencies.

While data reported from the SAAP Client Collection are generally weighted to take non-participation of agencies and non-consent of clients into account, unweighted data are presented in this report. Based on unweighted responses, there were a total of 146,864 closed support periods reported in the SAAP Client Collection for 2005–06. For the same period, the number of closed support periods using weighted data is estimated to be 158,600.

For further information on the SAAP collection, refer to the *Homeless people in SAAP: SAAP National Data Collection annual report 2005–06 Australia* (AIHW 2007e).

Appendix 2: Technical notes

Data presentation

Throughout this publication, data may not sum to the totals shown due to missing and/or not stated values, as well as rounding. Totals reported include missing and/or not stated values. The percentages shown within the tables are calculated excluding the missing and/or not stated figures, unless indicated otherwise. Percentage distributions may not sum to 100 due to rounding.

Cells may be suppressed for confidentiality reasons or where estimates are based on small numbers, resulting in low reliability.

Population rates

Crude (or observed) rates were calculated using the ABS estimated resident population (ERP) at the midpoint of the data range (for example, rates for 2005–06 data were calculated using ERP at 31 December 2005, while rates for 2005 calendar year data were calculated using ERP at 30 June 2005). Rates for 2006–07 data were calculated using preliminary ERP at 31 December 2006.

Rates for Indigenous status, country of birth and remoteness area data were calculated using ERP at 30 June of the relevant year.

Age-standardised rates

Rates are adjusted for age to facilitate comparisons between populations that have different age structures, e.g. between youthful and ageing communities. In this publication we use direct standardisation in which age-specific rates are multiplied against a standard population (the Australian Estimated Resident Population as at 30 June 2001 unless otherwise specified). This effectively removes the influence of age structure on the calculated rate that is described as the age-standardised rate. The method used for this calculation comprises three steps.

Step 1 Calculate the crude age-specific rate for each age group.

Step 2 Calculate the expected number of cases in each 5-year age group by multiplying the age-specific rates by the corresponding standard population and dividing by the base number for the rate calculation (say 100,000), giving the expected number of cases.

Step 3 Sum the expected number of cases in each age group to give the age-standardised total expected number. Divide this sum by the total of the standard population and multiply by 100,000.

In some instances in this publication where the numbers in particular 5-year age groups are very small (less than 5), neighbouring age groups have been combined to enable calculation of a meaningful crude rate.

Average annual rates of change

Average annual rates of change or growth rates have been calculated as geometric rates:

$$\text{Average rate of change} = ((P_n/P_o)^{1/N} - 1) \times 100$$

where P_n = value in the later time period

P_o = value in the earlier time period

N = number of years between the two time periods.

Confidence intervals

Where indicators based on survey data include a comparison of rates (or comparable numbers) between time periods, between demographic groups or between other categories, a 95% confidence interval is often presented with the rates. This is because the observed value of a rate may vary due to chance even where there is no variation in the underlying value of the rate. The 95% confidence interval represents a range over which variation in the observed rate is consistent with this chance variation.

These confidence intervals can be used as an approximate test of whether changes in a particular rate are consistent with chance variation. Where the confidence intervals do not overlap, the change in a rate is greater than that which could be explained by chance. Where the intervals do overlap, then changes in the rate may be taken as approximately consistent with variability due to chance.

It is important to note that this result does not imply that the difference between the two rates is definitely due to chance. Instead, an overlapping confidence interval represents a difference in rates which is too small to differentiate between a real difference and one which is due to chance variation.

Appendix 3: Classifications used

Health-related classifications have multiple purposes, including the facilitation of data collection and management in the clinical setting, the analysis of data to inform public policy and the allocation of financial and other resources. This section provides a short description of the classification systems referenced in this report.

Australian Classification of Health Interventions

The Australian Classification of Health Interventions (ACHI) is the Australian national standard for procedure and intervention coding in Australian hospitals.

The National Centre for Classification in Health (NCCH) developed ACHI based on the Medicare Benefits Schedule (MBS). The MBS is a fee schedule for Medicare services including general practice consultations, specialist consultations, operations and other medical services, such as diagnostic investigations and optometric services. DoHA updates the MBS at least twice each year and these code changes are either incorporated into ACHI or the MBS codes are mapped to existing ACHI codes.

ACHI captures procedures and interventions performed in public and private Australian hospitals, day centres and ambulatory settings, as well as allied health interventions, dentistry and imaging. The structure of ACHI is anatomically based, rather than based on the surgical specialty.

To maintain parity with disease classification, ACHI chapters resemble the chapter headings of the ICD-10. ACHI is updated biennially by the NCCH in line with the disease section of ICD-10-AM. Use of the codes is guided by the Australian Coding Standards, volume 5 of ICD-10-AM.

Further information on ACHI is available from the NCCH website:
< http://nis-web.fhs.usyd.edu.au/ncch_new/2.15.aspx >.

Australian Standard Geographical Classification

The Australian Standard Geographical Classification (ASGC) was developed by the ABS for the collection and dissemination of geographically classified statistics. It is an essential reference for understanding and interpreting the geographical context of statistics in Australia.

In this report the ASGC applies to the data presented by remoteness area. This is based on the Accessibility/Remoteness Index of Australia, which measures the remoteness of a point based on the physical road distance to the nearest urban centre.

This report uses the ASGC to present data in the following categories:

- Major cities
- Inner regional
- Outer regional
- Remote
- Very remote

For further information on this classification system, refer to *Australian Standard Geographical Classification* (ABS 2007a).

Anatomical Therapeutic Chemical Classification System

The Anatomical Therapeutic Chemical (ATC) Classification System, developed by the WHO, assigns therapeutic drugs to different groups according to the organ or system on which they act, as well as their therapeutic and chemical characteristics.

The coding of pharmaceutical products within the Schedule of Pharmaceutical Benefits is based on the ATC Classification System.

For further information on this classification system, refer to the WHO website <http://www.whocc.no/atcddd/>.

English Proficiency Country Groups

The English Proficiency Country Groups were developed by the (then) Bureau of Immigration, Multicultural and Population Research, based on the 1991 Census. It is a classification of countries of birth to enable the analysis and presentation of data on immigrants to Australia. Countries are classified to one of four groups depending on the proportion of immigrants in the five years prior to the Census who spoke good English (the EP index).

The latest published version of the English Proficiency Country Groups (often abbreviated to EP groups) was based on the 2001 Census (DIMIA 2003). They are:

- EP1 – All countries rating 98.5% or higher on the EP index with at least 10,000 residents in Australia
- EP2 – Countries rating 84.5% or higher on the EP index, other than those in EP1
- EP3 – Countries rating 57.5% to less than 84.5%
- EP4 – Countries rating less than 57.5%

International Classification of Diseases

The International Classification of Diseases (ICD), which was developed by the WHO, is the international standard for coding morbidity and mortality statistics. It was designed to promote international comparability in the collection, processing, classification and presentation of these statistics. The ICD is periodically reviewed to reflect changes in clinical and research settings (WHO 2006).

Although the ICD is primarily designed for the classification of diseases and injuries with a formal diagnosis, it also classifies a wide variety of signs, symptoms, abnormal findings, complaints and social circumstances that may stand in place of a diagnosis.

Further information on the ICD is available from the WHO website <http://www.who.int/classifications/icd/en/>.

International Statistical Classification of Diseases, 9th revision, Clinical Modification

The International Statistical Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM) is based on the ninth revision of the ICD (NCC 1996). The ICD-9-CM was the official system of assigning codes to diagnoses and procedures associated with hospital use in Australia before it was superseded by the ICD-10-AM.

International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification

The Australian Modification of ICD-10 (called ICD-10-AM) is used to classify diseases in the acute health sector in Australia. The ICD-10-AM was developed in Australia by the National Centre for Classification in Health with the purpose of making it more relevant to Australian clinical practice (NCCH 2006).

International Classification of Primary Care, version 2, and ICPC-2 PLUS

The International Classification of Primary Care, version 2 (ICPC-2) is a classification method for primary care (that is, general practice) encounters; this method has been adopted by the WHO. It allows for the classification of three elements of a health care encounter in relation to the patient: reasons for encounter; diagnoses or problems; and process of care.

The ICPC-2 PLUS (which is also known as the BEACH coding system) is an extended vocabulary of terms classified according to the ICPC-2, which enables greater specificity in coding. The ICPC-2 PLUS is primarily used in the context of the Australian general practice.

The ICPC-2 is currently being used in electronic health records within the clinical general practice, as well as in the research of general practice (that is, BEACH) and other statistical collections such as the ABS National Health Survey.

Further information on ICPC-2 is available from the WHO website <www.who.int/en/> and information on ICPC-2 PLUS is available from the BEACH website: <http://www.fmrc.org.au/icpc2plus/>.

Appendix 4: Codes used to define mental health-related general practice encounters and mental health-related hospital separations

This Appendix provides a list of codes used to define *mental health-related general practice encounters* from the BEACH database (as used in Chapter 2) and mental health-related hospital separations from the National Hospital Morbidity Database (as used in Chapters 5 and 7).

BEACH survey of general practice activity data

For the purpose of this report, mental health-related general practice encounters are defined as those encounters where a mental health-related problem was managed. Mental health-related problems are those that are classified in the psychological chapter (that is, the 'P' chapter) of the *International Classification of Primary Care*, *version 2* (ICPC-2). While in the great majority of cases the codes appearing in the diagnosis/problem fields of the BEACH survey form are those listed in this Appendix under the *Problems Managed* heading, occasionally, a code more relevant to procedures, other treatments, counselling or referrals has appeared. These cases (accounting for 2.8% of total problems managed) are still counted as mental health-related general practice encounters for the purpose of the report, in particular the estimates of Table 2.1.

For procedures, other treatments, counselling and referrals, codes that are classified in the psychological chapter of the ICPC-2 PLUS have been used, as these enable greater specificity in coding.

For medications prescribed, recommended or supplied, Anatomical Therapeutical Chemical (ATC) Classification System codes have been used, where the medication falls into one of four groups (WHO 2008).

Table A4.1 presents a list of the ICPC-2, ICPC-2 PLUS and ATC codes classed as 'psychological' for problems managed, procedures, other treatments, counselling, referrals and medications.

Table A4.1: ICPC-2, ICPC-2 PLUS and ATC codes classified as psychological for problems managed, treatments, referrals and medications in the BEACH database, 2006–07

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
Problems managed			
P01			Feeling anxious/nervous/tense
P02			Acute stress reaction
P03			Feeling depressed
P04			Feeling/behaving irritable/angry
P05			Senility, feeling/behaving old
P06			Sleep disturbance
P07			Sexual desire reduced
P08			Sexual fulfilment reduced
P09			Concern about sexual preference
P10			Stammering, stuttering, tics
P11			Eating problems in children
P12			Bed-wetting, enuresis
P13			Encopresis/bowel training problem
P15			Chronic alcohol abuse
P16			Acute alcohol abuse
P17			Tobacco abuse
P18			Medication abuse
P19			Drug abuse
P20			Memory disturbance
P22			Child behaviour symptom/complaint
P23			Adolescent symptom/complaint
P24			Specific learning problem
P25			Phase of life problem in adult
P27			Fear of mental disorder
P28			Limited function/disability psychological
P29			Psychological symptom/complaint, other
P70			Dementia (including senile, Alzheimer's)
P71			Organic psychoses, other
P72			Schizophrenia
P73			Affective psychoses
P74			Anxiety disorder/anxiety state
P75			Somatisation disorder
P76			Depressive disorder
P77			Suicide/suicide attempt
P78			Neurasthenia
P79			Phobia, compulsive disorder
P80			Personality disorder

(continued)

Table A4.1 (continued): ICPC-2, ICPC-2 PLUS and ATC codes classified as psychological for problems managed, treatments, referrals and medications in the BEACH database, 2006–07

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
Problems managed (continued)			
P81			Hyperkinetic disorder
P82			Post-traumatic stress disorder
P85			Mental retardation
P86			Anorexia nervosa, bulimia
P98			Psychoses not otherwise specified, other
P99			Psychological disorders, other
Procedures, other treatments, counselling			
Check-ups			
	P30001		Exploration; psychological; complete
	P30002		Check up; complete; psychological
	P30003		Exam; complete; psychological
	P31001		Exploration; psychological; partial
	P31002		Check up; partial; psychological
	P31003		Exam; partial; psychological
	P31004		Exam; mental state
	P31005		Monitoring; drug rehab
Tests and investigations			
	P34001		Test; blood; psychological
	P34002		Test; lithium
	P34003		Test; methadone
	P35001		Test; urine; psychological
	P38001		Test; other lab; psychological
	P39001		Test; physical function; psychological
	P41001		Radiology; diagnostic; psychological
	P43001		Test; psychological
	P43003		Procedures; diagnostic; psychological
Advice/counselling			
	P45001		Advice/education; psychological
	P45002		Observe/wait; psychological
	P45004		Advice/education; smoking
	P45005		Advice/education; alcohol
	P45006		Advice/education; illicit drugs
	P45007		Advice/education; relaxation
	P45008		Advice/education; lifestyle
	P45009		Advice/education; sexuality
	P45010		Advice/education; life stage
	P58001		Counselling; psychiatric

(continued)

Table A4.1 (continued): ICPC-2, ICPC-2 PLUS and ATC codes classified as psychological for problems managed, treatments, referrals and medications in the BEACH database, 2006–07

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
Procedures, other treatments, counselling (continued)			
	P58002		Psychotherapy
	P58004		Counselling; psychological
	P58005		Counselling; sexual; psychological
	P58006		Counselling; individual; psychological
	P58007		Counselling; bereavement
	P58008		Counselling; smoking
	P58009		Counselling; alcohol
	P58010		Counselling; drug abuse
	P58011		Counselling; relaxation
	P58012		Counselling; life style
	P58013		Counselling; anger
	P58014		Counselling; self-esteem
	P58015		Counselling; assertiveness
	P58016		Counselling; life stage
	P58017		Counselling; stress management
	P58018		Therapy; group
Therapeutic procedures			
	P59001		Therapeutic procedure; psychological
	P59002		Therapy; electroconvulsive
	P59003		Hypnosis/hypnotherapy
	P59005		Therapy; relaxation
Other management			
	P42001		Electrical tracings; psychological
	P46001		Consultation; other general practitioner/allied health professional; psychological
	P46002		Consultation; primary care provided; psychological
	P46003		Consultation; psychiatrist
	P47003		Consultation; psychiatrist
	P48002		Discuss; patients reason for encounter; psychological
	P49001		Prevent procedure; psychological
	P49002		Exchange; needle/syringe
	P50001		Medications; psychological
	P50002		Medication; request; psychological
	P50003		Medication; renew; psychological
	P50004		Prescription; psychological
	P50006		Injection; psychological
	P60001		Test; result(s); psychological

(continued)

Table A4.1 (continued): ICPC-2, ICPC-2 PLUS and ATC codes classified as psychological for problems managed, treatments, referrals and medications in the BEACH database, 2006–07

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
Procedures, other treatments, counselling (continued)			
	P60002		Results; procedures; psychological
	P62001		Administrative; psychological
	P63001		Encounter; follow-up; psychological
	P64002		Encounter; provider-initiated; psychological
	P69001		Encounter; other; psychological
	P69002		Assist at operation; psychological
Referrals			
	P66003		Referral; psychologist
	P66004		Referral; counsellor
	P66005		Referral; mental health team
	P66006		Referral; drug and alcohol
	P66007		Referral; hypnotherapy
	P67002		Referral; psychiatrist
	P67004		Referral; clinic; psychiatrist
	P67005		Referral; hospital; psychiatrist
	P67006		Referral; sleep clinic
	P68003		Referral; needle/syringe exchange
Medications			
		N05A	Antipsychotics
		N05B	Anxiolytics
		N05C	Hypnotics and sedatives
		N06A	Antidepressants

National Hospital Morbidity Database data

During the preparation of *Mental health services in Australia 1999–00*, attention was given to ensuring that for data on hospital separations from the National Hospital Morbidity Database (NHMD) the definition of a mental health-related diagnosis included all codes which were either clinically or statistically relevant to mental health. This definition was revised for *Mental health services in Australia 2000–01* to increase the accuracy of the data. More specifically, for the analyses of the 2000–01 National Hospital Morbidity data, a diagnosis was considered clinically relevant to mental health if:

- it was included as a principal diagnosis defining Australian Refined Diagnosis Related Group Version 4.2 Major Diagnostic Categories 19 (*Mental diseases and disorders)* and 20 (*Alcohol/drug use and alcohol/drug induced organic mental disorders*); or
- it appeared to be specific for a mental health-related condition based on expert advice.

A diagnosis was defined as being statistically relevant to mental health if:

- during 2000–01 there were more than 20 separations with specialised psychiatric care for that principal diagnosis at the 3-character level of ICD-10-AM, or more than 10 at the 4-character level; or
- over 50% of separations with that principal diagnosis included specialised psychiatric care.

This method was developed in consultation with the National Mental Health Working Group Information Strategy Committee (which is now called the Mental Health Information Strategy Subcommittee) and the Clinical Casemix Committee of Australia.

Certain codes were statistically relevant during 1999–00 but not in 2000–01; these were examined and included if over 50% of total separations over the 2 years included specialised psychiatric care.

For this edition of *Mental health services of Australia*, the same codes used for the analysis of the 2000–01 data have been used to define mental health-related hospital separations in Chapters 5 and 7. However, updates have been made to incorporate changes in codes that have occurred as new editions of ICD-10-AM have been released.

Thus, the full list of codes used to define mental health-related hospital separations is shown in Table A4.2.

Table A4.2: ICD-10-AM diagnosis codes used to define mental health-related hospital separations

ICD-10-AM codes	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F00	Dementia in Alzheimer's disease				✓
F01	Vascular dementia				✓
F02	Dementia in other diseases classified elsewhere			✓	
F03	Unspecified dementia				✓
F04	Organic amnesic syndrome, not induced by alcohol and other psychoactive substances				✓
F05	Delirium, not induced by alcohol and other psychoactive substances				✓
F06	Other mental disorders due to brain damage and dysfunction and to physical disease			✓	✓
F07	Personality and behavioural disorders due to brain disease, damage and dysfunction			✓	✓
F09	Unspecified organic or symptomatic mental disorder			✓	
F10	Mental and behavioural disorders due to use of alcohol		✓		
F11	Mental and behavioural disorders due to use of opioids		✓		
F12	Mental and behavioural disorders due to use of cannabinoids		✓	✓	
F13	Mental and behavioural disorders due to use of sedatives or hypnotics		✓		
F14	Mental and behavioural disorders due to use of cocaine		✓		
F15	Mental and behavioural disorders due to use of other stimulants, including caffeine		✓	✓	
F16	Mental and behavioural disorders due to use of hallucinogens		✓		
F17	Mental and behavioural disorders due to use of tobacco		✓		
F18	Mental and behavioural disorders due to use of volatile solvents		✓		
F19	Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances		✓	✓	
F20	Schizophrenia	✓		✓	
F21	Schizotypal disorder	✓		✓	
F22	Persistent delusional disorders	✓		✓	
F24	Induced delusional disorder	✓		✓	
F25	Schizoaffective disorders	✓		✓	
F28	Other non-organic psychotic disorders	✓		✓	
F29	Unspecified non-organic psychosis	✓		✓	
F30	Manic episode	✓		✓	
F31	Bipolar affective disorder	✓		✓	
F32	Depressive episode	✓		✓	
F33	Recurrent depressive disorder	✓		✓	

(continued)

Table A4.2 (continued): ICD-10-AM diagnosis codes used to define mental health-related hospital separations

ICD-10-AM codes	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F34	Persistent mood (affective) disorders	✓		✓	
F38	Other mood (affective) disorders	✓		✓	
F39	Unspecified mood (affective) disorder	✓		✓	
F40	Phobic anxiety disorders	✓		✓	
F41	Other anxiety disorders	✓			
F42	Obsessive–compulsive disorder	✓		✓	
F43	Reaction to severe stress, and adjustment disorders	✓		✓	
F44	Dissociative (conversion) disorders	✓			
F45	Somatoform disorders	✓			
F48	Other neurotic disorders	✓			
F50	Eating disorders	✓		✓	
F51	Non-organic sleep disorders	✓			
F52	Sexual dysfunction, not caused by organic disorder or disease	✓[a]		✓	✓
F53	Mental and behavioural disorders associated with the puerperium, not elsewhere classified				✓
F54	Psychological and behavioural factors associated with disorders or diseases classified elsewhere	✓			
F55	Harmful use of non-dependence-producing substances		✓		✓
F59	Unspecified behavioural syndromes associated with physiological disturbances and physical factors	✓			
F60	Specific personality disorders	✓		✓	
F61	Mixed and other personality disorders	✓		✓	
F62	Enduring personality changes, not attributable to brain damage and disease	✓		✓	
F63	Habit and impulse disorders	✓		✓	
F64	Gender identity disorders	✓			
F65	Disorders of sexual preference	✓		✓	
F66	Psychological and behavioural disorders associated with sexual development and orientation	✓		✓	
F68	Other disorders of adult personality and behaviour	✓		✓	
F69	Unspecified disorder of adult personality and behaviour	✓			
F70	Mild mental retardation			✓	
F71	Moderate mental retardation				✓
F72	Severe mental retardation				✓
F73	Profound mental retardation				✓
F78	Other mental retardation				✓
F79	Unspecified mental retardation			✓	

(continued)

Table A4.2 (continued): ICD-10-AM diagnosis codes used to define mental health-related hospital separations

ICD-10-AM codes	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F80	Specific developmental disorders of speech and language	✓			
F81	Specific developmental disorders of scholastic skills	✓			
F82	Specific developmental disorder of motor function	✓			
F83	Mixed specific developmental disorders	✓			
F84	Pervasive developmental disorders	✓(b)		✓	
F88	Other disorders of psychological development	✓			
F89	Unspecified disorder of psychological development	✓			
F90	Hyperkinetic disorders	✓		✓	
F91	Conduct disorders	✓		✓	
F92	Mixed disorders of conduct and emotions	✓		✓	
F93	Emotional disorders with onset specific to childhood	✓		✓	
F94	Disorders of social functioning with onset specific to childhood and adolescence	✓			
F95	Tic disorders	✓		✓	
F98	Other behavioural and emotional disorders with onset usually occurring in childhood and adolescence	✓(c)		✓	
F99	Mental disorder, not otherwise specified	✓			
G30.0	Alzheimer's disease with early onset			✓	
G30.1	Alzheimer's disease with late onset			✓	
G30.8	Other Alzheimer's disease				✓
G30.9	Alzheimer's disease, unspecified				✓
G47.0	Disorders initiating and maintaining sleep	✓			
G47.1	Disorders excessive somnolence	✓			
G47.2	Disorders of the sleep–wake schedule	✓			
G47.8	Other sleep disorders	✓			
G47.9	Sleep disorder, unspecified	✓			
O99.3	Mental disorder nervous system pregnancy and birth				✓
R44.0	Auditory hallucinations	✓			
R44.1	Visual hallucinations				✓
R44.2	Other hallucination	✓			
R44.3	Hallucinations, unspecified	✓			
R44.8	Other/not otherwise specified symptom involving general sensation perception	✓			
R45.0	Nervousness	✓			
R45.1	Restlessness and agitation	✓			
R45.4	Irritability and anger	✓			

(continued)

Table A4.2 (continued): ICD-10-AM diagnosis codes used to define mental health-related hospital separations

ICD-10-AM codes	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
R48.0	Dyslexia and alexia	✓			
R48.1	Agnosia	✓			
R48.2	Apraxia	✓			
R48.8	Other and unspecified symbolic dysfunctions	✓			
Z00.4	General psychiatric examination, not elsewhere classified			✓	
Z03.2	Observation for suspected mental and behavioural disorder	✓		✓	
Z04.6	General psychiatric examination, requested by authority			✓	
Z09.3	Follow-up examination after psychotherapy				✓
Z13.3	Special screening examination for mental and behavioural disorders				✓
Z50.2	Alcohol rehabilitation				✓
Z50.3	Drug rehabilitation				✓
Z54.3	Convalescence following psychotherapy				✓
Z61.9	Negative life event in childhood, unspecified			✓	
Z63.1	Problems relationship with parents and in-laws			✓	
Z63.8	Other specified problems related to primary support group			✓	
Z63.9	Problem related to primary support group, unspecified			✓	
Z65.8	Other specified problems related to psychosocial circumstances			✓	
Z65.9	Problem related to unspecified psychosocial circumstances				✓
Z71.4	Counselling and surveillance for alcohol use disorder				✓
Z71.5	Counselling and surveillance for drug use disorder				✓
Z76.0	Issue of repeat prescription			✓	

(a) Excluding F52.5.

(b) Excluding F84.2.

(c) Excluding F98.5 and F98.6.

Abbreviations

ABS	Australian Bureau of Statistics
ACHI	Australian Classification of Health Interventions
AIHW	Australian Institute of Health and Welfare
ASA	American Society of Anaesthesiologists
ASGC	Australian Standard Geographical Classification
ATC	Anatomical Therapeutic Chemical
BEACH	Bettering the Evaluation and Care of Health
CNS	Central Nervous System
COAG	Council of Australian Governments
CSTDA	Commonwealth State/Territory Disability Agreement
DoHA	Department of Health and Ageing
ED	emergency department
EP	English proficiency
ERP	estimated resident population
FTE	full-time-equivalent
HDSC	Health Data Standards Committee
GP	general practitioner
ICD	International Classification of Diseases
ICD-9-CM	International Statistical Classification of Diseases, 9th revision, Clinical Modification
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification
ICD-10-PC	International Statistical Classification of Diseases and Related Health Problems, 10th revision, Primary Care
ICPC-2	International Classification of Primary Care, version 2
K10	Kessler 10 Scale of Psychological Distress
LCL	lower confidence limit
NAPEDCD	National Non-admitted Patient Emergency Department Care Database
MBS	Medicare Benefits Schedule
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NCCH	National Centre for Classification in Health
NCMHCD	National Community Mental Health Care Database
NCMHED	National Community Mental Health Establishments Database
NDC	National Data Collection

NDSHS	National Drug Strategy Household Survey
NHMD	National Hospital Morbidity Database
NHS	National Health Survey
NMDS	National Minimum Data Set
NMHED	National Mental Health Establishments Database
NPHED	National Public Hospital Establishments Database
NRMHCD	National Residential Mental Health Care Database
NSMHW	National Survey of Mental Health and Wellbeing
PBS	Pharmaceutical Benefits Scheme
PHEC	Private Health Establishments Collection
RPBS	Repatriation Pharmaceutical Benefits Scheme
SAAP	Supported Accommodation Assistance Program
UCL	upper confidence limit
WHO	World Health Organization

References

ABS (Australian Bureau of Statistics) 1998. Mental health and wellbeing: profile of adults, Australia, 1997. ABS cat. no. 4326.0. Canberra: ABS.

ABS 2002. Australian Standard Geographical Classification. ABS cat. no. 1216.0 Canberra: ABS. Viewed December 2007, <http://www.abs.gov.au>.

ABS 2007a. Australian Standard Geographical Classification (ASGC), July 2007. ABS cat. no. 1216.0. Canberra: ABS. Viewed February 2008, <http://www.abs.gov.au>.

ABS 2007b. Private hospitals, Australia, 2005–06. ABS cat. no. 4390.0. Canberra: ABS.

AIHW (Australian Institute of Health and Welfare) 2005a. Disability support services 2003–04: national data on services provided under the Commonwealth State/Territory Disability Agreement. Disability series. Cat. no. DIS 40. Canberra: AIHW

AIHW 2005b. Improving the quality of Indigenous identification in hospital separations data. Health services series no. 25. Cat. no. HSE 101. Canberra: AIHW.

AIHW 2006a. Australia's health 2006. Cat. no. AUS 73. Canberra: AIHW.

AIHW 2007a. Australian hospital statistics 2005–06. Health services series no. 30. Cat. no. HSE 50. Canberra: AIHW.

AIHW 2007b. Disability support services 2005–06: national data on services provided under the Commonwealth State/Territory Disability Agreement. Disability series. Cat. no. DIS 51. Canberra: AIHW.

AIHW 2007c. Health expenditure Australia 2005–06. Health and welfare expenditure series no. 30. Cat no. HWE 37. Canberra: AIHW.

AIHW 2007d. Homeless people in SAAP: SAAP National Data Collection annual report 2005–06 Australia. SAAP NDCA report. Series 11. Cat. no. HOU 156. Canberra: AIHW.

AIHW 2007e. Mental Health Services in Australia 2004–05. Mental health series no. 9. Cat. no. HSE 47. Canberra: AIHW.

AIHW 2008a. Medical labour force 2005. National health labour force series no. 40. Cat. no. HWL 41. Canberra: AIHW.

AIHW 2008b. Nursing and midwifery labour force 2005. National health labour force series no. 39. Cat. no. HWL 40. Canberra: AIHW.

AIHW: Begg S, Vos T, Barker B, Stevenson C, Stanley L & Lopez A 2007. The burden of disease and injury in Australia, 2003. Cat. no. PHE 82. Canberra: AIHW.

Britt H, Miller GC, Charles J, Bayram C, Pan Y, Henderson J, Valenti L, O'Halloran J, Harrison C, Fahridin S 2008. General practice activity in Australia 2006–07. General Practice Series No. 21. Cat. no. GEP 21. Canberra: AIHW.

Cameron J & Payton J 2004. Report on exclusion practice in SAAP: identification of the mental health, alcohol and other drugs issues impacting on current practice in SAAP services. Viewed April 2008, <http://www.community.wa.gov.au/NR/rdonlyres/AB3781C1-D177-4074-A48F-2D527B0092FB/0/DCDRPTReportOnExclusionPracticeInSAAP2004.pdf>.

COAG (Council of Australian Governments) 2006a. Better Access to Psychiatrists, Psychologists and GPs through the Medicare Benefits Schedule (MBS). Viewed December 2007, <http://www.health.gov.au/internet/main/publishing.nsf/Content/coag-mental-q&a.htm>.

COAG (Council of Australian Governments) 2006b. National Action Plan on Mental Health 2006–2011. Viewed January 2008, <http://www.coag.gov.au/meetings/140706/docs/nap_mental_health.rtf>.

DIMIA (Department of Immigration, Multicultural and Indigenous Affairs) 2003. Statistical Focus - 2001 Classification of Countries into English Proficiency Groups. Canberra. Viewed April 2008, <http://www.immi.gov.au/media/publications/statistics/ep-groups/index.htm>.

DoHA (Department of Health and Ageing) 2005. National mental health report 2005: summary of ten years of reform in Australia's mental health services under the National Mental Health Strategy 1993–2003. Canberra: Commonwealth of Australia.

DoHA 2006. National Mental Health Strategy. Viewed April 2008, <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/mental-strategy>.

DoHA 2007a. Medicare Benefits Schedule book, effective 1 November 2007. Canberra: Commonwealth of Australia.

DoHA 2007b. Medicare Statistics – June Quarter 2007. Viewed 20 December 2007, <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/medstat-jun07-tables-g>.

DoHA 2007c. PBS Portal. Viewed January 2008<http://www.pbs.gov.au/html/home>.

DoHA 2008a. Drug Utilisation Sub-Committee (DUSC) database as at 28 February 2008.

DoHA 2008b. National Mental Health Report 2007: Summary of Twelve Years of Reform in Australia's Mental Health Services under the National Mental Health Strategy 1993-2005. Canberra: Commonwealth of Australia.

FaCS (Commonwealth Department of Families and Community Services) 2002. Commonwealth State/Territory Disability Agreement (CSTDA) 2002-2007. Viewed January 2007, <http://www.facsia.gov.au/internet/facsinternet.nsf/disabilities/policy-cstda.htm>.

HDSC (Health Data Standards Committee) 2006. National health data dictionary, Version 13. Canberra: AIHW.

Medicare Australia 2007a. Australian Government. Viewed November 2007, <http://www.medicareaustralia.gov.au>.

Medicare Australia 2007b. Medicare Benefits Schedule (MBS) Item Statistics Reports. Viewed January 2008, <http://www.medicareaustralia.gov.au/statistics/dyn_mbs/forms/mbs_tab4.shtml>

METeOR (Metadata Online Registry) 2007. Viewed November 2007, <http://meteor.aihw.gov.au/content/index.phtml/itemId/181162>.

National Centre for Classification in Health (NCCH) 2006. The international statistical classification of diseases and related health problems, 10th revision, Australian modification. Sydney: NCCH.

National Coding Centre (NCC) 1996. The Australian version of the international classification of diseases, 9th revision, clinical modification. Sydney: NCC.

NCSDC (National Community Services Data Committee) 2006. National Community Services Data Dictionary. AIHW cat. no. HWI 91. Version 4. Canberra: AIHW.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2008. Report on Government Services 2008. Canberra: Productivity Commission.

Victorian Government Department of Human Services 2005. Mental health presentations to the emergency department. Melbourne: Victorian Government. Viewed December 2007, <http://www.health.vic.gov.au/mentalhealth/publications/mh-presentations.pdf>.

WHO 2006. International Classification of Diseases (ICD). Viewed February 2008, <http://www.who.int/classifications/icd/en/>.

WHO 2008. The Anatomical, Therapeutic, Chemical Classification System with Defined Daily Doses(ATC/DDD), Viewed January 2008, <http://www.whocc.no/atcddd/>.

List of tables

List of figures

Index