

Technical notes

Data presentation

Throughout this publication:

- values presented in the columns and rows of tables may not sum to the totals shown due to missing and not stated values, as well as rounding.
- Totals reported include missing and not stated values, unless otherwise stated.
- The percentages shown in the tables are calculated excluding the missing and not stated values, unless indicated otherwise.
- Percentage distributions may not sum to 100 due to rounding.
- The Australian Institute of Health and Welfare (AIHW) has strict confidentiality policies which have their basis in section 29 of the Australian Institute of Health and Welfare Act 1987 (AIHW Act) and the Privacy Act 1988 (Privacy Act). Cells in tables may be suppressed for either confidentiality reasons or where estimates are based on small numbers, resulting in low reliability. Information that results in attribute disclosure will be suppressed unless agreement from a particular jurisdiction or data custodian to publish the data has been obtained.

Presentation of regional data

Data are reported at regional levels for some of the datasets. To report at this level, data were aggregated to SA2. For years prior to 2017–18, SA2 are reported according to 2011 ASGS. These SA2s were concorded to 2016 ASGS using files published by the Australian Bureau of Statistics, to allow for comparisons across time. Data were then aggregated to SA3 and apportioned to PHN based on correspondence files published by the Australian Bureau of Statistics. Population data reported at SA3 level were mapped to PHNs using the same methodology. All data are mapped to 2017 PHN boundaries.

Population rates

In this publication, crude rates were calculated using the Australian Bureau of Statistics estimated resident population (ERP) at the midpoint of the data range (for example, rates for 2015–16 data were calculated using the ERP at 31 December 2015, while rates for 2015 calendar year data were calculated using ERP at 30 June 2015).

Data for Victoria were not available for the 2011–12 and 2012–13 reporting period for the community mental health care section of Mental health services in Australia. Crude rates for national totals in this section were calculated by subtracting Victorian

populations data from the National total. These population data were used in the denominator for calculating national 'Total' crude rates for these reporting periods.

Some data sources for the ACT were not available for the 2014–15 and/or 2015–16 reporting periods. Refer to the respective table footnotes for details. Crude rates for national totals in these sections were calculated by subtracting ACT populations data from the National total. These population data were used in the denominator for calculating national 'Total' crude rates.

Age-standardised rates

In this publication, some population rates are adjusted (standardised) for age to facilitate comparisons between populations that have different age structures, for example, between Indigenous Australians and non-Indigenous Australians. This publication uses direct standardisation in which age-specific rates are applied to a standard population (the ERP 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 3 steps:

1. Calculate the crude age-specific rate for each 5-year age group.
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 (for example 100,000), giving the expected number of cases.
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 the applicable base number (100,000 in this example).

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 the calculation of a meaningful crude rate.

Data for Victoria were not available for the 2011–12 and 2012–13 reporting period for the community mental health care section of *Mental health services in Australia*. Age-standardised rates for this section were calculated with Victorian population data excluded from the national total.

Some data for the ACT were not available for the 2014–15 and/or 2015–16 reporting periods. Refer to the respective table footnotes for details. Age-standardised rates for these sections were calculated excluding ACT population data.

Average annual rates of change

In this publication, the 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 2 time periods.

Average annual rates of change are not calculated where data are incomplete.

Confidence intervals

A confidence interval is a range of values that is used to describe the uncertainty around an estimate, usually from a sample survey. Generally speaking, confidence intervals describe how different the estimate could have been if the underlying conditions stayed the same but variability in sampling (i.e. selecting a different sample from the population) had led to a different set of data. Confidence intervals are calculated with a stated probability (commonly 95%); this means that there is a 95% chance that the confidence interval includes the true value.

Indirect expenditure

The National Mental Health Establishments Database collects information on direct and indirect recurrent expenditure. Direct recurrent expenditure comprises salaries and wages and selected non-salary expenditure, and is collected at the individual mental health service unit level.

Indirect recurrent expenditure is additional expenditure associated with the provision of mental health services not incurred or reported at the individual service unit level.

Indirect expenditure is reported at 3 overarching levels above the individual service unit level:

- the organisational level; an organisation may or may not comprise a number of individual service units
- the regional level
- the state/territory level.

Some of these indirect expenditure items can be directly linked to the provision of services by the service units. Specifically, at the organisational and regional levels the

expenditure on the following items is directly related to individual mental health service units and thus has been apportioned to units in the organisation or region reporting the indirect funds:

- program administration
- support services
- academic chairs
- superannuation
- workers compensation
- insurance
- patient transport services
- property leasing
- other indirect expenditure.

The apportioning of indirect expenditure is calculated on the total direct funds for the service, as a proportion of the total for all service units in the organisation or region. The total allocation or apportioning of funds is reported in the indirect expenditure rows in Table EXP.1.

The remaining indirect expenditure categories of education and training, research, mental health promotion, service development costs associated with the start up of new services and costs associated with the establishment and operation of jurisdictional Mental Health Act review bodies are not apportioned to mental health service units. State/territory level expenditure is also not apportioned to mental health service units. The total for these residual categories is reported in the row 'Other indirect expenditure' in Table EXP.1. Note that grants to non-government-organisations are not regarded as indirect expenditure.

Deflators

Expenditure aggregates in this report are expressed in current prices and/or constant prices. The transformation of current prices to constant prices is termed 'deflation', using price indexes or 'deflators'. There are a variety of deflators that can be used to translate current prices into constant prices. The deflators that were used by AIHW for the various items in the Expenditure on mental health services section are outlined in the table below. For further information on the methodology used to calculate deflators, refer to Health expenditure Australia 2017–18 (AIHW 2019).

Table Tech 1: Area of health expenditure, by type of deflator applied

Area of expenditure	Deflator applied
Public psychiatric hospitals/acute hospitals with a specialised psychiatric unit or ward	Government final consumption expenditure (GFCE) hospitals and nursing homes(a)
Community mental health care services	Professional health workers wage rate index
Residential mental health services	Professional health workers wage rate index
Grants to non-government-operated organisations	Professional health workers wage rate index
Other indirect expenditure	Government final consumption expenditure (GFCE) hospitals and nursing homes(a)
Private psychiatric hospital expenditure	Government final consumption expenditure (GFCE) hospitals and nursing homes(a)
Medicare expenditure on mental health-related services	Medicare fees charged per service by specialists(b)
Expenditure on mental health-related medications subsidised under the PBS and RPBS	PBS pharmaceuticals(b)
Australian Government expenditure on mental health-related services	Government final consumption expenditure (GFCE) hospitals and nursing homes(a)
Expenditure on specialised mental health services	Government final consumption expenditure (GFCE) hospitals and nursing homes(a)

(a) Australian Bureau of Statistics (unpublished data).

(b) AIHW Health Expenditure Database to 2018

References

AIHW (Australian Institute of Health and Welfare) 2019. Health expenditure Australia 2017–18. Health and welfare expenditure series no. 65. Cat. no. HWE 77. Canberra: AIHW.

Health-related classifications

Health related classifications have multiple purposes, including the facilitation of data collection and management in the clinical setting, the analysis of data to inform health 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 (NCCCH) developed the ACHI based on the Medicare Benefits Schedule (MBS). The MBS is a fee schedule for Medicare services including general practice consultations, specialist consultations, surgical procedures and other medical services, such as diagnostic investigations and optometric services. The Department of Health (DoH) updates the MBS at least twice each year and these code changes are incorporated into the ACHI or the MBS codes are mapped to existing ACHI codes.

The ACHI classifies 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 the ACHI is anatomically based, rather than based on the medical specialty.

To maintain parity with disease classification, ACHI chapters resemble the International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD 10-AM chapters). The ACHI is updated biennially by the National Casemix and Classification Centre (NCCC) in line with the disease section of the ICD 10 AM. Use of the codes is guided by the Australian Coding Standards of the ICD 10 AM.

Further information on the ACHI is available from the [ACCD website](#).

Primary Health Networks

Primary Health Networks are organisations that connect health services across a specific geographic area (a PHN area), with the boundaries defined by the Australian Government Department of Health. There are 31 PHN areas that cover the whole of Australia. Further information is available on the [Department of Health website](#).

Australian Statistical Geography Standard

The Australian Statistical Geography Standard (ASGS) was developed by the Australian Bureau of Statistics (ABS) for the collection and dissemination of geographically classified statistics. It is a common framework that enables publication of statistics that are comparable and spatially integrated and is an essential reference for understanding and interpreting the geographical context of Australian statistics.

The ASGS replaces the Australian Standard Geographical Classification (ASGC) and has been utilised for release of data from the 2016 Census of Population and Housing.

Statistical Areas

Statistical Areas—Statistical Areas are a geographical classification defined by the Australian Bureau of Statistics. They encompass 4 levels, with increasing size and population: Statistical Areas Level 1 (SA1s); Statistical Areas Level 2 (SA2s); Statistical Areas Level 3 (SA3s); and Statistical Areas Level 4 (SA4).

In some data sections, aggregate SA3 data were mapped to PHNs using correspondence files are sourced from Australian Statistical Geography Standard (ASGS): Volume 3 - Non ABS Structures (ABS cat.no. 1270.0.55.003). Population estimates for SA3s as at 30 June were mapped to PHNs using the method.

Where applicable, data from previous collection periods where data were reported with SA3 2011 boundaries were mapped to 2016 boundaries to allow for historical comparisons. Correspondence are sourced from Australian Statistical Geography Standard (ASGS): Volume 1 – Main structure and Greater Capital City Statistical Areas (ABS cat.no. 1270.0.55.001).

Remoteness

Australian Statistical Geography Standard (ASGS) is the geographical framework defined by the Australian Bureau of Statistics (ABS) for disseminating geographically classified statistics (ABS 2011, ABS 2016). In this report, the ASGS applies to the data presented by remoteness area. For data from 2017-18 onwards, the ASGS 2016 is used; earlier years use ASGS 2011. ASGS is categorised into Remoteness Areas (RAs). RAs aggregate to states and territories and cover the whole of Australia without gaps or overlaps.

This report uses the ASGS 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 the ABS website.

Socio-economic status

The ABS Socio Economic Indexes For Areas Index of Relative Socio-economic Disadvantage (SEIFA IRSD) is used to report Australian socio-economic data (ABS 201, ABS 2016). SEIFA scores are calculated by taking into account social and economic indicators of advantage and disadvantage, such as education, occupation, employment, income, families, and housing, and are used to summarise the socioeconomic conditions of a geographical area (ABS 2014, ABS 2016).

These scores are categorised into 5 groups, referred to as quintiles, which each represent one-fifth (20%) of the population (ABS 2014, ABS 2016). Quintile 1 is the most disadvantaged group (worst off) and quintile 5 is the least disadvantaged group (best off) (ABS 2014, ABS 2016). A geographical area with a low SEIFA score will likely comprise of a higher proportion of people who are relatively disadvantaged and a lower proportion of people who are relatively advantaged.

More information can be found on the ABS website.

Anatomical Therapeutic Chemical Classification System

The Anatomical Therapeutic Chemical (ATC) Classification System, developed by the World Health Organization (WHO), assigns therapeutic drugs to different groups according to the body 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 but with some differences as outlined in the relevant data source sections.

For further information on this classification system, refer to the WHO website.

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 2011).

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.

International Statistical Classification of Diseases and Related Health Problems, 9th revision, Clinical Modification

The International Statistical Classification of Diseases and Related Health Problems, 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 diagnoses in the health sector in Australia. It is used in public and private hospitals, and in community and residential mental health care services. The ICD-10-AM was developed in Australia by the NCCH with the purpose of making ICD-10 more relevant to Australian clinical practice (NCCH 2006).

International Classification of Primary Care, 2nd edition, and ICPC 2 PLUS

The International Classification of Primary Care, 2nd edition (ICPC-2) is a classification method for primary care or general practice encounters accepted by the WHO and primarily used in Australia. 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 Australian general practice.

The ICPC-2 is currently being used in some electronic health records in clinical general practice, for research purposes (such as the BEACH project) and for coding self-reported health information in other statistical collections such as the ABS National Health Survey.

Further information on ICPC-2 is available from the [WHO website](#) and information on ICPC-2 PLUS is available from the [National Centre for Classification in Health](#) website.

References

ABS (Australian Bureau of Statistics) 2011. Australian Statistical Geography Standard (ASGS): Volume 5 – Remoteness Structure, July 2011. ABS cat. No. 1270.0.55.005. Canberra: ABS.

ABS 2014. Socio-Economic Indexes for Areas (SEIFA). Canberra: ABS. Viewed June 2015

ABS 2016. Australian Statistical Geography Standard (ASGS): Volume 1 – Main Structure and Greater Capital City Statistical Areas, July 2016. ABS cat. No. 1270.0.55.001. Canberra: ABS.

ABS 2016. Australian Statistical Geography Standard (ASGS): Volume 5 – Remoteness Structure, July 2016. ABS cat. No. 1270.0.55.005. Canberra: ABS.

ABS 2016. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016. ABS cat. No. 2033.0.55.001. Canberra: ABS.

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

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

WHO (World Health Organization) 2010. [ATC: International classification of diseases \(ICD\)](#). Geneva: Viewed December 2015.

Classification codes

This section provides a list of codes used to define mental health-related general practice encounters from the Bettering the Evaluation and Care of Health (BEACH) database (as used in the general practice section) and mental health-related hospital separations from the National Hospital Morbidity Database (as used in the Admitted patient sections).

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, 2nd edition (ICPC-2). In the great majority of cases, the codes appearing in the diagnosis or problem fields of the BEACH survey form those listed here under the 'Problems managed' heading. Occasionally a code more relevant to treatments or referrals has appeared. These cases (accounting for 3% of all mental health-related problems managed in BEACH in 2011–12) are still counted as 'mental health related' general practice encounters for the purpose of the report, in particular the estimates in table class code 1 below.

For treatments 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, Anatomical Therapeutic Chemical (ATC) classification codes (WHO 2011) have been used, where the medication falls into one of four groups.

The following table presents a list of the ICPC-2, ICPC-2 PLUS and ATC codes classed as 'psychological' for problems managed, treatments, referrals and medications.

Table Class code 1: ICPC-2, ICPC-2 PLUS and ATC codes classified as psychological for problems managed, treatments, referrals and medications in the BEACH database, 2011–12

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

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
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 behaviour 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

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
P74			Anxiety disorder/anxiety state
P75			Somatisation disorder
P76			Depressive disorder
P77			Suicide/suicide attempt
P78			Neurasthenia
P79			Phobia, compulsive disorder
P80			Personality disorder
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
Treatments, including 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

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
	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
	P43004		Exam; mini mental state
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
	P45013		Anger management
	P58001		Counselling; psychiatric
	P58002		Psychotherapy
	P58004		Counselling; psychological
	P58005		Counselling; sexual; psychological
	P58006		Counselling; individual; psychological
	P58007		Counselling; bereavement
	P58008		Counselling; smoking

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
	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
	P58019		Cognitive behavioural therapy
	P58020		Rehabilitation; drug
	P58021		Rehabilitation; alcohol
	P58022		Counselling; body image
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 provider; psychological
	P46003		Consultation; psychiatrist
	P46004		Consultation; mental health worker

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
	P47003		Consultation; psychiatrist
	P48002		Discuss; patient reason for encounter; psychological
	P49001		Preventive; procedure; psychological
	P49002		Exchange; needle/syringe
	P49003		Mental health plan
	P50001		Medications; psychological
	P50002		Medication; request; psychological
	P50003		Medication; renew; psychological
	P50004		Prescription; psychological
	P50006		Injection; psychological
	P60001		Test; result(s); psychological
	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 & alcohol
	P66007		Referral; hypnotherapy
	P67002		Referral; psychiatrist
	P67004		Referral; clinic; psychiatrist
	P67005		Referral; hospital; psychiatrist

ICPC-2 code	ICPC-2 PLUS code	ATC code	ICPC-2/ICPC-2 PLUS/ATC label
	P67006		Referral; sleep clinic
	P68003		Referral; needle/syringe exchange
Medications			
		N05A	Antipsychotics
		N05B	Anxiolytics
		N05C	Hypnotics and sedatives
		N06A	Antidepressants

Source: ICPC-2 Classification of Primary Care, 2nd edition

National Hospital Morbidity Database data

Data from the National Hospital Morbidity Database (NHMD) are the source for the Admitted patient sections of this online report. The definition of the scope of each section is provided in the section's introduction or data source. Key elements of these definitions depend on the ICD-10-AM diagnosis codes and the Australian Classification of Health Interventions (ACHI) procedure codes. The codes in-scope are listed below.

During the preparation of Mental health services in Australia 1999–00 (AIHW 2002), attention was given to ensuring that, for data on hospital separations from the NHMD, the definition of a 'mental health-related diagnosis' included all codes that were either clinically or statistically relevant to mental health. This definition was revised for Mental health services in Australia 2000–01 (AIHW 2003) 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 (MDC) 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 (now called the Mental Health Information Strategy Standing Committee) 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 Mental health services in Australia, the same codes used for the analysis of the 2000–01 data have been used to define ‘mental health-related’ hospital separations in the Admitted patient sections. However, updates have been made to incorporate changes in codes that have occurred as new editions of ICD-10-AM have been released.

The full list of codes used to define mental health-related hospital separations is shown in the following table.

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

ICD-10-AM code	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F00	Dementia in Alzheimer’s disease	..	..	..	Y
F01	Vascular dementia	..	..	..	Y
F02	Dementia in other diseases classified elsewhere	..	..	Y	..
F03	Unspecified dementia	..	..	..	Y
F04	Organic amnesic syndrome, not induced by alcohol and other psychoactive substances	..	..	..	Y
F05	Delirium, not induced by alcohol and other psychoactive substances	..	..	..	Y
F06	Other mental disorders due to brain damage and dysfunction and to physical disease	..	..	Y	Y
F07	Personality and behavioural disorders due to brain disease, damage and dysfunction	..	..	Y	Y
F09	Unspecified organic or symptomatic mental disorder	..	..	Y	..

ICD-10-AM code	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F10	Mental and behavioural disorders due to use of alcohol	..	Y	..	..
F11	Mental and behavioural disorders due to use of opioids	..	Y	..	..
F12	Mental and behavioural disorders due to use of cannabinoids	..	Y	Y	..
F13	Mental and behavioural disorders due to use of sedatives or hypnotics	..	Y	..	..
F14	Mental and behavioural disorders due to use of cocaine	..	Y	..	..
F15	Mental and behavioural disorders due to use of other stimulants, including caffeine	..	Y	Y	..
F16	Mental and behavioural disorders due to use of hallucinogens	..	Y	..	..
F17	Mental and behavioural disorders due to use of tobacco	..	Y	..	..
F18	Mental and behavioural disorders due to use of volatile solvents	..	Y	..	..
F19	Mental and behavioural disorders due to multiple drug use and use of other psychoactive substances	..	Y	Y	..
F20	Schizophrenia	Y	..	Y	..
F21	Schizotypal disorder	Y	..	Y	..
F22	Persistent delusional disorders	Y	..	Y	..
F23	Acute and transient psychotic disorders	Y	..	Y	..
F24	Induced delusional disorder	Y	..	Y	..
F25	Schizoaffective disorders	Y	..	Y	..
F28	Other non-organic psychotic disorders	Y	..	Y	..
F29	Unspecified non-organic psychosis	Y	..	Y	..
F30	Manic episode	Y	..	Y	..

ICD-10-AM code	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F31	Bipolar affective disorder	Y	..	Y	..
F32	Depressive episode	Y	..	Y	..
F33	Recurrent depressive disorder	Y	..	Y	..
F34	Persistent mood (affective) disorders	Y	..	Y	..
F38	Other mood (affective) disorders	Y	..	Y	..
F39	Unspecified mood (affective) disorder	Y	..	Y	..
F40	Phobic anxiety disorders	Y	..	Y	..
F41	Other anxiety disorders	Y	..	..	..
F42	Obsessive–compulsive disorder	Y	..	Y	..
F43	Reaction to severe stress, and adjustment disorders	Y	..	Y	..
F44	Dissociative (conversion) disorders	Y	..	..	..
F45	Somatoform disorders	Y	..	..	..
F48	Other neurotic disorders	Y	..	..	..
F50	Eating disorders	Y	..	Y	..
F51	Non-organic sleep disorders	Y	..	..	..
F52 ^(a)	Sexual dysfunction, not caused by organic disorder or disease	Y	..	Y	Y
F53	Mental and behavioural disorders associated with the puerperium, not elsewhere classified	..	..	..	Y
F54	Psychological and behavioural factors associated with disorders or diseases classified elsewhere	Y	..	..	..
F55	Harmful use of non-dependence-producing substances	..	Y	..	Y
F59	Unspecified behavioural syndromes associated with physiological disturbances and physical factors	Y	..	..	..

ICD-10-AM code	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F60	Specific personality disorders	Y	..	Y	..
F61	Mixed and other personality disorders	Y	..	Y	..
F62	Enduring personality changes, not attributable to brain damage and disease	Y	..	Y	..
F63	Habit and impulse disorders	Y	..	Y	..
F64	Gender identity disorders	Y	..	..	..
F65	Disorders of sexual preference	Y	..	Y	..
F66	Psychological and behavioural disorders associated with sexual development and orientation	Y	..	Y	..
F68	Other disorders of adult personality and behaviour	Y	..	Y	..
F69	Unspecified disorder of adult personality and behaviour	Y	..	..	..
F70	Mild mental retardation	..	..	Y	..
F71	Moderate mental retardation	..	..	..	Y
F72	Severe mental retardation	..	..	..	Y
F73	Profound mental retardation	..	..	..	Y
F78	Other mental retardation	..	..	..	Y
F79	Unspecified mental retardation	..	..	Y	..
F80	Specific developmental disorders of speech and language	Y	..	..	..
F81	Specific developmental disorders of scholastic skills	Y	..	..	..
F82	Specific developmental disorder of motor function	Y	..	..	..
F83	Mixed specific developmental disorders	Y	..	..	..
F84 ^(b)	Pervasive developmental disorders	Y	..	Y	..

ICD-10-AM code	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
F88	Other disorders of psychological development	Y	..	..	..
F89	Unspecified disorder of psychological development	Y	..	..	..
F90	Hyperkinetic disorders	Y	..	Y	..
F91	Conduct disorders	Y	..	Y	..
F92	Mixed disorders of conduct and emotions	Y	..	Y	..
F93	Emotional disorders with onset specific to childhood	Y	..	Y	..
F94	Disorders of social functioning with onset specific to childhood and adolescence	Y	..	..	..
F95	Tic disorders	Y	..	Y	..
F98 ^(c)	Other behavioural and emotional disorders with onset usually occurring in childhood and adolescence	Y	..	Y	..
F99	Mental disorder, not otherwise specified	Y	..	..	..
G30.0	Alzheimer's disease with early onset	..	..	Y	..
G30.1	Alzheimer's disease with late onset	..	..	Y	..
G30.8	Other Alzheimer's disease	..	..	..	Y
G30.9	Alzheimer's disease, unspecified	..	..	..	Y
G47.0	Disorders initiating and maintaining sleep	Y	..	..	..
G47.1	Disorders excessive somnolence	Y	..	..	..
G47.2	Disorders of the sleep-wake schedule	Y	..	..	..
G47.8	Other sleep disorders	Y	..	..	..
G47.9	Sleep disorder, unspecified	Y	..	..	..
O99.3	Mental disorder nervous system pregnancy and birth	..	..	..	Y
R44.0	Auditory hallucinations	Y	..	..	..
R44.1	Visual hallucinations	..	..	..	Y

ICD-10-AM code	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
R44.2	Other hallucination	Y	..	..	..
R44.3	Hallucinations, unspecified	Y	..	..	..
R44.8	Other/not otherwise specified symptom involving general sensation perception	Y	..	..	..
R45.0	Nervousness	Y	..	..	..
R45.1	Restlessness and agitation	Y	..	..	..
R45.4	Irritability and anger	Y	..	..	..
R48.0	Dyslexia and alexia	Y	..	..	..
R48.1	Agnosia	Y	..	..	..
R48.2	Apraxia	Y	..	..	..
R48.8	Other and unspecified symbolic dysfunctions	Y	..	..	..
Z00.4	General psychiatric examination, not elsewhere classified	..	..	Y	..
Z03.2	Observation for suspected mental and behavioural disorder	Y	..	Y	..
Z04.6	General psychiatric examination, requested by authority	..	..	Y	..
Z09.3	Follow-up examination after psychotherapy	..	..	..	Y
Z13.3	Special screening examination for mental and behavioural disorders	..	..	..	Y
Z50.2	Alcohol rehabilitation	..	..	..	Y
Z50.3	Drug rehabilitation	..	..	..	Y
Z54.3	Convalescence following psychotherapy	..	..	..	Y
Z61.9	Negative life event in childhood, unspecified	..	..	Y	..
Z63.1	Problems relationship w parents & in-laws	..	..	Y	..
Z63.8	Other spec problems related to prim support group	..	..	Y	..

ICD-10-AM code	Diagnosis	MDC 19	MDC 20	Statistically relevant	Apparently otherwise relevant
Z63.9	Problem related to primary support group, unspecified	..	..	Y	..
Z65.8	Other specified problems related to psychosocial circumstances	..	..	Y	..
Z65.9	Problem related to unspecified psychosocial circumstances	..	..	..	Y
Z71.4	Counselling and surveillance for alcohol use disorder	..	..	..	Y
Z71.5	Counselling and surveillance for drug use disorder	..	..	..	Y
Z76.0	Issue of repeat prescription	..	..	Y	..

- .. not applicable
- Y code used
- (a) Excluding F52.5.
- (b) F84.2.
- (c) Excluding F98.5 and F98.6.

References

- ABS (Australian Bureau of Statistics) 2014. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011. ABS cat. no. 2033.0. Canberra: ABS.
- ABS 2016. Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016. ABS cat. No. 2033.0.55.001. Canberra: ABS.
- AIHW (Australian Institute of Health and Welfare) 2002. Mental health services in Australia 1999–00. Mental health series no. 3. Cat. no. HSE 19. Canberra: AIHW.
- AIHW 2003. Mental health services in Australia 2000–01. Mental health series no. 4. Cat. no. HSE 24. Canberra: AIHW.
- WHO (World Health Organization) 2016. ATC: [Structure and principles](#). Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed January 2018,