

8 Mental health care for schizophrenia and related disorders

This report presents information on the delivery of specialised and non-specialised mental health care relating to all mental disorders categorised by the type of care provided. Data can also be presented for specific mental disorders to illustrate disorder-specific patterns in service use.

This chapter presents an overview of the available data on the prevalence and burden of schizophrenia in the Australian community, the characteristics of mental health care and medication provided for people with this disorder and the health system costs associated with it. In this chapter the term *schizophrenia* is used to encompass schizophrenia and a number of related disorders as specified below.

Definitions

Schizophrenia is a condition that can affect a person's thoughts, perceptions, emotions and behaviour in a variety of ways. It is not a single illness, but a cluster of illnesses in which signs and symptoms can overlap. First onset often occurs during adolescence or early adulthood (NSW Health Department 2001).

ICD-10-AM 3rd edition groups schizophrenia, schizotypal and delusional disorders under codes F20–F29 (*Schizophrenia, schizotypal and delusional disorders*). This grouping comprises schizophrenia, schizotypal disorder, persistent delusional disorders, and a larger group of acute and transient psychotic disorders and schizoaffective disorders (NCCH 2002).

For the purposes of this chapter we have also included specific sub-categories from codes F10–F19 (*Mental and behavioural disorders due to psychoactive substance use*) as they comprise psychotic disorders due to substance use. There are 10 sub-categories used in codes F10–F19 (from .0 to .9). Relevant sub-categories used in this chapter are *Psychotic disorders (.5)* and *Residual and late-onset psychotic disorders (.7)*.

The following definitions are from ICD-10-AM 3rd edition (NCCH 2002).

Mental and behavioural disorders due to psychoactive substance use (F10–F19)

'This block contains a wide variety of disorders that differ in severity and clinical form but that are all attributable to the use of one or more psychoactive substances, which may or may not have been medically prescribed. The third character of the code identifies the substance involved, and the fourth character specifies the clinical state' (NCCH 2002).

The psychoactive substances included in F10–F19 are: alcohol (F10); opioids (F11); cannabinoids (F12); sedatives or hypnotics (F13); cocaine (F14); other stimulants including caffeine (F15); hallucinogens (F16); tobacco (F17); volatile solvents (F18); multiple drug use and use of other psychoactive substances (F19).

The two relevant sub-categories used in this chapter are .5 and .7.

Psychotic disorder (.5)

'A cluster of psychotic phenomena that occur during or following psychoactive substance use but are not explained on the basis of acute intoxication alone and do not form part of a withdrawal state. The disorder is characterised by hallucinations (typically auditory, but often in more than one sensory modality), perceptual distortions, delusions (often of a paranoid or persecutory nature), psychomotor disturbances (excitement or stupor), and an abnormal affect, which may range from intense fear to ecstasy. The sensorium is usually clear but some degree of clouding of consciousness, though not severe confusion, may be present' (NCCH 2002).

Residual and late-onset psychotic disorder (.7)

'A disorder in which alcohol- or psychoactive substance-induced changes of cognition, affect, personality, or behaviour persist beyond the period during which a direct psychoactive substance-related effect might reasonably be assumed to be operating. Onset of the disorder should be directly related to the use of the psychoactive substance' (NCCH 2002).

Schizophrenia (F20)

'The schizophrenic disorders are characterised in general by fundamental and characteristic distortions of thinking and perception, and affects that are inappropriate or blunted. Clear consciousness and intellectual capacity are usually maintained although certain cognitive deficits may evolve in the course of time. The most important psychopathological phenomena include thought echo; thought insertion or withdrawal; thought broadcasting; delusional perception and delusions of control; influence or passivity; hallucinatory voices commenting or discussing the patient in the third person; thought disorders and negative symptoms' (NCCH 2002).

Schizotypal disorder (F21)

'A disorder characterised by eccentric behaviour and anomalies of thinking and affect which resemble those seen in schizophrenia, though no definite and characteristic schizophrenic anomalies occur at any stage. The symptoms may include a cold or inappropriate affect; anhedonia; odd or eccentric behaviour; a tendency to social withdrawal; paranoid or bizarre ideas not amounting to true delusions; obsessive ruminations; thought disorder and perceptual disturbances; occasional transient quasi-psychotic episodes with intense illusions, auditory or other hallucinations, and delusion like ideas, usually occurring without external provocation. There is no definite onset and evolution and course are usually those of a personality disorder' (NCCH 2002).

Persistent delusional disorders (F22)

'Includes a variety of disorders in which long-standing delusions constitute the only, or the most conspicuous, clinical characteristic and which cannot be classified as organic, schizophrenic or affective' (NCCH 2002).

Acute and transient psychotic disorders (F23)

'A heterogeneous group of disorders characterised by the acute onset of psychotic symptoms such as delusions, hallucinations, and perceptual disturbances, and by the severe disruption of ordinary behaviour. Acute onset is defined as a crescendo development of a clearly abnormal clinical picture in about two weeks or less. For these disorders there is no evidence of organic causation. Perplexity and puzzlement are often present but disorientation for time, place and person is not persistent or severe enough to justify a diagnosis of organically caused delirium

(F05.-). Complete recovery usually occurs within a few months, often within a few weeks or even days' (NCCH 2002).

Induced delusional disorder (F24)

'A delusional disorder shared by two or more people with close emotional links. Only one of the people suffers from a genuine psychotic disorder; the delusions are induced in the other(s) and usually disappear when the people are separated' (NCCH 2002).

Schizoaffective disorders (F25)

'Episodic disorders in which both affective and schizophrenic symptoms are prominent but which do not justify a diagnosis of either schizophrenia or depressive or manic episodes' (NCCH 2002).

Other nonorganic psychotic disorders (F28)

'Delusional or hallucinatory disorders that do not justify a diagnosis of schizophrenia, persistent delusional disorders, acute and transient psychotic disorders, psychotic types of manic episode, or severe depressive episode' (NCCH 2002).

Unspecified nonorganic psychosis (F29)

'Psychosis not otherwise specified' (NCCH 2002).

Data sources and definitions for schizophrenia in this chapter

Box 8.1 provides information on the source of the data on schizophrenia used in this chapter, the type of data used and the classification system used to define schizophrenia. The following is a summary of the classifications used to define schizophrenia in each of the data sources used in this chapter:

- Hospital separations data and community mental health service contact data: based on the ICD-10-AM categories of *Schizophrenia, schizotypal and delusional disorders* (F20-F29) and *Mental and behavioural disorders (psychotic disorders and residual and late-onset psychotic disorders) due to psychoactive substance use* (F10-F19, for .5 and .7 sub-categories only).
- Mortality data: based on the ICD-10 version of the above categories.
- Health service expenditure data: based on the ICD-10 categories of *Schizophrenia, schizotypal and delusional disorders* (F20-F29) only.
- The Low Prevalence (Psychotic) Disorders study: based on the ICD-10-AM codes *Schizophrenia, schizotypal and delusional disorders* (F20-F29) excluding *Schizotypal disorder* (F21) and *Induced delusional disorder* (F24). In addition, it also included mood disorders that contain psychosis, such as bipolar disorder and mania or severe depression with psychosis (relevant codes from F30-F33).
- AIHW Burden of Disease and Injury in Australia study: based on the ICD-9 codes, which are similar, but not exactly equivalent, to codes F20-F29 in the ICD-10-AM.
- The BEACH survey of general practice activity: based on the International Classification for Primary Care (ICPC-2). The codes used are similar, but not exactly equivalent to codes F20-F29 and codes F10-F19, for .5 and .7 sub-categories only in the ICD-10-AM.

Box 8.1: Schizophrenia data sources, type of data and classification system used

<i>ABS National Survey of Mental Health and Wellbeing: Low Prevalence (Psychotic) Disorders Component</i>	<i>This study included people with psychotic disorders that could be classified using the ICD-10-AM codes: Schizophrenia (F20); Schizoaffective disorders (F25); Persistent delusional disorder (F22); Acute or transient psychotic disorder (F23); Other and Unspecified non-organic psychotic disorder (F28, F29); Manic episode with psychotic symptoms (F30.2); Bipolar affective disorder with psychotic symptoms (F31.2, F31.5); Severe depressive episode with psychotic symptoms (F32.3); or recurrent depressive disorder with psychotic symptoms (F33.3). For the prevalence estimate reported in this chapter all of the above codes were used.</i>
<i>AIHW National Mortality Database</i>	<i>Data on the underlying cause of death. Schizophrenia was defined as ICD-10 codes Schizophrenia, schizotypal and delusional disorders (F20–F29); and Mental and behavioural disorders due to psychoactive substance use (F10–F19) limited to psychotic disorders or residual and late-onset psychotic disorders due to psychoactive substance use (codes .5 and .7 only).</i>
<i>AIHW Burden of Disease and Injury in Australia study</i>	<i>Data are disability-adjusted life years data (DALY). Schizophrenia was defined using the ICD-9 code Schizophrenic disorders (295), which includes: Simple type (295.0); Disorganised/hebephrenic type (295.1); Catatonic type (295.2); Paranoid type (295.3); Acute-schizophrenic-like psychotic disorder (295.4); Latent schizophrenia (295.5); Residual schizophrenia (295.6); Schizo-affective type (295.7); Other specified types of schizophrenia (295.8); Unspecified schizophrenia (295.9).</i>
<i>BEACH survey of GPs</i>	<i>Data on encounters from the 2003–04 BEACH survey of GPs. Schizophrenia was defined using the International Classification for Primary Care (ICPC–2) as codes: P72 (Schizophrenia: Hebephrenic, catatonic, schizoaffective and schizophrenic psychoses; Paranoia; Paranoid schizophrenia, reaction or state; Paraphrenia; Schizophrenia; and Delusions); P15002 (Chronic alcohol abuse, Psychosis); P15003 (Chronic alcohol abuse, Alcoholic brain syndrome); P15004 (Chronic alcohol abuse, Dementia); P19004 (Drug abuse, Psychosis); P98003 (Psychoses not otherwise specified, other Psychotic); P98004 (Psychoses not otherwise specified, other Psychosis).</i>
<i>AIHW National Community Mental Health Care Database</i>	<i>Data are for service contacts in specialised mental health outpatient and ambulatory community-based services. Schizophrenia was defined using the ICD–10–AM codes Schizophrenia, schizotypal and delusional disorders (F20–F29); and Mental and behavioural disorders due to psychoactive substance use (F10–F19) limited to psychotic disorders or residual and late-onset psychotic disorders due to psychoactive substance use (codes .5 and .7 only).</i>
<i>AIHW National Hospital Morbidity Database</i>	<i>Ambulatory-equivalent admitted-patient care data and hospital-admitted-patient care data (separations and patient-days). Schizophrenia was defined using the ICD–10–AM codes Schizophrenia, schizotypal and delusional disorders (F20–F29); and Mental and behavioural disorders due to psychoactive substance use (F10–F19) limited to psychotic disorders or residual and late-onset psychotic disorders due to psychoactive substance use (codes .5 and .7 only).</i>
<i>Health service expenditure data</i>	<i>Health service expenditure data by disease and injury categories for schizophrenia. Schizophrenia was defined ICD–10–AM codes Schizophrenia, schizotypal and delusional disorders (F20–F29).</i>

8.1 Prevalence

Between September 1997 and January 1998, the University of Western Australia undertook the Low Prevalence (Psychotic) Disorders component of the ABS's National Survey of Mental Health and Wellbeing. This study aimed to examine the prevalence of psychotic disorders

among Australians aged 18–64 years. The first phase of the study involved conducting a systematic one-month census to identify people with a psychotic disorder who attended mental health services, such as hospitals and community clinics, in geographically defined areas of the Australian Capital Territory, Queensland, Victoria and Western Australia. Other relevant service providers and agencies, such as general practitioners, private psychiatrists, boarding houses and homeless shelters, were also approached and invited to participate in the study. In the second phase of the study, a sample of 980 persons were interviewed to obtain information on sociodemographic characteristics, symptoms, functioning in daily life activities, use of mental health and social services, and quality of life of adults with psychotic disorders.

This study found the treated prevalence of psychotic disorders in the adult urban population to be between 4 and 7 persons per 1,000, depending on the catchment area. Schizophrenia and schizoaffective disorders were reported for over 60% of the people identified with psychotic disorders (Jablensky et al. 1999).

Mortality

In 2002, there were 73 deaths for which schizophrenia (ICD-10 codes F20–F29 and F10–F19 for 4th subdivisions of .5 and .7 only) was the underlying cause of death (43 deaths for males and 30 for females). Between 1997 and 2002, the age-standardised mortality rate for schizophrenia as the underlying cause of death remained between 0.4 to 0.5 deaths per 100,000 population, with the exception of a drop in 2000 to 0.2 per 100,000 population, mainly due to a drop in the rate for males (AIHW National Mortality Database). For males, the age-standardised mortality rate varied over this time from a high of 0.7 per 100,000 population in 1997 to a low of 0.2 in 2000. The rate was 0.5 in 2002. For females, the age-standardised mortality rate varied from a high of 0.3 per 100,000 population in 1997 and a low of 0.2 in 2002. Males were more than twice as likely as females to have schizophrenia as their underlying cause of death with an age-standardised mortality rate of 0.5 per 100,000 population and 0.3 per 100,000 population in 2002.

Burden

In 1999, the *Burden of Disease and Injury in Australia* study attempted to measure and compare the burden for all diseases and injuries in Australia (AIHW: Mathers et al. 1999). The study used a health summary measure called a disability-adjusted life year, or DALY, developed by Murray and Lopez (1996). This measure was designed to combine the concept of years of life lost due to premature death with a concept of years of equivalent healthy life lost through disability. One DALY represents one lost year of healthy life whether through premature death or disability.

In this study, among the 75 leading causes of disease burden, schizophrenia was ranked 35th for males and 27th for females. It accounted for 0.7% (8,960) of total DALYs for males and 0.7% (8,728) of total DALYs for females (AIHW: Mathers et al. 1999). For persons with schizophrenia the years of healthy life lost (DALY) are almost completely due to the disability burden (98.7% for males and 98.2% for females) rather than to premature death (1.3% for males and 1.8% for females).

8.2 Mental health care

This section summarises the available data on the use of mental health-related services by people with schizophrenia.

Ambulatory mental health care

The main source of data on ambulatory care for schizophrenia by general practitioners (GP) in Australia is the BEACH survey. The BEACH survey includes information on the reason for the patient visit (encounter), the problem that was managed, the medication that was prescribed, supplied or recommended and whether a referral was made.

Information on ambulatory care provided by private psychiatrists is available from Medicare and information on medications prescribed by private psychiatrists and non-specialists is contained in the PBS and RPBS data collections. However, these data were not available in time for inclusion.

General practice

According to the Low Prevalence (Psychotic) Disorders component of the National Survey of Mental Health and Wellbeing, approximately 9% of the survey sample of people with a psychotic disorder such as schizophrenia who were using health services saw a GP during the census month (Jablensky et al 1999) (see Section 8.1). Figure 8.1 presents BEACH data on encounters where schizophrenia was managed and how this relates to other data collected for the encounter. In 2003–04, schizophrenia was managed at 0.5% of GP encounters. Since 1998–99, when the BEACH survey commenced, schizophrenia has consistently accounted for approximately 0.3% of all problems managed by GPs. Based on these data, it is estimated that there were approximately 289,000 visits to GPs that involved the management of schizophrenia in 2003–04, and approximately 290,000 visits in 2002–03.

Patients aged between 25–44 years (39.7%) and 45–64 years (33.7%) and patients who were male (54.6%) accounted for the greatest proportion of schizophrenia problems managed. Almost two thirds (64.7%) of GPs who took part in the BEACH survey were located in major cities, similarly the majority of problems relating to schizophrenia (58.5%) were managed by GPs who resided in these areas.

At 40.4% of encounters at which schizophrenia was managed, the patient reason for encounter (RFE) was prescription request. Schizophrenia was a patient RFE for 24.7% of encounters at which schizophrenia was managed and psychological follow-up was a patient RFE for 8.4% of these encounters.

Clinical treatments were used at a much lower rate for the management of schizophrenia problems (25.2%) than for all mental health-related problems (45.6%) (Table 3.11). These treatments included psychological counselling (13.0% of schizophrenia problems managed) and referrals to other health professionals (5.5%), most commonly to a mental health team (2.2%).

Outpatient services and community-based ambulatory mental health care

Data on outpatient and community-based ambulatory services presented in this report are drawn from the National Community Mental Health Care Database (NCMHCD). The data quality concerns pertaining to this data collection are detailed in Chapter 3, Section 3.4 (e.g. the proportion of service contacts with no principal diagnosis reported).

In 2002–03, schizophrenia (ICD-10-AM codes F20–F29, or codes F10–F19 where the fourth digit was .5 or .7) was reported for 1.4 million service contacts (47.6%) provided by those ambulatory mental health services for which a principal diagnosis was reported.

Schizophrenia was more frequently reported for males (110.1 of service contacts with a schizophrenia diagnosis per 1,000 population) than for females (69.5 per 1,000 population) (Table 8.1). Patients in the 25–34 year age group had the highest rate of service contacts with a schizophrenia diagnosis (173.5 per 1,000 in this age group) followed by patients aged 35–44 years (149.8 per 1,000).

Of those service contacts that were schizophrenia-related, 9.6% had a mental health legal status of involuntary. This proportion excludes Western Australia, which was unable to report mental health legal status for 2002–03. A small proportion of schizophrenia-related service contacts were for patients who identified as Aboriginal and/or Torres Strait Islander peoples (0.8%).

Ambulatory-equivalent admitted-patient care

Figure 8.2 presents hospital separations that were considered equivalent to ambulatory mental health care (see Appendix 2) and where the patient's principal diagnosis was schizophrenia (ICD-10-AM codes F20–F29, or codes F10–F19 where the fourth digit was .5 or .7). In 2002–03, there were 8,950 separations with a principal diagnosis of schizophrenia with 7,592 psychiatric care days. Over two-thirds (66.7%) of separations with this principal diagnosis were in private hospitals and the majority of separations (95.3%) were for patients who received acute care. A small proportion of these separations were involuntary (3.9%).

Between 1998–99 and 2002–03, the number of these separations that were in private hospitals increased 53% (from 3,895 separations to 5,974) and those in public hospitals decreased by 13% (from 3,409 separations to 2,976) (Table 8.2).

The most common diagnosis in addition to a principal diagnosis of schizophrenia was *Problems related to lifestyle* (Z72); and the most common procedures performed were *Psychological/psychosocial therapies* (Block 1873) and *Other counselling or education* (Block 1869). The most commonly reported AR-DRG was *Mental health treatment same day without electroconvulsive therapy* (AR-DRG U60Z).

Medications used in ambulatory mental health care

General practice

Based on BEACH data in 2003–04, medications were prescribed or supplied for schizophrenia at a rate of 89.4 per 100 schizophrenia problem contacts. Olanzapine and fluphenazine decanoate were the medications most frequently prescribed for schizophrenia, at rates of 14.6 and 10.5 per 100 schizophrenia problem contacts, respectively (Figure 8.1).

Male patients were prescribed 91.2 medications per 100 schizophrenia problems managed by GPs compared with 87.0 per 100 for female patients. Persons aged between 25 and 44 years (41%) received the highest proportion of medications for schizophrenia prescribed by GPs.

Highly Specialised Drugs Program

Under the Department of Health and Ageing's Highly Specialised Drugs Program (HSDP), the antipsychotic drug clozapine is provided to treat schizophrenia. In 2003–04, expenditure by HSDP on clozapine was \$30.9 million, 92.7% of which was supplied by public hospitals (Table 8.2). Information on the provision of clozapine is reported differently for public and private

hospitals. For 2003–04, private hospitals dispensed 7,846 prescriptions for clozapine and public hospitals provided 121,890 individual packs of this drug (Table 8.3). Figures in the HSDP show that patient numbers for clozapine increased from just over 5,000 in 1998–99 to approximately 9,000 in 2003–04.

Low Prevalence (Psychotic) Disorders survey

According to the 1998 Low Prevalence (Psychotic) Disorders component of the National Survey of Mental Health and Wellbeing, a majority of the survey respondents with a diagnosis of schizophrenia used a typical (conventional or older) antipsychotic (61.4%) such as fluphenazine decanoate, almost one quarter used an atypical (newer) antipsychotic (34.9%) such as olanzapine or clozapine, and 16.4% used an antidepressant (DHA 2002). Respondents may have used more than one medication at a time so percentages are not additive.

Hospital admitted patient care

Figure 8.3 describes available data for mental health-related separations that were not considered equivalent to ambulatory mental health care and for which the patient's principal diagnosis was schizophrenia (ICD-10-AM codes F20–F29, or codes F10–F19 where the fourth digit was .5 or .7). In 2002–03, there were 43,826 separations with a principal diagnosis of schizophrenia with 1,072,393 psychiatric care days. The majority of separations (96.7%) were for patients who received acute care. Almost half of the separations were involuntary (45.6%).

Separations with a principal diagnosis of schizophrenia (ICD-10-AM codes F20–F29, or codes F10–F19 where the fourth digit was .5 or .7) accounted for 35,694 (31.6%) mental health-related separations with specialised psychiatric care and 8,132 (10.3%) of those separations without specialised psychiatric care.

The most common diagnosis in addition to a principal diagnosis of schizophrenia was *Problems related to lifestyle (Z72)*, while the most common procedures performed were *Generalised allied health interventions (Block 1916)* and *Cerebral anaesthesia (Block 1910)*. The most commonly reported AR-DRG was *Schizophrenia disorders with mental health legal status (AR-DRG U61A)*.

The total number of mental health-related separations, including ambulatory-equivalent separations, with a principal diagnosis of schizophrenia increased from 43,896 in 1998–99 to 52,776 in 2002–03 (Table 8.4), with 86% of the increase in public acute hospitals. However the number of patient-days decreased (1,153,361 in 1998–99 to 1,140,220 in 2002–03). The number of same-day separations (excluding ambulatory-equivalent) in public acute hospitals rose 68% during this period (from 2,255 to 3,792) and 135% in private hospitals (from 113 to 265), but, for public psychiatric hospitals this number decreased 76% (from 503 to 121).

8.3 Health service expenditure for schizophrenia

For health service expenditure, a detailed analysis by disease and injury categories, including mental health, was undertaken for 1993–94 and 2000–01 (AIHW 2004b). Note that data for hospital services expenditure have been adjusted to take into account the impact of long-stay patients on annual expenditure figures.

For 2000–01, it was estimated that health care expenditure for schizophrenia (ICD-10-AM codes F20–F29) was \$709 million (1.3% of recurrent health expenditure) (Table 8.5). (This expenditure excludes community mental health expenditure, as it was not able to be allocated to the different mental health disorders.) The majority of this \$709 million expenditure was for

hospital services (69% or \$489 million) such as admitted and non-admitted patients and in-hospital private medical services, and for pharmaceutical services (16% or \$110 million).

In comparison, the health care expenditure for schizophrenia in 1993–94 (2000–01 prices) was estimated at \$408 million or 1.0% of recurrent health care expenditure. This was mostly for hospital services (82% or \$335 million). The proportion of expenditure on pharmaceutical services in 1993–94 was lower (2% or \$10 million) than in 2000–01.

This section focuses on health service expenditure for schizophrenia, but it is only part of the financial costs associated with this illness. There are also the indirect financial costs to people with schizophrenia, their families and the community. For 2001, the indirect costs of schizophrenia were estimated to total \$1,186.1 million, or \$31,857 per person with schizophrenia. These included loss of earnings (\$459.8 million), carer costs (\$88.1 million), absenteeism costs (\$27.8 million), payments for disability support (\$249.9 million), and prison, police and legal costs (\$51.8 million)(Access Economics, 2002).

Table 8.1: Community mental health care service contacts with a principal diagnosis of schizophrenia^(a), by sex and age group, Australia^(b), 2002–03

	Less than 15 years	15–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	Total ^(c)
Sex	Number							
Males	1,691	150,438	286,388	229,699	129,131	47,284	28,974	873,831
Females	1,338	63,391	118,278	132,627	116,063	68,932	59,296	560,546
Total^(c)	3,392	214,018	405,703	363,725	245,672	116,387	88,341	1,438,731
	Per 1,000 population^(d)							
Males	1.0	135.3	245.7	189.9	118.8	58.6	31.6	110.1
Females	0.9	59.5	100.9	108.8	105.8	87.0	51.3	69.5
Total^(c)	1.1	98.3	173.5	149.8	112.5	72.8	42.6	89.9

(a) Schizophrenia includes principal diagnoses of *Schizophrenia, schizotypal and delusional disorders* (F20–F29) and *Mental and behavioural disorders due to psychoactive substance abuse* (F10–F19, for .5 and .7 sub-categories only).

(b) Excluding Queensland who was unable to provide principal diagnosis for 2002–03.

(c) Includes service contacts for which sex and/or age group was not reported.

(d) The rate per 1,000 population is a crude rate based on the Estimated Resident Population, excluding Queensland, at 31 December 2002. Queensland was unable to provide principal diagnosis for 2002–03.

Note: These data should be interpreted with caution due to incomplete coverage and inconsistencies in the definition of a service contact used between jurisdictions. For more information refer to Appendix 2.

Table 8.2: Highly Specialised Drugs Program expenditure (\$'000) on clozapine, by state or territory, 1998–99 to 2003–04

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Private hospitals	Public hospitals	Total
1998–99	5,488.8	5,875.1	2,856.6	1,341.7	859.2	365.4	276.8	82.7	n.a.	n.a.	17,146.3
1999–00	6,382.3	6,986.7	3,639.4	1,620.0	1,182.7	456.6	303.2	90.0	n.a.	n.a.	20,660.7
2000–01	6,867.8	7,972.4	4,006.6	1,704.9	1,383.6	515.0	303.9	83.5	873.7	21,963.8	22,837.5
2001–02	7,770.1	8,968.7	4,376.6	1,817.9	1,721.8	571.7	326.0	87.9	1,705.0	23,935.7	25,640.7
2002–03	8,357.3	9,576.4	4,955.4	2,071.3	1,985.8	603.2	343.8	121.2	1,948.2	26,066.1	28,014.3
2003–04	9,298.7	10,389.3	5,844.3	2,134.3	2,110.6	636.5	334.3	156.7	2,241.8	28,662.8	30,904.6

n.a. Not available.

Source: DHA.

Table 8.3: Highly Specialised Drugs Program: number of packs and prescriptions for clozapine, by hospital sector and state or territory, 2003–04

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Public hospitals									
Number of individual packs	35,715	40,509	23,809	8,742	7,821	2,979	1,648	667	121,890
Private hospitals									
Number of prescriptions	3,168	2,757	918	352	634	17	7,846

.. Not applicable.

Source: DHA.

Table 8.4: Number of separations and patient-days for separations with a principal diagnosis of schizophrenia^(a), by hospital type, Australia, 1998–99 to 2002–03

Hospital and separation type	1998–99		1999–00		2000–01		2001–02		2002–03	
	Separations	Patient-days	Separations	Patient-days	Separations	Patient-days	Separations	Patient-days	Separations	Patient-days
Public acute hospitals										
Ambulatory-equivalent admitted patient care ^(b)	2,901	2,901	3,089	3,089	2,795	2,795	2,779	2,779	2,712	2,712
Other separations										
Same day	2,255	2,255	2,488	2,488	2,813	2,813	3,830	3,830	3,792	3,792
Overnight	25,360	421,353	27,397	448,139	27,540	453,801	30,106	497,025	31,446	538,013
<i>Total</i>	<i>27,615</i>	<i>423,608</i>	<i>29,885</i>	<i>450,627</i>	<i>30,353</i>	<i>456,614</i>	<i>33,936</i>	<i>500,855</i>	<i>35,238</i>	<i>541,805</i>
Public psychiatric hospitals										
Ambulatory-equivalent admitted patient care ^(b)	508	508	467	467	81	81	63	63	264	264
Other separations										
Same day	503	503	72	72	140	140	159	159	121	121
Overnight	6,080	682,396	6,055	643,355	5,603	383,594	5,812	580,848	5,632	538,738
<i>Total</i>	<i>6,583</i>	<i>682,899</i>	<i>6,127</i>	<i>643,427</i>	<i>5,743</i>	<i>383,734</i>	<i>5,971</i>	<i>581,007</i>	<i>5,753</i>	<i>538,859</i>
Private hospitals										
Ambulatory-equivalent admitted patient care ^(b)	3,895	3,895	4,501	4,501	4,551	4,551	4,681	4,681	5,974	5,974
Other separations										
Same day	113	113	185	185	227	227	220	220	265	265
Overnight	2,281	39,437	2,433	41,649	2,721	51,826	2,738	66,720	2,570	50,341
<i>Total</i>	<i>2,394</i>	<i>39,550</i>	<i>2,618</i>	<i>41,834</i>	<i>2,948</i>	<i>52,053</i>	<i>2,958</i>	<i>66,940</i>	<i>2,835</i>	<i>50,606</i>
Total	43,896	1,153,361	46,687	1,143,945	46,471	899,828	50,388	1,156,325	52,776	1,140,220

(a) Schizophrenia includes principal diagnoses of *Schizophrenia, schizotypal and delusional disorders* (F20–F29) and *Mental and behavioural disorders due to psychoactive substance abuse* (F10–F19, for .5 and .7 sub-categories only).

(b) See Appendix 2 for definition of ambulatory-equivalent mental health-related separations.

Table 8.5: Health system costs^(a) of schizophrenia^(b) in Australia, 2000–01 and 1993–94 (\$ millions)

Year	Hospitals^(c)	Aged care homes	Out-of-hospital medical^(d)	Pharmaceuticals	Other professional services	Research	Total expenditure
2000–01	489	54	31	110	2	22	709
1993–94^(e)	335	24	32	10	1	6	408

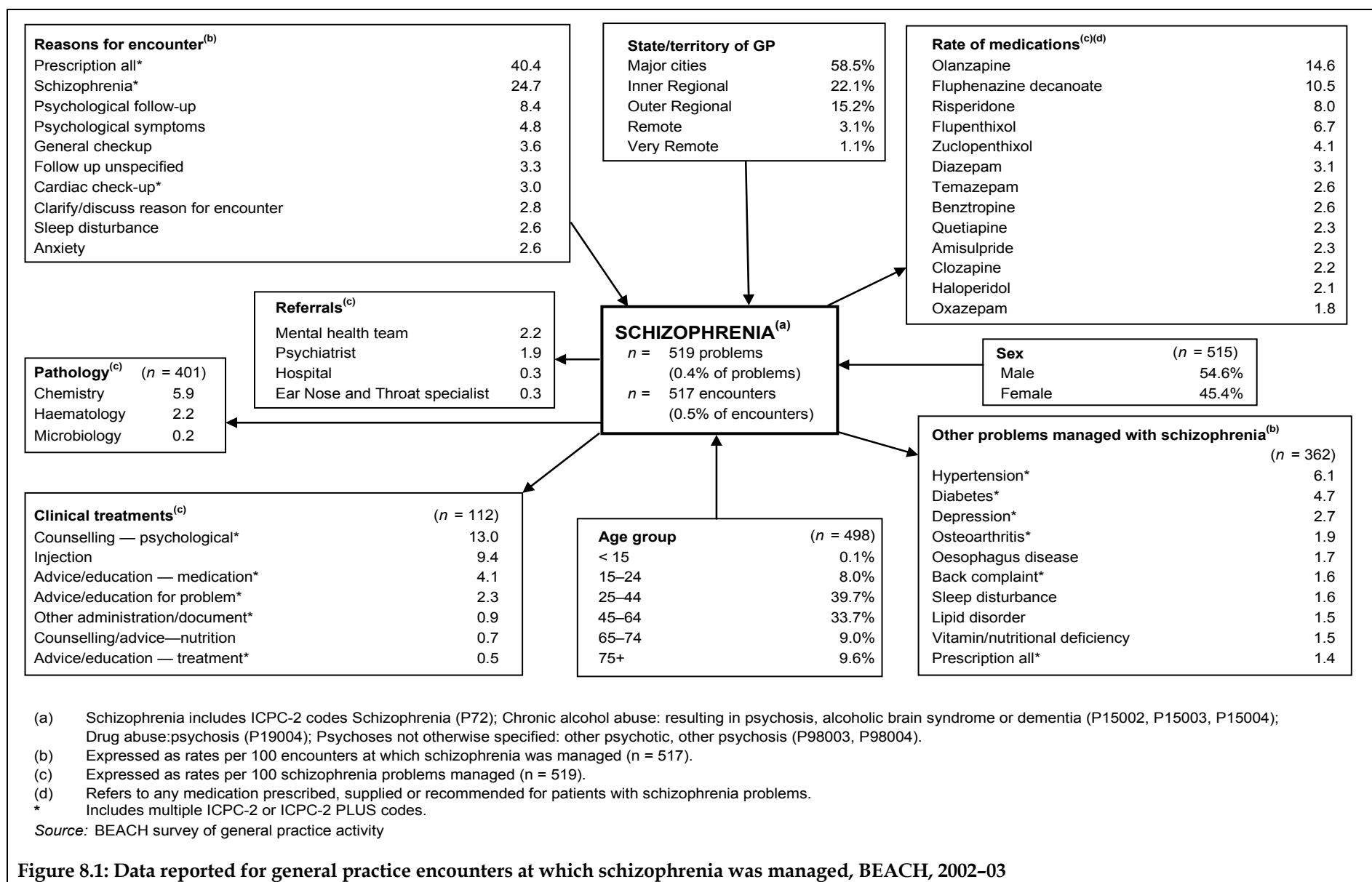
(a) Excludes expenditure on community mental health care.

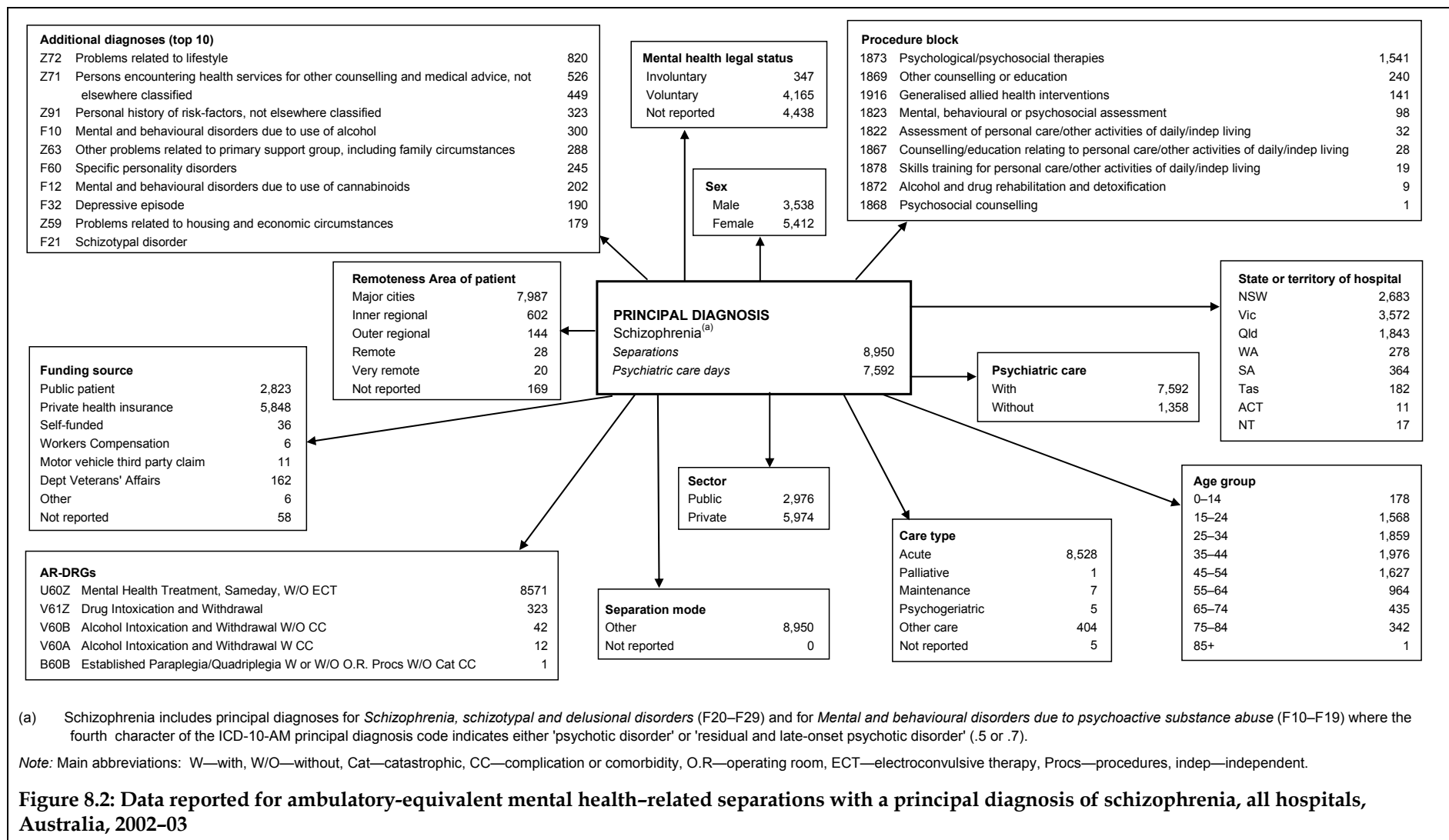
(b) Includes ICD-10-AM codes F20–F29.

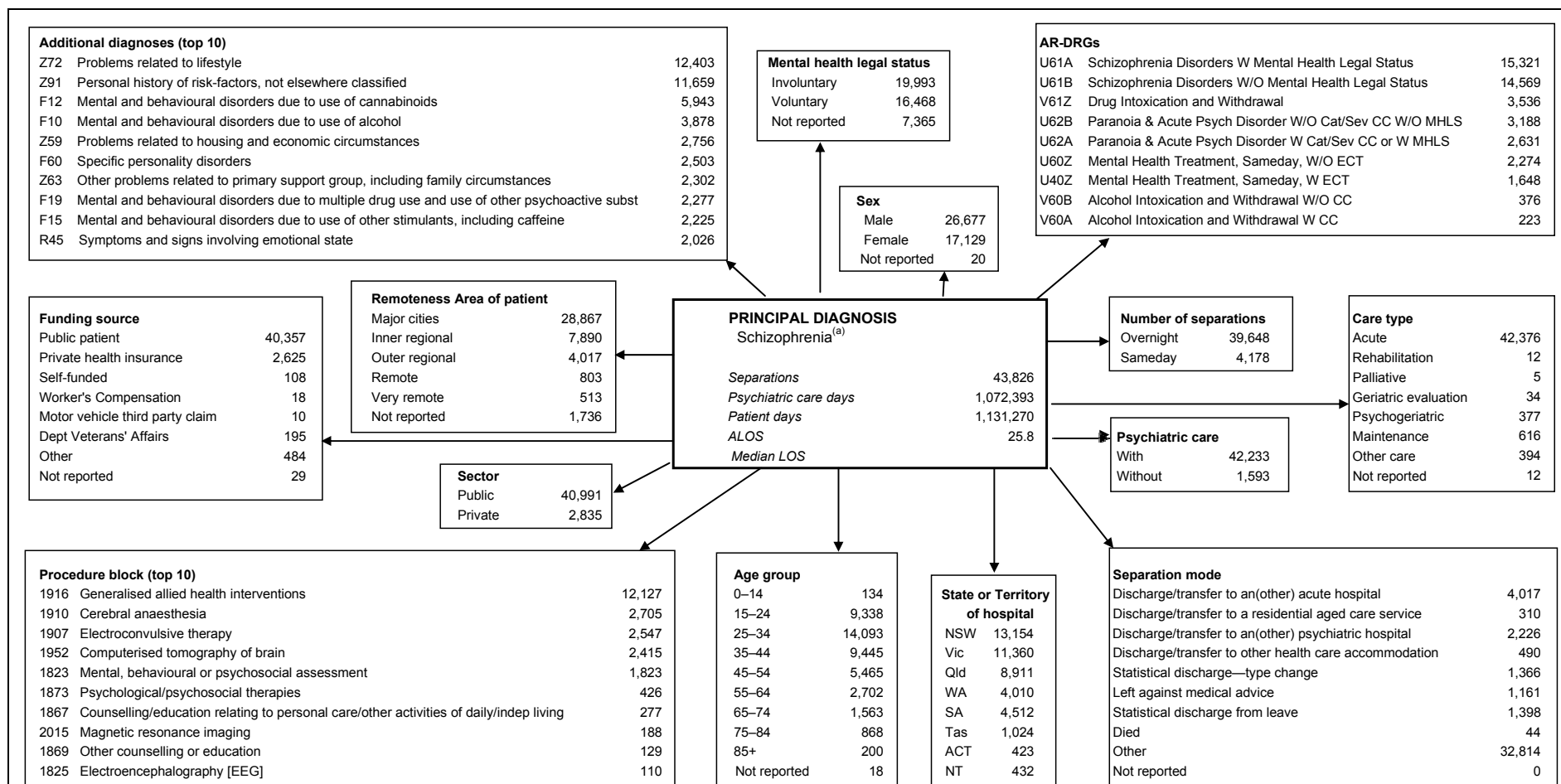
(c) Hospital costs include the costs of admitted and non-admitted patients and in-hospital private medical services.

(d) Out-of-hospital medical includes unreferral attendances, imaging, pathology and other medical.

(e) Expenditures for 1993–94 have been converted to 2000–01 prices by adjusting for health price inflation between 1993–94 and 2000–01.







(a) Schizophrenia includes principal diagnoses for *Schizophrenia, schizotypal and delusional disorders* (F20–F29) and for *Mental and behavioural disorders due to psychoactive substance abuse* (F10–F19) where the fourth character of the ICD-10-AM principal diagnosis code indicates either 'psychotic disorder' or 'residual and late-onset psychotic disorder' (.5 or .7).

Note: Main abbreviations: ALOS—average length of stay, Cat—catastrophic, CC—complication or comorbidity, ECT—electroconvulsive therapy, LOS—length of stay, MHLS—mental health legal status, Sev—severe, W—with, W/O—without.

Figure 8.3: Data reported for non-ambulatory-equivalent mental health-related separations with a principal diagnosis of schizophrenia, all hospitals, Australia, 2002–03