

3 Mental health-related care in emergency departments

3.1 Introduction

Hospital emergency departments play a role in treating mental illness. The emergency department can be the initial point of care for a range of reasons. For example, a 2004 study of mental health presentations to Victorian emergency departments found that emergency departments were used as an initial point of care for those seeking mental health-related services for the first time, as well as another point of care for people seeking after-hours mental health care (Victorian Government Department of Human Services 2006). The Victorian study found that emergency departments played a role in caring for those who:

- presented involuntarily with the police for a mental health assessment
- were brought in by ambulance after a self-harm attempt
- required containment and treatment in situations where no beds in specialist psychiatric wards were readily available
- presented with high prevalence disorders, such as anxiety and depression.

Information on selected *mental health-related emergency department occasions of service* was included in this report for the first time in 2004–05, with the aim of providing a more complete picture of mental health-related services in Australia.

All state and territory health authorities collect a core set of nationally comparable information on most *emergency department occasions of service* in public hospitals within their jurisdiction. The Australian Institute of Health and Welfare compiles this episode-level data annually into the National Non-admitted Patient Emergency Department Care Database (NNAPEDCD). In addition, although not compiled as part of the NNAPEDCD, all jurisdictions collect information (in some form) on the *principal diagnosis* for many of those emergency department occasions of service which they report to the NNAPEDCD. For the purposes of this chapter, this diagnosis information was used by states and territories to identify those emergency department occasions of service that were mental health-related. Data on these mental health-related occasions of service were provided by the states and territories from the same sources as those used to provide data on all emergency department occasions of service to the NNAPEDCD.

3.2 Mental health-related emergency department occasions of service

Mental health-related emergency department occasions of service are defined as occasions of service in public hospital emergency departments that have a principal diagnosis of mental and behavioural disorders (codes F00–F99) in the *International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM)* or the equivalent codes in the *International Statistical Classification of Diseases, 9th revision, Clinical*

Modification (ICD-9-CM). A list of the relevant diagnosis codes for both ICD-10-AM and ICD-9-CM are provided in Appendix Table A1.2.

State and territory health authorities provided aggregate 2006–07 information on the demographic characteristics, triage category, episode end status and principal diagnosis of patients for whom mental health-related occasions of service were reported. Principal diagnosis was reported on the basis of the 11 diagnosis blocks that make up the *Mental and behavioural disorders* chapter (Chapter 5) in the ICD-10-AM.

Key concepts

Emergency department occasion of service refers to the period of treatment or care between when a patient presents at an emergency department and when the non-admitted emergency department treatment ends. It includes presentations of patients who do not wait for treatment once registered or triaged in the emergency department, those who are dead on arrival, and those who are subsequently admitted to hospital or to beds or units in the emergency department. An individual may have multiple occasions of service in a year. For further information, see the definition of Non-admitted patient emergency department service episode in the *National health data dictionary, Version 13* (HDSC 2006).

Mental health-related emergency department occasion of service refers to an emergency department occasion of service that has a principal diagnosis that falls within the *Mental and behavioural disorders* chapter (Chapter 5) of ICD-10-AM (codes F00–F99) or the equivalent ICD-9-CM codes. It should be noted that this definition does not encompass all mental health-related presentations to emergency departments, as detailed below. Additional information about this and applicable caveats can be found in Appendix 1.

Principal diagnosis. Currently, there is no national standard definition of principal diagnosis in relation to emergency department data. Thus, for the purposes of the data presented in this chapter, states and territories provided data on principal diagnosis based on local definitions used within their jurisdiction or emergency departments.

The definition of mental health-related emergency department occasions of service in this chapter has limitations:

- **Not all occasions of service in emergency departments within a state or territory are reported with detailed episode-level data.**

Nationally, in 2006–07, an estimated 22% of the 5.3 million public hospital emergency department occasions of service were not reported with episode-level data and thus not included in the NNAPEDCD (Appendix Table A1.3). In addition, non-admitted patient occasions of service provided by accident and emergency departments in private acute and psychiatric hospitals are not included.

The Australian Bureau of Statistics (ABS) estimates there were 453,572 non-admitted patient occasions of service provided by accident and emergency departments in private acute and psychiatric hospitals in 2006–07 (ABS 2008b).

- **Not all of the emergency department occasions of service that are reported with detailed episode-level data include a diagnosis.**

It is estimated that in 2006–07, the proportion of reported occasions of service with a diagnosis was 92% (Appendix Table A1.3).

- **Not all conditions and problems that could be considered mental health-related are captured by the mental health-related definition used in this chapter.**

For example, emergency department occasions of service for which the principal diagnosis did not fall within the *Mental and behavioural disorders* chapter but for which an

external cause of morbidity or mortality was identified as intentional self-harm are not included.

- **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.

- **A patient may have a mental health-related condition that is not recognised or diagnosed (and thus not recorded) during the emergency department occasion of service.**

As a consequence, the data presented in this chapter are likely to under-report the actual number of mental health-related emergency department occasions of service. Further information on data collection limitations can be found in Appendix 1.

3.3 Mental health-related emergency department care

States and territories reported a total 178,595 emergency department occasions of service with a mental health-related principal diagnosis in 2006–07 (Table 3.1). However, taking into account state and territory estimates of the coverage of their emergency department data collections and the total proportion (72%) of all occasions of service with a principal diagnosis reported, it is estimated that there were about 248,500 mental health-related emergency department occasions of service in public hospitals in 2006–07. This represents an increase of 19% on the estimated number of mental health-related emergency department occasions of service reported in 2005–06 (208,200 – this figure has been updated from last year’s report due to revised figures from one jurisdiction). Further information on estimated and reported emergency department occasions of service is available in Appendix 1.

Patient demographics

The demographic characteristics reported for mental health-related emergency department occasions of service in 2006–07 are contained in Table 3.1. For comparative purposes, the characteristics reported for all emergency department occasions of service in that year (as sourced from the NNAPEDCD) are also provided.

Mental health-related emergency department occasions of service differ markedly in their age distribution when compared with all emergency occasions of service, featuring a higher percentage in the 15–54 year age bracket (79.1% and 51.8%, respectively) and a much lower percentage of those aged less than 15 years (3.4% and 22.6%, respectively).

In 2006–07, males made up a slightly higher proportion of mental health-related emergency department occasions of service than females (50.8% compared with 49.2%). This was in line with the distribution for all emergency department occasions of service (51.9% male).

Aboriginal and Torres Strait Islander peoples accounted for 5.7% of the mental health-related emergency department occasions of service. This compares with 4.3% of all emergency department occasions of service. It should be noted that most of the data on emergency department occasions of service relate to emergency departments in hospitals within *Major cities* (see Appendix Table A1.3). Consequently, the coverage may not include areas

where the proportion of Indigenous Australians (compared with other Australians) may be higher than average. Therefore, these data may not be indicative of the rate of use of emergency department services by Indigenous Australians on a national level. In addition, when reporting data to the NNAPEDCD, most states and territories cautioned that information on Indigenous status collected in emergency departments could be less accurate than the corresponding information collected on admitted patients. Furthermore, the data are also of variable quality across jurisdictions (AIHW 2008a).

Table 3.1: Mental health-related emergency department occasions of service^(a) in public hospitals, by patient demographic characteristics, 2006–07

Patient demographics	Number of occasions of service ^(b)	Per cent of total mental health-related occasions of service ^(c)	Per cent of all emergency department occasions of service reported in the NNAPEDCD ^{(c)(d)}
Age (years)			
Less than 15	6,120	3.4	22.6
15–24	39,314	22.0	15.8
25–34	40,427	22.6	14.3
35–44	36,539	20.5	12.0
45–54	24,914	14.0	9.7
55–64	13,032	7.3	8.1
65–74	7,017	3.9	6.8
75+	11,172	6.3	10.8
Sex			
Male	90,723	50.8	51.9
Female	87,856	49.2	48.1
Indigenous status			
Indigenous Australians	10,224	5.7	4.3
Other Australians ^(e)	168,371	94.3	95.7
Total	178,595	100.0	100.0

(a) Includes emergency department occasions of service that had a principal diagnosis that fell within the *Mental and behavioural disorders* chapter (Chapter 5) of ICD-10-AM (codes F00–F99) or the equivalent ICD-9-CM codes.

(b) The number of occasions of service for each demographic variable may not sum to the total due to missing and/or not reported data.

(c) The percentages shown do not include occasions of service for which the demographic information was missing and/or not reported.

(d) Occasions of service with episode-level data reported by state and territory health authorities to the NNAPEDCD 2006–07.

(e) Includes separations where Indigenous status was missing or not reported (see AIHW 2005).

Source: Data provided by state and territory health authorities.

Principal diagnosis

States and territories provided data on mental health-related occasions of services by principal diagnosis, based on the broad categories within the *Mental and behavioural disorders* chapter (Chapter 5) in the ICD-10-AM (Table 3.2). Those jurisdictions which recorded diagnoses using ICD-9-CM codes were asked to map their data according to the specifications provided in Appendix Table A1.2.

In 2006–07, four diagnosis categories accounted for the majority (85.9%) of mental health-related occasions of service (Table 3.2). These were *Neurotic, stress-related and somatoform disorders* (F40–F48, 29.5%), *Mental and behavioural disorders due to psychoactive substance use* (F10–F19, 23.6%), *Mood (affective) disorders* (F30–F39, 17.7%) and *Schizophrenia, schizotypal and delusional disorders* (F20–F29, 15.1%). These proportions are very similar to the 2005–06 breakdown, where the top four diagnoses accounted for 86.0% of the total.

Table 3.2: Mental health-related emergency department occasions of service^(a) in public hospitals, by principal diagnosis, states and territories, 2006–07

Principal diagnosis (ICD-10-AM)	NSW ^(b)	Vic	Qld	WA	SA ^(b)	Tas	ACT	NT	Total	Per cent of total
F00–F09: Organic, including symptomatic, mental disorders	3,044	1,415	1,168	1,258	809	232	133	75	8,134	4.6
F10–F19: Mental and behavioural disorders due to psychoactive substance use	17,845	8,802	6,398	3,134	3,503	916	510	982	42,090	23.6
F20–F29: Schizophrenia, schizotypal and delusional disorders	11,840	5,074	4,347	1,336	2,367	776	582	648	26,970	15.1
F30–F39: Mood (affective) disorders	12,758	6,691	6,029	1,913	1,905	1,307	592	343	31,538	17.7
F40–F48: Neurotic, stress-related and somatoform disorders	26,431	9,257	5,310	4,957	4,501	854	685	727	52,722	29.5
F50–F59: Behavioural syndromes associated with physiological disturbances and physical factors	464	182	2,155	88	123	34	19	9	3,074	1.7
F60–F69: Disorders of adult personality and behaviour	960	928	2,128	324	435	181	62	24	5,042	2.8
F70–F79: Mental retardation	8	28	102	0	3	0	2	0	143	0.1
F80–F89: Disorders of psychological development	85	0	165	12	17	0	4	1	284	0.2
F90–F98: Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	3,304	602	788	367	346	81	11	72	5,571	3.1
F99: Unspecified mental disorder	960	764	18	129	155	323	35	643	3,027	1.7
Total	77,699	33,743	28,608	13,518	14,164	4,704	2,635	3,524	178,595	100.0

(a) Includes emergency department occasions of service that had a principal diagnosis that fell within the *Mental and behavioural disorders* chapter (Chapter 5) of ICD-10-AM (codes F00–F99) or the equivalent ICD-9-CM codes.

(b) New South Wales and South Australia used a combination of ICD-9-CM and ICD-10-AM. A mapping of the relevant ICD-9-CM codes to the ICD-10-AM code blocks is provided in Appendix Table A1.2.

Source: Data provided by state and territory health authorities.

The extent to which these four diagnosis categories contributed to the mental health-related emergency department occasions of service varied substantially across states and territories (Table 3.2). However, these variations should be interpreted carefully, as they may reflect the lack of national standards for the coding and collection of principal diagnosis information in emergency departments. In addition, differences in the data scope and coverage (for example, in some jurisdictions only occasions of service from emergency departments in

metropolitan hospitals are included) may contribute to variations in principal diagnosis across states and territories.

Triage category

Triage category is related to the urgency of the patient's need for medical and nursing care, assessed when a patient is triaged in the emergency department. For example, patients triaged to the emergency category are assessed as requiring care within 10 minutes. However, they may or may not actually receive care within that time frame.

In 2006–07, 6.6% of mental health-related occasions of service in emergency departments were considered non-urgent (requiring care within 120 minutes), 36.8% were recorded as semi-urgent (within 60 minutes) and 45.0% as urgent (within 30 minutes). A further 10.8% were classified as emergency (requiring care within 10 minutes) and 0.8% as resuscitation (within seconds) (Table 3.3). These proportions are similar to 2005–06 data. Mental health-related occasions of service (55.8%) were more likely than all emergency department occasions of service (44.8%) to be assessed as urgent or emergency (AIHW 2008a).

Table 3.3: Mental health-related emergency department occasions of service^(a) in public hospitals, by triage category, states and territories, 2006–07

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Per cent of total
Resuscitation	335	392	292	114	175	21	11	29	1,369	0.8
Emergency	6,847	3,681	3,745	1,639	2,147	579	243	347	19,228	10.8
Urgent	34,386	14,547	13,828	5,933	6,556	2,337	1,122	1,657	80,366	45.0
Semi-urgent	29,286	13,033	9,530	5,388	4,595	1,681	1,099	1,192	65,804	36.8
Non-urgent	6,827	2,090	1,200	442	691	86	160	257	11,753	6.6
Total^(b)	77,699	33,743	28,608	13,518	14,164	4,704	2,635	3,524	178,595	100.0

(a) Includes emergency department occasions of service that had a principal diagnosis that fell within the *Mental and behavioural disorders* chapter (Chapter 5) of ICD-10-AM (codes F00–F99) or the equivalent ICD-9-CM codes.

(b) The number of occasions of service may not sum to the total due to missing and/or not reported data.

Source: Data provided by state and territory health authorities.

Episode end status

In 2006–07, the episode end status (formerly called departure status) for nearly two-thirds of the mental health-related emergency department occasions of service was recorded as completed (Table 3.4). That is, 63.6% of these occasions of service were completed without admission or referral to another hospital. Just under one-third (29.0%) of mental health-related occasions of service were closed with the patient being admitted to the hospital to which he or she presented, which is slightly higher than the 26.9% for all emergency department occasions of service (AIHW 2008a). A further 4.5% of mental health-related patients were referred to another hospital.

Table 3.4: Mental health-related emergency department occasions of service^(a) in public hospitals, by episode end status, states and territories, 2006–07

Episode end status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Per cent of total
Admitted to this hospital ^(b)	21,491	8,237	9,078	3,967	4,628	2,287	794	1,327	51,809	29.0
Non-admitted patient emergency department service episode completed ^(c)	48,812	23,215	18,219	8,617	8,587	2,257	1,751	2,058	113,516	63.6
Referred to another hospital for admission	4,556	1,419	611	615	690	99	40	11	8,041	4.5
Did not wait to be attended by a health care professional	798	0	288	70	20	5	15	2	1,198	0.7
Left at own risk ^(d)	1,925	871	412	232	199	49	35	82	3,805	2.1
Not reported ^(e)	117	1	0	17	40	7	0	44	226	0.1
Total	77,699	33,743	28,608	13,518	14,164	4,704	2,635	3,524	178,595	100.0

(a) Includes emergency department occasions of service that had a principal diagnosis that fell within the *Mental and behavioural disorders* chapter (Chapter 5) of ICD-10-AM (codes F00–F99) or the equivalent ICD-9-CM codes.

(b) Includes admissions to beds or units within the emergency department.

(c) Patient departed without being admitted or referred to another hospital.

(d) Patient left at own risk after being attended by a health care professional but before the non-admitted patient emergency department occasion of service was completed.

(e) Included in this category are 8 occasions of service with an episode end status of *Died in emergency department as a non-admitted patient* and 12 occasions of service with an episode end status of *Dead on arrival, not treated in emergency department*.

Source: Data provided by state and territory health authorities.