

## 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 multitude 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 2005). Furthermore, 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; and 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 AIHW compiles this episode-level data annually into the National Non-admitted Patient Emergency Department Care Database (NAPEDCD). In addition, although not compiled as part of the NAPEDCD, 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 NAPEDCD. For the purposes of this chapter, this diagnosis information is used 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 NAPEDCD.

### 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 2005–06 information on the demographic characteristics, triage category, departure 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 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 2005–06, an estimated 22% of the 4.9 million public hospital emergency department occasions of service were not reported with episode-level data and thus not included in the NAPEDCD (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 ABS estimates there were 423,300 non-admitted patient occasions of service provided by accident and emergency departments in private acute and psychiatric hospitals in 2005–06 (ABS 2007b).

- **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 2005–06, 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 is 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

State and territories reported a total 144,006 emergency department occasions of service with a mental health-related principal diagnosis in 2005–06. 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 200,000 mental health-related emergency department occasions of service in public hospitals in 2005–06. This represents an increase of 5% on the estimated number of mental health-related emergency department occasions of service reported in 2004–05 (190,000). 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 2005–06 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 NAPEDCD) 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 (79.9% and 51.6%, respectively) and significantly lower rates of those aged less than 15 years (3.0% and 23.0%, respectively).

In 2005–06, males made up a slightly higher proportion of mental health-related emergency department occasions of service than females (51.6% compared with 48.4%). This was in line with the distribution for all emergency department occasions of service (52.1% male).

Aboriginal and Torres Strait Islander peoples accounted for 5.0% 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 NAPEDCD, 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 2007a).

**Table 3.1: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by patient demographic characteristics, 2005–06**

Patient demographics	Number of occasions of service <sup>(b)</sup>	Per cent of total mental health-related occasions of service <sup>(c)</sup>	Per cent of all emergency department occasions of service reported in the NAPEDCD <sup>(c)(d)</sup>
<b>Age (years)</b>			
Less than 15	4,357	3.0	23.0
15–24	31,736	22.0	15.6
25–34	34,843	24.2	14.5
35–44	29,243	20.3	11.9
45–54	19,220	13.3	9.6
55–64	10,283	7.1	7.9
65–74	5,572	3.9	6.7
75+	8,744	6.1	10.7
<b>Sex</b>			
Male	74,257	51.6	52.1
Female	69,740	48.4	47.9
<b>Indigenous status</b>			
Indigenous Australians	7,220	5.0	4.3
Other Australians <sup>(e)</sup>	136,786	96.5	95.7
<b>Total</b>	<b>144,006</b>	<b>100</b>	<b>100</b>

(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 NAPEDCD 2005–06.

(e) Other Australians includes 'not reported' Indigenous status.

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 in the ICD-10-AM (Table 3.2). Those jurisdictions who had recorded diagnoses using ICD-9-CM codes were asked to map their data according to the specifications provided in Appendix Table A1.3.

In 2005–06, four diagnosis categories accounted for the majority (86.0%) of mental health-related occasions of service (Table 3.2). These were *Neurotic, stress-related and somatoform disorders* (F40–F48, 28.3%), *Mental and behavioural disorders due to psychoactive substance use* (F10–F19, 22.1%), *Mood (affective) disorders* (F30–F39, 18.7%) and *Schizophrenia, schizotypal and delusional disorders* (F20–F29, 16.9%). These proportions are very similar to the 2004–05 breakdown, where the top four diagnoses accounted for 85.5% of the total.

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 change year to year due to 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.

**Table 3.2: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by principal diagnosis, states and territories, 2005–06**

<b>Principal diagnosis (ICD-10-AM)</b>	<b>NSW<sup>(b)</sup></b>	<b>Vic</b>	<b>Qld</b>	<b>WA</b>	<b>SA<sup>(b)</sup></b>	<b>Tas</b>	<b>ACT</b>	<b>NT</b>	<b>Total</b>	<b>Per cent of total</b>
F00-F09: Organic, including symptomatic, mental disorders	1,558	1,329	990	998	726	254	99	75	6,029	4.2
F10-F19: Mental and behavioural disorders due to psychoactive substance use	10,827	7,491	5,588	2,766	2,694	882	606	982	31,836	22.1
F20-F29: Schizophrenia, schizotypal and delusional disorders	10,061	5,053	3,800	1,241	2,092	874	551	648	24,320	16.9
F30-F39: Mood (affective) disorders	9,864	6,501	5,146	1,642	1,739	1,067	640	343	26,942	18.7
F40-F48: Neurotic, stress-related and somatoform disorders	16,998	8,546	4,655	3,880	4,449	771	706	727	40,732	28.3
F50-F59: Behavioural syndromes associated with physiological disturbances and physical factors	240	198	1,552	48	90	28	15	9	2,180	1.5
F60-F69: Disorders of adult personality and behaviour	643	928	1,894	300	674	231	75	24	4,769	3.3
F70-F79: Mental retardation	22	13	84	0	5	0	1	0	125	0.1
F80-F89: Disorders of psychological development	73	0	90	11	21	1	22	1	219	0.2
F90-F98: Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	3,002	510	472	287	319	47	22	72	4,731	3.3
F99: Unspecified mental disorder	72	760	35	106	187	362	0	601	2,123	1.5
<b>Total</b>	<b>53,360</b>	<b>31,329</b>	<b>24,306</b>	<b>11,279</b>	<b>12,996</b>	<b>4,517</b>	<b>2,737</b>	<b>3,482</b>	<b>144,006</b>	<b>100.0</b>

(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) South Australia used ICD-9-CM to code principal diagnosis for emergency department occasions of service in 2005–06. New South Wales 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.

## 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 2005–06, 5.8% of mental health-related occasions of service in emergency departments were considered non-urgent (requiring care within 120 minutes), 36.4% were recorded as semi-urgent (within 60 minutes) and 45.9% as urgent (within 30 minutes). A further 11.0% were classified as emergency (requiring care within 10 minutes) and 0.8% as resuscitation (within seconds) (Table 3.3). These proportions are similar to 2004–05 data. Mental health-related occasions of service (56.9%) were more likely than all emergency department occasions of service (40.0%) to be assessed as urgent and as emergency (AIHW 2007a).

**Table 3.3: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by triage category, states and territories, 2005–06**

Triage category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(b)</sup>	Per cent of total <sup>(c)</sup>
Resuscitation	294	362	259	78	137	28	25	29	1,212	0.8
Emergency	5,372	3,191	2,860	1,268	1,896	536	374	347	15,844	11.0
Urgent	26,040	12,585	11,466	5,023	5,936	2,169	1,192	1,657	66,068	45.9
Semi-urgent	18,396	12,897	8,553	4,455	4,231	1,696	1,029	1,192	52,449	36.4
Non-urgent	3,250	2,294	1,168	441	796	88	117	257	8,411	5.8
<b>Total</b>	<b>53,360</b>	<b>31,329</b>	<b>24,306</b>	<b>11,279</b>	<b>12,996</b>	<b>4,517</b>	<b>2,737</b>	<b>3,482</b>	<b>144,006</b>	<b>100</b>

(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 principal diagnosis 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 triage category was missing and/or not reported.

Source: Data provided by state and territory health authorities.

## Departure status

In 2005–06, the departure status for over half of the mental health-related emergency department occasions of service was recorded as completed (Table 3.4). That is, 58.8% of these occasions of service were completed without admission or referral to another hospital. Just over one-third (34.4%) 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 27.5% for all emergency department occasions of service (AIHW 2007a). A further 4.3% of mental health-related patients were referred to another hospital.

**Table 3.4: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by departure status, states and territories, 2005–06**

Departure status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	Per cent of total
Admitted to this hospital <sup>(b)</sup>	22,490	7,315	7,580	3,611	4,007	2,262	941	1,327	49,533	34.4
Non-admitted patient emergency department service episode completed <sup>(c)</sup>	26,639	21,861	15,693	6,821	7,698	2,136	1,710	2,058	84,616	58.8
Referred to another hospital for admission	2,635	1,341	477	586	1,029	63	47	11	6,189	4.3
Did not wait to be attended by a health care professional	277	0	247	55	52	12	6	2	651	0.5
Left at own risk <sup>(d)</sup>	1,211	811	308	200	114	37	33	82	2,796	1.9
Not reported <sup>(e)</sup>	108	1	1	6	96	7	0	2	221	0.2
<b>Total</b>	<b>53,360</b>	<b>31,329</b>	<b>24,306</b>	<b>11,279</b>	<b>12,996</b>	<b>4,517</b>	<b>2,737</b>	<b>3,482</b>	<b>144,006</b>	<b>100.0</b>

(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) Including 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 4 occasions of service with a departure status of 'Died in emergency department as a non-admitted patient' and 3 occasions of service with a departure status of 'Dead on arrival, not treated in emergency department'.

Source: Data provided by state and territory health authorities.