

# 3 Mental health-related care in emergency departments

## 3.1 Introduction

In previous editions of this report, no information was included on mental health-related care provided in emergency departments. However, along with other mental health care providers, hospital emergency departments play a role in providing treatment to people with mental health problems. 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 an additional 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.

With the aim of providing a more complete picture of mental health-related services in Australia, this report includes, for the first time, information on selected *mental health-related emergency department occasions of service*.

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. This episode-level data are compiled annually by the AIHW 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 that 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

For the purposes of compiling information for this report, 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' (that is, codes F00–F99) in the *International Classification of Diseases, 10th revision, Australian Modification* (ICD-10-AM) or the equivalent codes in the *International 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 A1.1. For the purposes of this data compilation, state and territory health

authorities were asked to provide emergency department data according to this definition for 2004–05. Specifically, aggregate information was requested on the demographic characteristics, triage category and departure status of the patients for whom mental health-related occasions of service were reported, and on the principal diagnosis according to 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 (that is, 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 with regards to 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 does not include all possible occasions of service for the following reasons.

- Not all occasions of service in emergency departments within a state or territory are reported with detailed episode-level data. In 2004–05, nationally, an estimated 24% of all public hospital emergency department occasions of service were not reported with episode-level data and thus not included in the NAPEDCD (Appendix Table A1.2). In addition, non-admitted patient occasions of service provided by accident and emergency departments in private acute and psychiatric hospitals are not included. Based on ABS estimates, there were 451,700 non-admitted patient occasions of service provided by accident and emergency departments in private acute and psychiatric hospitals in 2004–05 (ABS 2006d).
- 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 2004–05, the proportion of reported occasions of service with a diagnosis was 93% (Appendix Table A1.2).
- 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.

For these reasons (and as detailed further in Appendix 1), the data presented in this chapter represent an undercount of the actual number of mental health-related emergency department occasions of service. However, because there are no means currently available to identify all mental health-related occasions of service in emergency departments in a nationally comparable and agreed-upon manner, the data present a picture of the minimum number of such occasions of service.

In an attempt to collect additional information on mental health-related emergency department care for this report, states and territories were also requested to provide data using two other definitions of 'mental health-related emergency department occasions of service' (see Appendix 1). As only half of the jurisdictions could report this additional data and because the data provided for one of these additional definitions were not comparable across the jurisdictions, these data are not presented. However, in order to provide readers with an indication of the extent to which other care in emergency departments may be mental health-related, data for Victoria that is based on the two additional definitions are presented in Appendix 1.

### **3.3 Mental health-related emergency department care**

In 2004–05, emergency departments in public hospitals in Australia reported 133,403 mental health-related occasions of service (Table 3.1). Taking into account the undercoverage issues discussed in Section 3.2, the estimated number of total mental health-related occasions of service is approximately 190,000 (Appendix Table A1.2). This estimated number represents 3.2% of the total number of occasions of service in emergency departments in public hospitals in 2004–05 (which is reported to be almost 6 million) (AIHW 2006b).

#### **Patient demographics**

The demographic characteristics reported for mental health-related emergency department occasions of service in 2004–05 are shown 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 in Table 3.1.

Mental health-related occasions of service were more likely than all emergency department occasions of service to involve a person in the middle age groups and less likely to involve a person in the very young or older age groups. That is, in 2004–05, 2.9% of mental health-related occasions of service were for persons under 15 years of age and 66.6% were for persons aged between 15 and 44 years. In comparison, 22.8% of all emergency department occasions of service involved persons under 15 years of age and 42.0% related to those aged 15 to 44 years.

**Table 3.1: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by patient demographic characteristics, 2004–05**

<b>Patient demographics</b>	<b>Number of occasions of service<sup>(b)</sup></b>	<b>Per cent of total mental health-related occasions of service<sup>(c)</sup></b>	<b>Per cent of all emergency department occasions of service reported in the NAPEDCD<sup>(c)(d)</sup></b>
<b>Age</b>			
Less than 15 years	3,844	2.9	22.8
15–24 years	28,943	21.7	15.4
25–34 years	33,024	24.8	14.7
35–44 years	26,855	20.1	11.9
45–54 years	17,619	13.2	9.6
55–64 years	9,550	7.2	7.9
65–74 years	5,105	3.8	7.0
75 years and over	8,426	6.3	10.7
<b>Sex</b>			
Male	68,558	51.4	52.5
Female	64,734	48.6	47.5
<b>Indigenous status</b>			
Indigenous Australians	6,533	5.0	4.4
Other Australians	123,606	95.0	95.6
<b>Total</b>	<b>133,403</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes those 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 (i.e., 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 those 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 Non-admitted Patient Emergency Department Care Database 2004–05 (AIHW 2006b).

Source: Data provided by state and territory health authorities.

In 2004–05, males made up a higher proportion of the mental health-related emergency department occasions of service than females (51.4% compared with 48.6%). This was similar to the distribution for all emergency department occasions of service (52.5% male).

Indigenous people accounted for 5.0% of the mental health-related emergency department occasions of service; this compares with 4.4% 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 A1.2). Consequently, the coverage may not include areas where the proportion of Indigenous people (compared with other Australians) may be higher than average. Therefore, these data may not be indicative of the rate of usage of emergency department services by Indigenous Australians nationally. In addition, when reporting data to the NAPEDCD, most states and territories cautioned that information on Indigenous status collected in an emergency department setting could be less accurate than the corresponding information collected on admitted patients. Furthermore, the data are also of variable quality across jurisdictions (AIHW 2006b:95–96).

## Principal diagnosis

States and territories were asked to provide the data on mental health-related occasions of services by principal diagnosis according to the 11 blocks 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 A1.1.

In 2004–05, four main principal diagnosis blocks accounted for the majority of mental health-related occasions of service. These were *Neurotic, stress-related and somatoform disorders* (F40–F48, 28.8%), *Mental and behavioural disorders due to psychoactive substance use* (F10–F19, 20.9%), *Mood (affective) disorders* (F30–F39, 18.9%) and *Schizophrenia, schizotypal and delusional disorders* (F20–F29, 16.9%). To varying degrees, these four diagnoses blocks were the largest contributors to the mental health-related emergency department occasions of service in all states and territories. However, the variations in the distribution of diagnoses across states and territories should be interpreted carefully, 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.

### **Triage category**

'Triage category' is recorded according to the urgency of the patient's need for medical and nursing care, as 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. They may or may not actually receive care within that time, however.

In 2004–05, 6.1% of mental health-related occasions of service in emergency departments were considered 'non-urgent' (requiring care within 120 minutes), 37.7% were recorded as 'semi-urgent' (within 60 minutes) and 44.8% as 'urgent' (within 30 minutes). A further 10.7% were classified as 'emergency' (requiring care within 10 minutes) and 0.7% as 'resuscitation' (within seconds) (Table 3.3). Mental health-related occasions of service were more likely than all emergency department occasions of service to be assessed as 'urgent' (44.8% and 30.7%, respectively) and as 'emergency' (10.7% and 7.9%, respectively) (AIHW 2006b). The proportion of all emergency department occasions of service assessed as 'resuscitation' (that is, requiring care within seconds) was similar for both (0.7% for mental health-related occasions of service and 0.8% for all emergency department occasions of service).

**Table 3.2: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by principal diagnosis, states and territories, 2004–05**

<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</b>
F00–F09: Organic, including symptomatic, mental disorders	1,324	1,181	724	1,016	767	194	63	80	5,349	4.0
F10–F19: Mental and behavioural disorders due to psychoactive substance use	9,343	6,973	4,229	2,379	2,781	794	483	859	27,841	20.9
F20–F29: Schizophrenia, schizotypal and delusional disorders	9,434	4,367	3,001	1,059	2,718	1,007	393	524	22,503	16.9
F30–F39: Mood (affective) disorders	9,039	5,990	4,265	1,524	2,640	1,013	412	350	25,233	18.9
F40–F48: Neurotic, stress-related and somatoform disorders	15,158	7,941	4,433	3,429	5,106	758	806	796	38,427	28.8
F50–F59: Behavioural syndromes associated with physiological disturbances and physical factors	203	129	669	47	116	25	8	11	1,208	0.9
F60–F69: Disorders of adult personality and behaviour	582	907	1,531	266	756	267	32	32	4,373	3.3
F70–F79: Mental retardation	11	6	65	0	16	1	0	1	100	0.1
F80–F89: Disorders of psychological development	55	0	76	5	10	2	1	0	149	0.1
F90–F98: Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	3,036	481	459	261	516	71	32	50	4,906	3.7
F99: Unspecified mental disorder	38	782	1,941	128	0	407	18	0	3,314	2.5
<b>Total</b>	<b>48,223</b>	<b>28,757</b>	<b>21,393</b>	<b>10,114</b>	<b>15,426</b>	<b>4,539</b>	<b>2,248</b>	<b>2,703</b>	<b>133,403</b>	<b>100.0</b>

(a) Includes those 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 (that is, 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 2004–05. 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 A1.1.

Source: Data provided by state and territory health authorities.

**Table 3.3: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by triage category, states and territories, 2004–05**

Triage categories	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Resuscitation	275	299	127	96	124	16	31	29	997
Emergency	4,775	2,579	2,251	1,191	2,228	580	358	263	14,225
Urgent	22,831	10,938	9,922	4,358	7,315	2,062	969	1,341	59,736
Semi-urgent	17,511	12,455	7,952	4,120	4,808	1,779	762	907	50,294
Non-urgent	2,830	2,486	1,140	338	951	102	128	163	8,138
<b>Total<sup>(b)</sup></b>	<b>48,223</b>	<b>28,757</b>	<b>21,393</b>	<b>10,114</b>	<b>15,426</b>	<b>4,539</b>	<b>2,248</b>	<b>2,703</b>	<b>133,403</b>

(a) Includes those 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 (that is, codes F00–F99) or the equivalent ICD-9-CM codes.

(b) The numbers 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.

## Departure status

In 2004–05, the departure status for over half of the mental health-related emergency department occasions of service was recorded as 'completed'; that is, 58.8% of these occasions of service were completed without admission or referral to another hospital (Table 3.4). Just over one-third (33.9%) of mental health-related occasions of service were closed with the patient being admitted to the hospital to which they presented, and for a further 4.3% the patient was referred to another hospital. This is slightly higher than for all emergency department occasions of service, with 27.2% of those ending in admission and 1.7% being referred (AIHW 2006b:110).

**Table 3.4: Mental health-related emergency department occasions of service<sup>(a)</sup> in public hospitals, by departure status, states and territories, 2004–05**

Departure status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Admitted to this hospital <sup>(b)</sup>	19,743	6,071	5,635	3,142	5,096	2,366	561	906	43,520
Non-admitted patient ED occasion of service completed <sup>(c)</sup>	24,646	20,778	10,805	6,115	7,701	2,063	1,590	1,714	75,412
Referred to another hospital for admission	2,220	1,188	273	569	1,147	54	43	5	5,499
Did not wait to be attended by a health care professional	211	0	869	36	46	13	25	11	1,211
Left at own risk <sup>(d)</sup>	1,095	717	306	192	121	37	29	67	2,564
Not reported <sup>(e)</sup>	308	3	3,505	60	1,315	6	0	0	5,197
<b>Total</b>	<b>48,223</b>	<b>28,757</b>	<b>21,393</b>	<b>10,114</b>	<b>15,426</b>	<b>4,539</b>	<b>2,248</b>	<b>2,703</b>	<b>133,403</b>

(a) Includes those 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 (that is, 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 9 occasions of service with a departure status of 'Died in ED as a non-admitted patient' and 1 occasion of service with a departure status of 'Dead on arrival, not treated in ED'.

Note: ED—Emergency Department.

Source: Data provided by state and territory health authorities.