

## Admitted patient mental health-related care

People with mental health problems may require hospitalisation from time to time. Patients can receive [specialised psychiatric care](#) in a psychiatric hospital or in a psychiatric unit within a hospital. Patients can also be admitted to a general ward in a hospital where staff are not specifically trained to care for the mentally ill. Under this circumstance, the admission is classified as [without specialised psychiatric care](#).

This section presents information on these non-ambulatory [admitted patient mental health-related separations](#). The data are from the National Hospital Morbidity Database (NHMD), a collation of data on admitted patient care in Australian hospitals. Please note, as it is not possible to determine how many separations an individual patient has had, the information in this section is presented as separation events, not patients. For further information on the data see the [data source](#) section.

### Key points

- Of the 222,567 non-ambulatory admitted patient mental health-related separations, specialised psychiatric care was provided for over half (59%) in 2009–10.
- Around 31% of mental health-related separations with specialised psychiatric care were from involuntary admissions.
- The largest numbers and highest rates of mental health-related separations with specialised psychiatric care were for patients aged 35–44 years.
- Depressive episode (F32) and schizophrenia (F20) were the most commonly reported principal diagnoses for separations with specialised psychiatric care (18% and 16% respectively).
- Mental health-related separations without specialised psychiatric care were predominantly provided by public acute hospitals (90%).
- Mental and behavioural disorders due to use of alcohol (F10) was the most commonly reported principal diagnosis for separations without specialised psychiatric care (20%).

### Overview

A total of 8,531,003 separations were reported from public acute, private acute and public psychiatric hospitals in 2009–10 (AIHW 2011). Approximately 4.3% (364,814) of these separations were mental health-related, comprising both ambulatory-equivalent and non-ambulatory admitted patient separations. There were 222,567 non-ambulatory admitted patient mental health-related separations reported in 2009–10, accounting for 2.6% of all hospital separations and 61.0% of all mental health-related separations. Over the 5 years to 2009–10, the average annual rate of increase for all non-ambulatory admitted mental health-related separations was 2.2%. Of the 222,567 non-ambulatory equivalent admitted mental health-related separations reported in 2009–10, 130,192 separations occurred with specialised care and 92,375 occurred without specialised care.

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### Reference

[AIHW 2011](#). Australian hospital statistics 2009–10. Health services series no. 40. Cat. no. HSE 107. Canberra: AIHW.

# Specialised admitted patient mental health care by states and territories

For public acute hospitals, compared with the national rate of 3.6 separations per 1,000 population, Queensland had the highest rate of separations with specialised psychiatric care (4.5) and Victoria the lowest (3.4). Nationally, there were 61.8 public acute hospital *patient days* per 1,000 population. Queensland had the highest number of public acute hospital patient days (66.1 per 1,000 population) and the Northern Territory the lowest (41.1).

The rate of public psychiatric hospital patient days per 1,000 population varied greatly across jurisdictions, from 10.9 days in Victoria to 88.4 days in Tasmania. Victoria reported the highest rate of patient days in private hospitals (40.2 per 1,000 population).

The *average length of stay* in public psychiatric hospitals varied across jurisdictions, from 11.7 days in the Northern Territory to 18.5 days in Western Australia (Figure 7.1)

**Figure 7.1: Average length of stay for admitted patient mental health-related separations with specialised psychiatric care in public acute hospitals, by states and territories, 2009–10**



*Notes:*

Separations with a care type of *Newborn* (without qualified days) and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

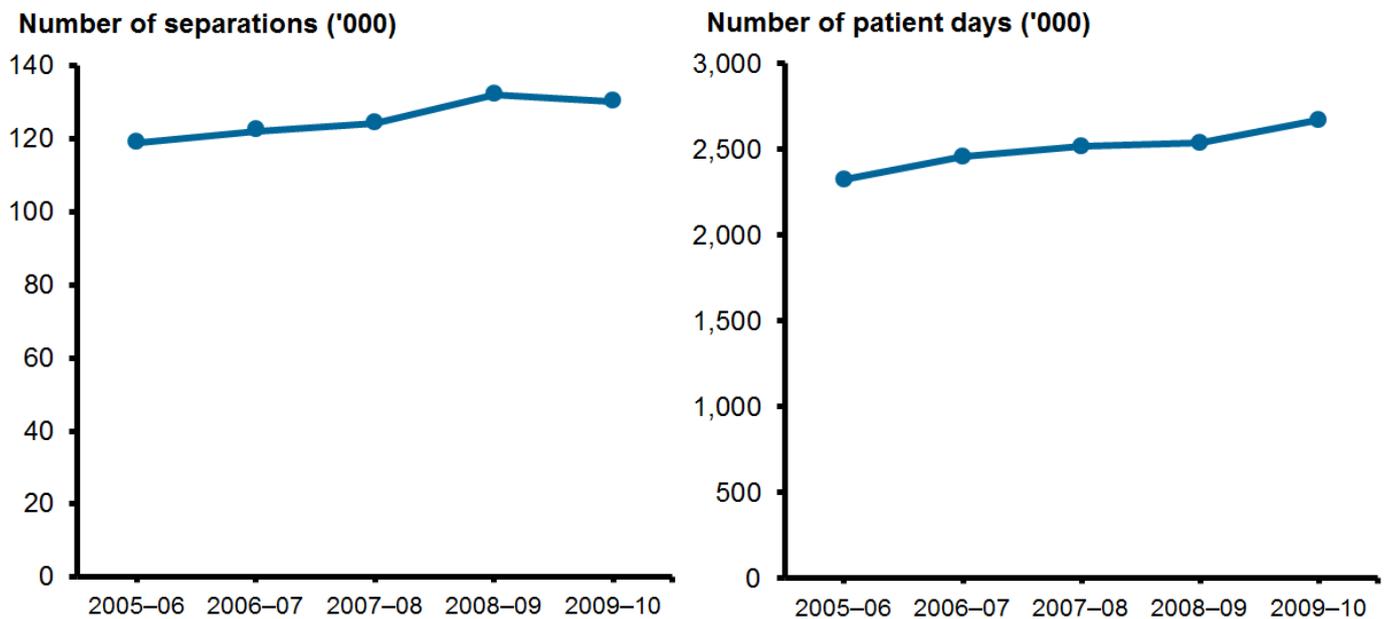
Tasmania moved to a new state-wide public hospital patient information system which involved changes to reporting processes and tools. As a result, for the 2009–10 data, all separations and patient days were reported as occurring without specialised psychiatric care for public acute hospitals.

Source: National Hospital Morbidity Database

## Specialised admitted patient mental health care over time

The number of mental health-related separations with specialised psychiatric care increased by an average annual rate of 2.3% between 2005–06 and 2009–10. However, the rate of mental health-related separations with specialised psychiatric care remained relatively stable over this period, with an annual average increase of 0.4%. The number of mental health-related patient days with specialised psychiatric care increased by an average annual rate of 3.5% between 2005–06 and 2009–10 (Figure 7.2).

**Figure 7.2: Admitted patient mental health-related separations and patient days with specialised psychiatric care, 2005–06 to 2009–10**



*Note:* Separations with a care type of *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

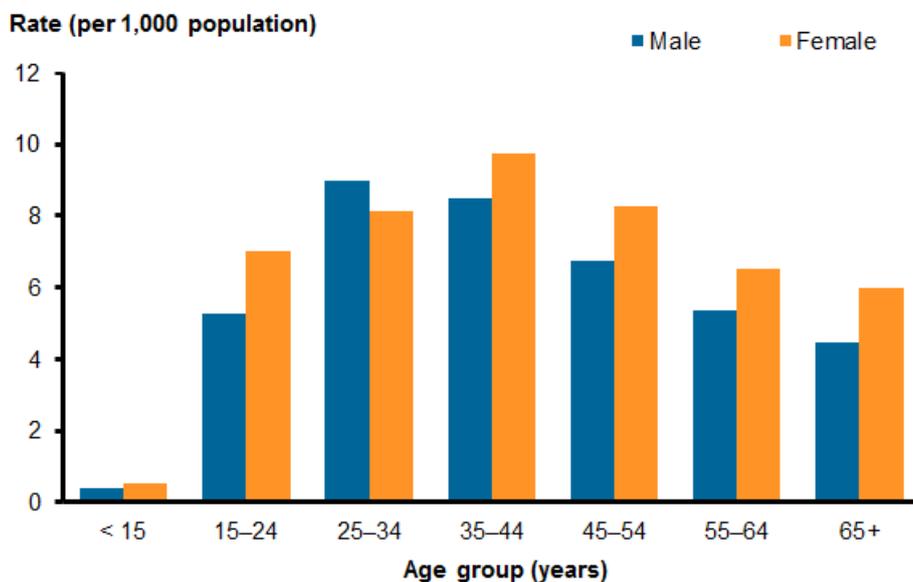
*Source:* National Hospital Morbidity Database

# Specialised admitted patient mental health care patient characteristics

## Patient demographics

The largest number and highest rate of separations were for patients aged 35–44 (28,781 and 9.1 per 1,000 population respectively) (Figure 7.3). The lowest proportion of separations was for patients aged less than 15 (1.5%). The separation rate was higher for females than males (6.3 and 5.4 per 1,000 population respectively).

**Figure 7.3: Admitted patient separation with specialised psychiatric care rates, by sex and age groups, 2009–10**



*Note:* Separations with a care type of *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

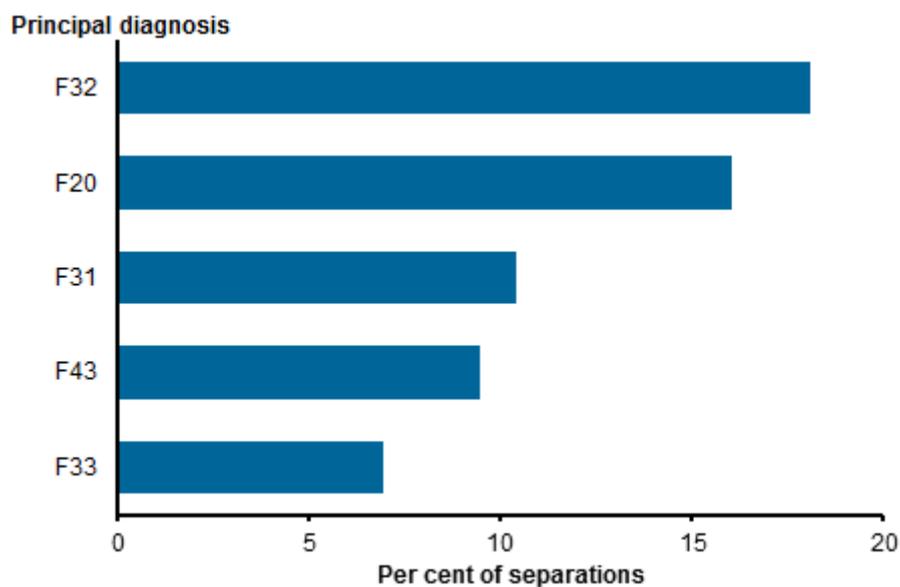
*Source:* National Hospital Morbidity Database

More than half of the separations (51.8%) involved those with a marital status of never married. A further 30.8% of separations involved those who were married (including de facto). Those living in major cities had the highest rate of separations (6.3 per 1,000 population) compared to other remoteness areas. Indigenous Australians made up only 4.0% of separations, but had a separation rate nearly double that of Other Australians (10.6 and 5.9 per 1,000 population respectively).

## Principal diagnosis

The most frequently reported principal diagnoses among separations with specialised psychiatric care were depressive episode (F32) (18.1%), followed by schizophrenia (F20) (16.1%) and bipolar affective disorders (10.4%), in 2009–10 (Figure 7.4).

**Figure 7.4: Admitted patient separations with specialised psychiatric care by the five most commonly reported principal diagnoses, 2009–10**



*Key*

- F32 Depressive episode
- F20 Schizophrenia
- F31 Bipolar affective disorders
- F43 Reaction to severe stress and adjustment disorders
- F33 Recurrent depressive disorders

*Note:* Separations with a care type of *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

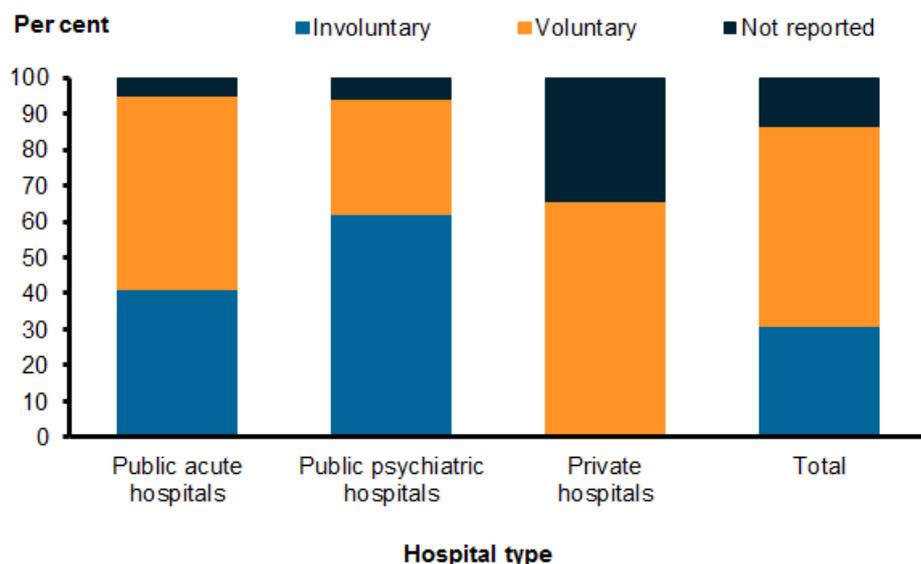
*Source:* National Hospital Morbidity Database

# Specialised admitted patient mental health care separation characteristics

## Mental health legal status

Of all separations with specialised psychiatric care in 2009–10, 30.8% were for patients who had an involuntary admission, with the majority of these reported by public acute hospitals (33,139 of 40,054). Involuntary admitted patient separations comprised 61.9% of public psychiatric hospitals separations, while only 0.3% of private hospital separations were from involuntary admissions (Figure 7.5).

**Figure 7.5: Admitted patient separations with specialised psychiatric care, by mental health legal status and hospital type, 2009–10**



*Note:* Separations with a care type of *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

*Source:* National Hospital Morbidity Database

## Procedures

Around 41% of all mental-health related separations did not have an intervention or procedure recorded. It is likely that the interventions (procedures) provided to admitted patients during these mental health-related separations were not able to be coded using the existing procedure classification system. The administration of mental health-related medications, for example, are not explicitly included in the classification system.

From the data available, a commonly reported intervention (procedure) for all mental health-related separations was an allied health service intervention, including services provided by social workers and occupational therapists. A common procedure for separations with specialised care was non-emergency general anaesthesia. This was most likely associated with the administration of electroconvulsive therapy, a form of treatment for depression—a commonly reported principal diagnosis.

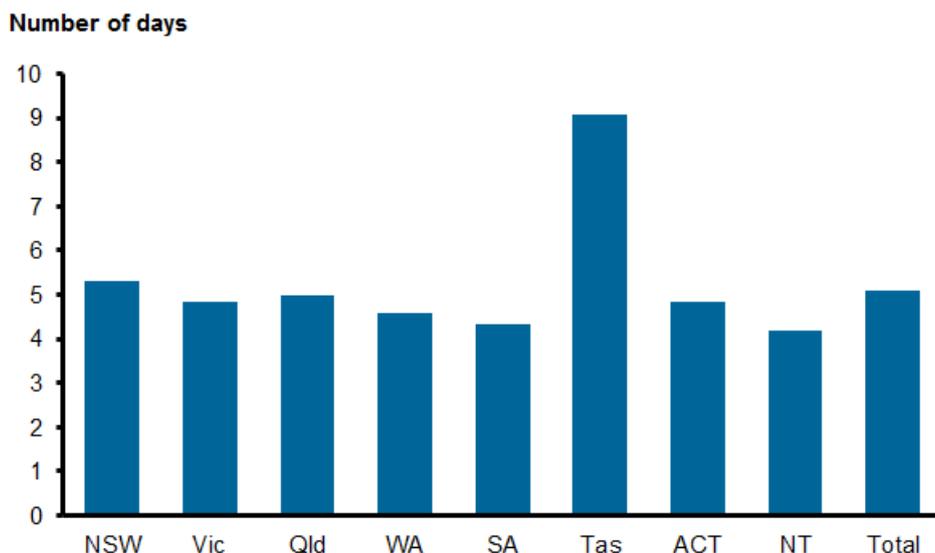
## Non-specialised admitted patient mental health care by states and territories

Mental health-related separations without specialised psychiatric care were predominantly provided by public acute hospitals (89.6% of 92,375) in 2009–10. There were 3.7 public acute hospital separations per 1,000 population reported nationally, with Tasmania reporting the highest rate (6.7) and the Australian Capital Territory the lowest (2.3). Nationally, there were 18.5 per 1,000 population public acute hospital patient days without specialised psychiatric care. Tasmania had the highest rate of public acute hospital patient days without specialised psychiatric care (61.0 per 1,000 population) and the Australian Capital Territory the lowest (11.7).

The average length of stay in public psychiatric hospitals varied across jurisdictions, from 9.1 days in Tasmania to 4.2 days the Northern Territory, compared to the national average of 5.1 days (Figure 7.6).

It is important to note that the numbers for Tasmania are inflated due to a state-wide change in reporting process and tools which resulted in all separations for public acute psychiatric hospitals being recorded as without specialised psychiatric care.

**Figure 7.6: Average length of stay for public psychiatric hospital admitted patient mental health-related separations without specialised psychiatric care, states and territories, 2009–10**



*Notes:*

Separations with a care type of *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

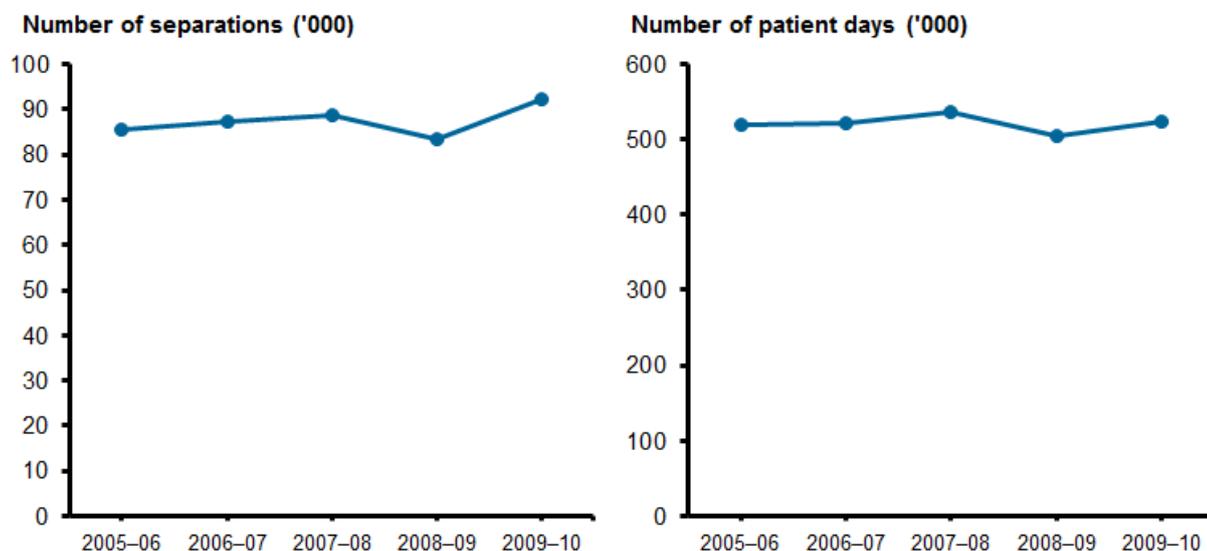
Tasmania moved to a new state-wide public hospital patient information system which involved changes to reporting processes and tools. As a result, for the 2009–10 data, all separations and patient days were reported as occurring without specialised psychiatric care for public acute hospitals.

Source: National Hospital Morbidity Database

## Non-specialised admitted patient mental health care over time

The number of mental health-related separations without specialised psychiatric care increased by an average annual rate of 2.0% between 2005–06 and 2009–10. However, the rate per 1,000 population remained relatively stable over this period, with an annual average decrease of 0.4%. Mental health-related patient days without specialised psychiatric care has remained relatively stable between 2005–06 and 2009–10, increasing by an average annual rate of 0.2% (Figure 7.7).

**Figure 7.7: Admitted patient mental health-related separations and patient days without specialised psychiatric care, 2005–06 to 2009–10**



*Note:* Separations with a care type of *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

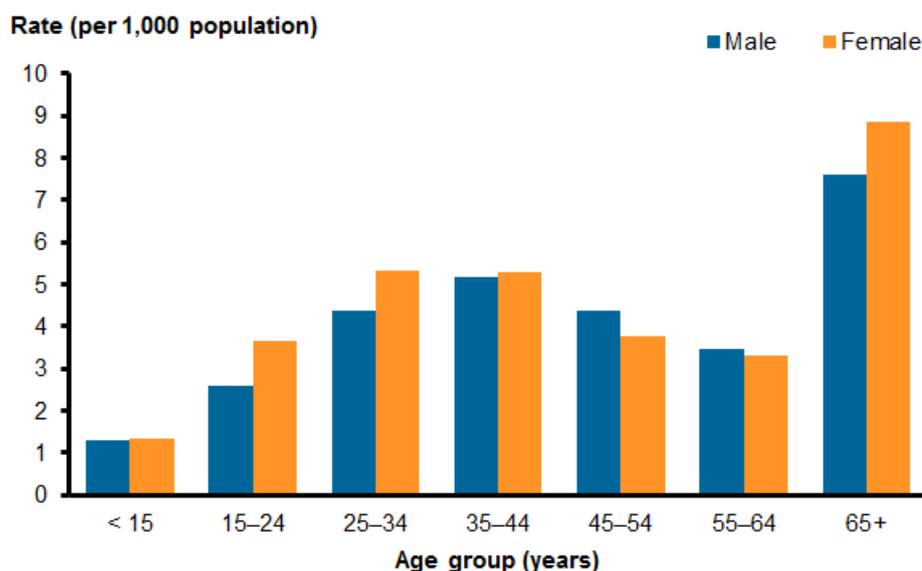
*Source:* National Hospital Morbidity Database

# Non-specialised admitted patient mental health care patient characteristics

## Patient demographics

The 65 and over age group had the highest rate of separations at 8.3 per 1,000 population in 2009–10. There was minimal difference between the rate of male and female separations per 1,000 population (4.0 and 4.2 respectively) (Figure 7.8).

**Figure 7.8: Admitted patient separation rates without specialised psychiatric care, by sex and age group, 2009–10**



*Note:* Separations with a care type of *Newborn* (without qualified days), and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

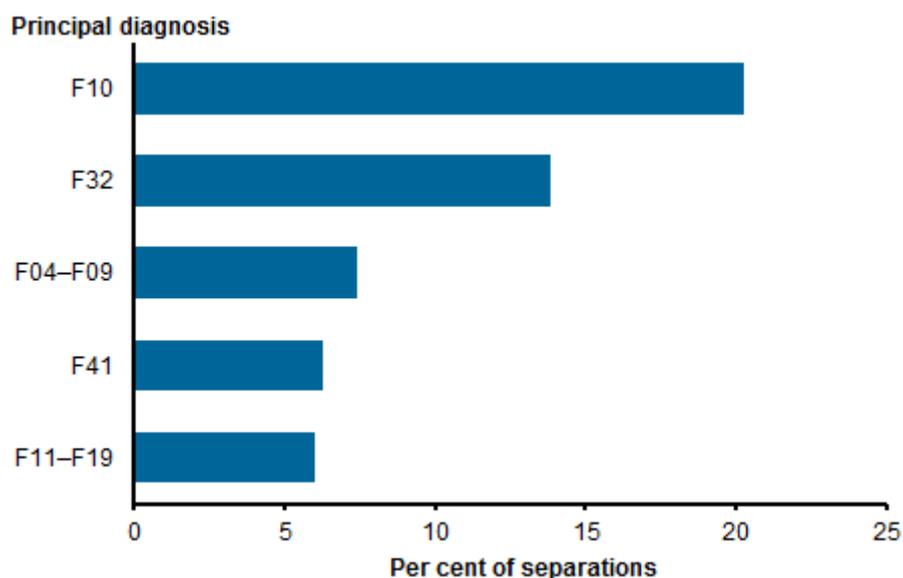
*Source:* National Hospital Morbidity Database

The majority of mental health-related separations without specialised psychiatric care were for patients living in major cities (59.5%). However, the highest rate of separations per 1,000 population was for patients in remote areas (8.0 per 1,000 population). The rate of separations involving Australian-born people was nearly double that of those born overseas (4.6 and 2.5 per 1,000 population respectively). Indigenous Australians accounted for only 6.7% of separations, yet reported a separation rate of 13.5 per 1,000 population (compared to 3.9 per 1,000 experienced by Other Australians).

## Principal diagnosis

In 2009–10, the principal diagnosis of mental and behavioural disorders due to use of alcohol (F10) accounted for the largest number of separations (18,704 or 20.2%), followed by depressive episode (F32, 12,803 or 13.9%) (Figure 7.9).

**Figure 7.9: Admitted patient separations without specialised psychiatric care by the five most commonly reported principal diagnoses, 2009–10**



### Key

- F10 Mental and behavioural disorders due to use of alcohol
- F32 Depressive episode
- F04–09 Other organic mental disorders
- F41 Other Anxiety disorders
- F11–19 Mental and behavioural disorders due to other psychoactive substance use

*Note:* Separations with a care type of *Newborn* (without qualified days) and records for *Hospital boarders* and *Posthumous organ procurement* have been excluded.

*Source:* National Hospital Morbidity Database

## Non-specialised admitted patient mental health care separation characteristics

### Procedures

A total of 123,017 procedures were reported in relation to 54,239 mental health-related separations without specialised psychiatric care, where at least one procedure was reported, in 2009–10. No procedures were reported for 41.3% (38,136 of 92,375) of separations without specialised psychiatric care. The most frequently reported procedure was allied health intervention, social work (12.2% of procedures), followed by allied health intervention, physiotherapy (9.8%).

## Data source

### National Hospital Morbidity Database

The National Hospital Morbidity Database (NHMD) is a compilation of electronic summary separation records from admitted patient morbidity data collections in Australian hospitals. It includes demographic, administrative and length of stay data for each hospital separation. Clinical information such as diagnoses, procedures undergone, and external causes of injury and poisoning are also recorded.

The 2009–10 collection contains data for hospital separations that occurred between 1 July 2009 and 30 June 2010. Admitted patient stays that began before 1 July 2009 are included if the separation date fell within the collection period (2009–10). A record is generated for each separation rather than each patient. Therefore, patients who separated more than once in the reference year have more than one record in the database.

Data relating to admitted patients in almost all hospitals are included. The coverage is described in greater detail in *Australian hospital statistics 2009–10* (AIHW 2011).

Specialised mental health care is identified by the patient having one or more psychiatric care days recorded—that is, care was received in a specialised psychiatric unit or ward. In acute care hospitals, a 'specialised' episode of care or separation may comprise some psychiatric care days and some days in general care. An episode of care from a public psychiatric hospital is deemed to comprise psychiatric care days only and to be 'specialised', unless some care was given in a unit other than a psychiatric unit, such as a drug and alcohol unit.

In interpreting the NHMD data presented in this report, note that mental health care for admitted patients in Australia is provided in a large and complex system, and there are state and territory differences in the scope of services provided for admitted patients. Differences in the data presented by jurisdictions may reflect different service delivery practices, differences in admission practices or differences in the types of establishments categorised as hospitals. Interpretation of the differences between jurisdictions therefore needs to be done with care.

The scope of the data collection and the definitions used by the data providers may vary from year to year. Consequently, caution should be exercised when making comparisons between reporting years.

Tasmania moved to a new state wide public hospital patient information system in 2009–10 which involved changes to reporting processes and tools. As a result, for the 2009–10 data, all separations and patient days were reported as occurring without specialised psychiatric care for public acute hospitals.

Principal diagnosis refers to the diagnosis established after observation by medical staff to be chiefly responsible for the patient's episode of admitted patient care. Diagnoses are classified according to the *International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification* (ICD-10-AM). Further information on this is included in the online [technical information](#) section.

Procedures are classified according to the *Australian Classification of Health Interventions, 5th edition*. Further information on this classification is included in the online [technical information](#) section. More than one procedure can be reported for a separation and not all separations have a procedure reported.

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### Reference

AIHW 2011. Australian hospital statistics 2009–10. Health services series no. 40. Cat. no. HSE 107. Canberra: AIHW.

## Key Concepts

### Admitted patient mental health-related care

Key Concept	Description
<b>Admitted patient</b>	An <b>admitted patient</b> is a patient who undergoes a hospital's formal admission process, completes an episode of care and 'separates' from the hospital.
<b>Average length of stay</b>	<b>Average length of stay</b> is the average number of patient days for admitted patient separations.
<b>Mental health related</b>	A separation is classified as <b>mental health related</b> for the purposes of this report if: <ul style="list-style-type: none"><li>• it had a mental health related principal diagnosis, which, for admitted patient care in this report, is defined as a principal diagnosis that is either:<ul style="list-style-type: none"><li>○ a diagnosis that falls within the section on Mental and behavioural disorders (Chapter 5) in the International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM) (codes F00–F99), or</li><li>○ a number of other selected diagnoses (see the online <a href="#">technical information</a> for a full list of applicable diagnoses), and/or</li></ul></li><li>• it included any specialised psychiatric care.</li></ul>
<b>Patient day</b>	<b>Patient day</b> means the occupancy of a hospital bed (or chair in the case of some same day patients) by an admitted patient for all or part of a day. The patient day data (and psychiatric care day data) measure hospital activity in a way that is not as affected by variation in length of stay as separations data. The day data are proportional to the length of stay whereas separations data have the same value whatever the length of stay. The patient day data presented in this report include days within hospital stays that occurred before 1 July provided that the separation from hospital occurred during the relevant reporting period (that is, the financial year period). This has little or no impact in private and public acute hospitals, where separations are relatively brief, throughput is relatively high and the patient days that occurred in the previous year are expected to be approximately balanced by the patient days not included in the counts because they are associated with patients yet to separate from the hospital and therefore yet to be reported. However, some public psychiatric hospitals provide very long stays for small numbers of patients and, as a result, would have comparatively large numbers of patient days recorded that occurred before the relevant reporting period and may not be balanced by patient days associated with patients yet to separate from the hospital.
<b>Psychiatric care days</b>	<b>Psychiatric care days</b> are the number of days or part days the person received care as an admitted patient in a designated psychiatric unit or ward.

**Separation** *Separation* refers to an episode of care for an admitted patient, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute to rehabilitation). Separation also means the process by which an admitted patient completes an episode of care by being discharged, dying, transferring to another hospital or changing type of care. Separation data provide information on the number of hospital stays completed in a designated period, typically a financial year. These data can be used as a measure of hospital activity, but can represent quite different types of activity. That is, some separations will occur after same day stays in hospital, some for stays of a few days, while others can be for stays of months or, rarely, years. Thus, the separation data do not allow accurate comparison of hospitals that tend to provide for longer stays and report fewer separations (for example, public psychiatric hospitals) with hospitals that concentrate on providing numerous short stays (for example, acute care hospitals).

**Specialised psychiatric care** A separation is classified as having **specialised psychiatric care** if the patient was reported as having one or more days in a specialised psychiatric unit or ward.

**Without specialised psychiatric care** A separation is classified as **without specialised psychiatric care** if the patient did not receive any days of care in a specialised psychiatric unit or ward. Despite this, these separations are classified as mental health related because the reported principal diagnosis for the separation is either one that falls within the Mental and behavioural disorders chapter (Chapter 5) in the ICD-10-AM classification (codes F00–F99) or is one of a number of other selected diagnoses (see the [online technical information](#)).