Overnight admitted mental health-related care

Some people's mental health care needs may require care in a hospital setting such as a hospital ward, an emergency department or an outpatient clinic. A patient may be admitted to the hospital just for the day, a single overnight stay, or for a number of days. Care that lasts more than one day is referred to as overnight admitted patient care.

When admitted to a hospital, patients can receive specialised psychiatric care in a psychiatric hospital or in a hospital's psychiatric unit. Patients with mental illness may also be admitted overnight to other areas of the hospital where health care workers may not be specifically trained to care for the mentally ill, such as a drug and alcohol treatment unit. These overnight admissions are classified as being without specialised psychiatric care.

This section presents information on overnight admitted patient mental health-related separations from Australian hospitals. Data are sourced from the National Hospital Morbidity Database (NHMD); a collation of data on admitted patient care in Australian hospitals defined by the Admitted Patient Care National Minimum Data Set (APC NMDS). It is possible for patients to have multiple separations in any given reference period. Further information can be found in the data source section. The statistical measures presented are derived based on episodes of care that ended within a collection period.

Data downloads:

Excel - Overnight admitted mental health-related care 2018–19 tables (259KBXLSX)

PDF - Overnight admitted mental health-related care 2018–19 section (xxxKB)

Link – Interactive figures

Link – Data source and key concepts

Data coverage includes the time period 2006–07 to 2018–19. This section was last updated in November 2020.

Key points

- **271,040** overnight admitted mental health-related hospital separations occurred in 2018–19, of which **63.2**% included specialised psychiatric care.

- *Depressive episode* (**15.7**%) and *Schizophrenia* (**13.6**%) were the most common diagnoses for overnight mental health-related separations with specialised psychiatric care.
- Aboriginal and Torres Strait Islander people rates[1] of overnight mental health-related separations with and without specialised care were about 141 and 87 per 10,000 population respectively, which are respectively **2.2** and **2.3** times the rates for other patients.
- Over the past decade, the population rate of overnight mental health-related hospital separations increased by **2.1**% per year on average.
- For females aged 12–17, the population rate of overnight separations with specialised care has more than **doubled** between 2006–07 (37.3) and 2018–19 (78.2).
- For those aged 85+, the population rate of overnight mental health-related separations without specialised care has increased by **82.4**%, from 2006–07 to 2018–19.
- For 12–17 year old females, the population rate of overnight mental health-related separations with specialised psychiatric care has consistently been about **2 to 3 times** the rate for males, throughout 2006–07 to 2018–19.

There were almost 4.5 million overnight hospital separations in 2018–19, across the public and private hospital sectors. Of these 271,040 were mental health-related, representing about 1 in 16 (6.1%) of all overnight hospital separations. Almost two thirds of overnight mental health-related separations involved specialised psychiatric care (171,286 or 63.2%). Over 3 in 4 overnight mental health-related separations occurred in public hospitals (78.4%).

Long term trends show steady increases in the population rates of overnight mental health-related separations and patient days, both with and without specialised psychiatric care. Detailed information is presented in the MS Excel tables and interactive charts.

Specialised overnight admitted patient mental health care

Service provision

Specialised overnight admitted patient mental health care (also referred to as specialised psychiatric care) takes place within a designated psychiatric ward/unit, which

[1] Age standardised

is staffed by health professionals with specialist mental health qualifications or training and have as their principal function the treatment and care of patients affected by mental illness.

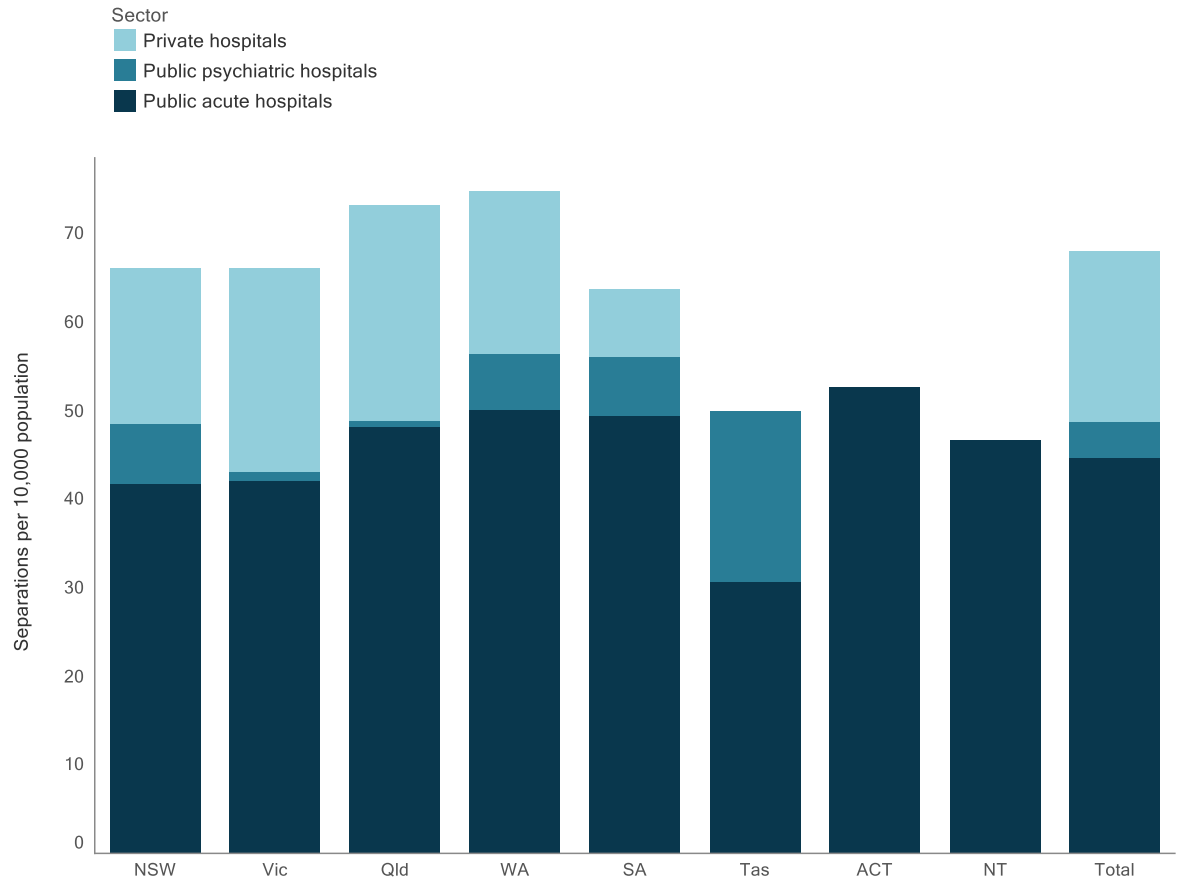
States and territories

In 2018–19, there were 171,286 overnight admitted mental health-related separations with specialised psychiatric care; equivalent to a national rate of 68.0 per 10,000 population.

For all states and territories, the rate of overnight mental health-related separations with specialised psychiatric care was higher for public acute hospitals than other hospital types (public psychiatric hospitals and private hospitals). The Australian Capital Territory had the highest rate of public acute hospital separations with specialised psychiatric care (52.7 per 10,000 population) and Tasmania the lowest (30.7) (Figure ON.1).

For public acute hospitals, there were 674.8 patient days per 10,000 population for overnight mental health-related separations with specialised psychiatric care in 2018–19. The Australian Capital Territory had the highest rate of public acute hospital patient days (991.6 per 10,000 population respectively) which was much higher than the second highest rate of 738.6 for New South Wales. Tasmania recorded the lowest rate of patient days per 10,000 population (472.0). For states with public psychiatric hospitals, the rates ranged from a high of 641.1 patient days per 10,000 population in Tasmania to a low of 106.9 in Queensland. Among jurisdictions for which private hospital figures are published, Queensland reported the highest rate of patient days (500.8 per 10,000 population), while South Australia reported the lowest rate (126.5).

Figure ON.1: Overnight mental health-related separations with specialised psychiatric care, state and territory, by hospital type, 2018–19



Notes:
1. The Australian Capital Territory and Northern Territory do not have any public psychiatric hospitals.
2. Private hospital figures for Tasmania, the Australian Capital Territory and the Northern Territory are not published for confidentiality reasons.
Source: National Hospital Morbidity Database; Table ON.4.

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In 2018–19, the national average length of stay for overnight mental health-related separations in *public acute hospitals* was 15.1 days, which is consistent with 2017–18 figures (15.0 days). Please refer to the data source for information on patient day fluctuations over time. The Australian Capital Territory had the longest average length of stay (18.8 days) and the Northern Territory had the shortest (12.6 days). The average length of stay in *public psychiatric hospitals* ranged from 24.8 days in South Australia to 204.5 days in Queensland.

In 2018–19, the most common mode of separation for overnight mental health-related separations in both public (84.1%) and private (94.5%) hospitals was discharge to 'home', which includes discharge to usual residence/own accommodation/welfare institution (including prisons, hostels and group homes providing primarily welfare services).

Most of the remaining separations were either transfers to other facilities (an (other) acute hospital, residential aged care facility, an (other) psychiatric hospital, or other health accommodation) (10.8% from public hospitals and 2.9% from private) or statistical discharges (changes in care type, or discharges from leave) (2.6% for public and 0.3% for private). For jurisdictions, the proportion of discharges from public hospitals to 'home' ranged from 87.8% in the Australian Capital Territory to 78.6% in South Australia.

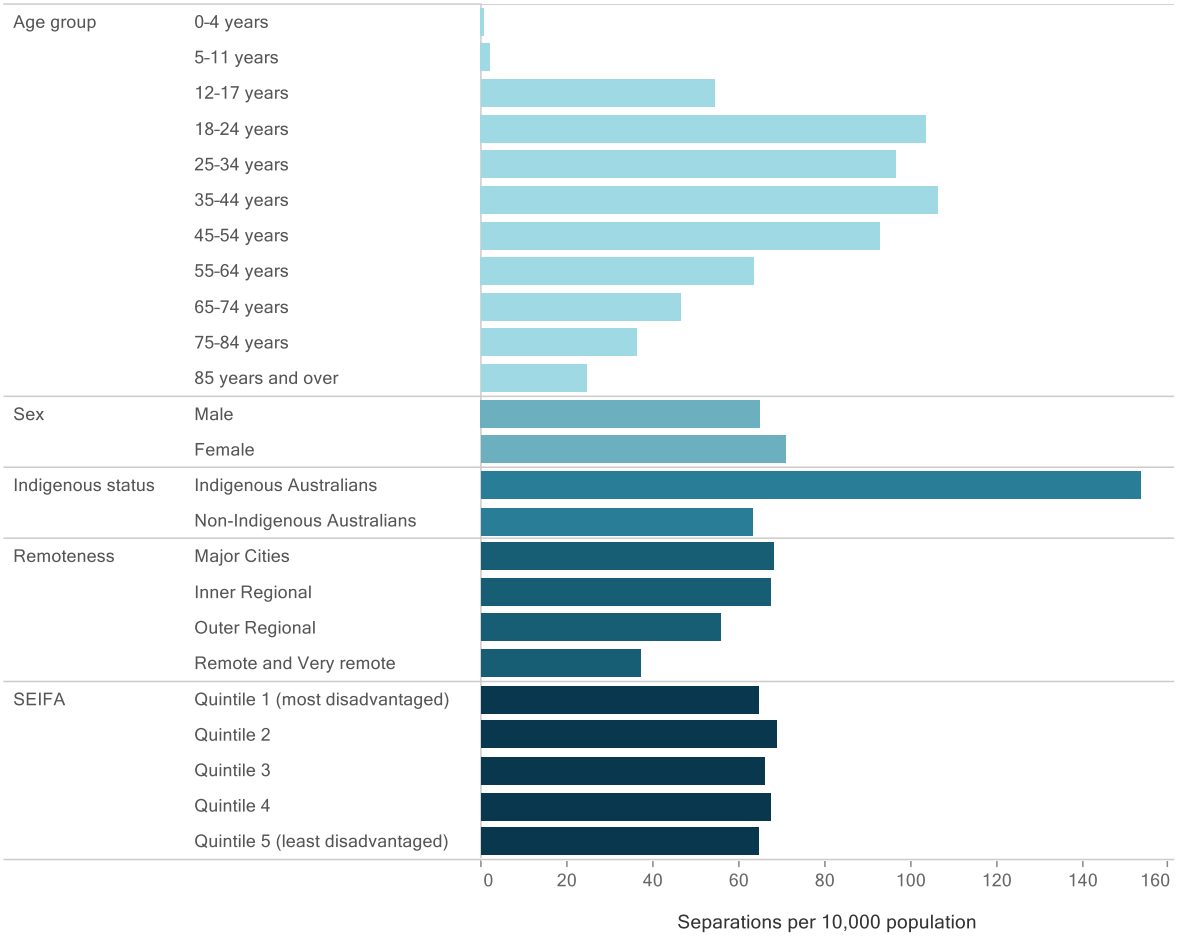
Note that information on the place to which a patient was discharged or transferred may not be available for some separations.

Patient characteristics

Patient demographics

In 2018–19, the rate of overnight mental health-related separations with specialised psychiatric care was highest for patients aged 35–44 years and 18–24 years (106.6 and 103.7 per 10,000 population respectively) and lowest for those aged 0-4 years and 5–11 years (0.6 and 2.2 per 10,000 population respectively) (Figure ON.2). Overall, the separation rate was higher for females than males (70.8 and 65.2 per 10,000 population respectively), but there is variation across individual age groups.

Figure ON.2: Overnight mental health-related separations with specialised psychiatric care, by demographic variable, 2018–19



Note: Age-standardised rate is shown for Indigenous status.
Source: National Hospital Morbidity Database; Table ON.5.

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There were 11,704 overnight mental health-related separations with specialised psychiatric care for Aboriginal and Torres Strait Islander people in 2018–19, or 140.9 per 10,000 population, which is 2.2 times higher than the rate of 64.3 per 10,000 population for other patients. Rates standardised on the 2001 age profile were 153.6 and 63.4 per 10,000 population respectively, so the standardised rate for Indigenous people was 2.4 times that of other patients. Patients living in *Major Cities* and *Inner regional* areas had the highest rates of overnight mental health-related separations with specialised psychiatric care in 2018–19 (68.0 and 67.5 per 10,000 population respectively), whilst those living in *Remote and Very remote* areas had the lowest (37.2).

Changes over time

The rate of overall overnight mental health-related separations with specialised psychiatric care per 10,000 population has been steadily increasing in the past decade with an average annual increase of 4.1% between 2008–09 and 2018–19, and an increase of 4.5% in the 5 years from 2014–15 and 2018–19.

Separation rates for people aged 12–17 years have increased substantially during the time period examined. In 2018–19 the separation rates for males and females in this age range were 32.1 and 78.2 per 10,000 population respectively, which are 75.4% and 109.7% increases on 2006–07 rates.

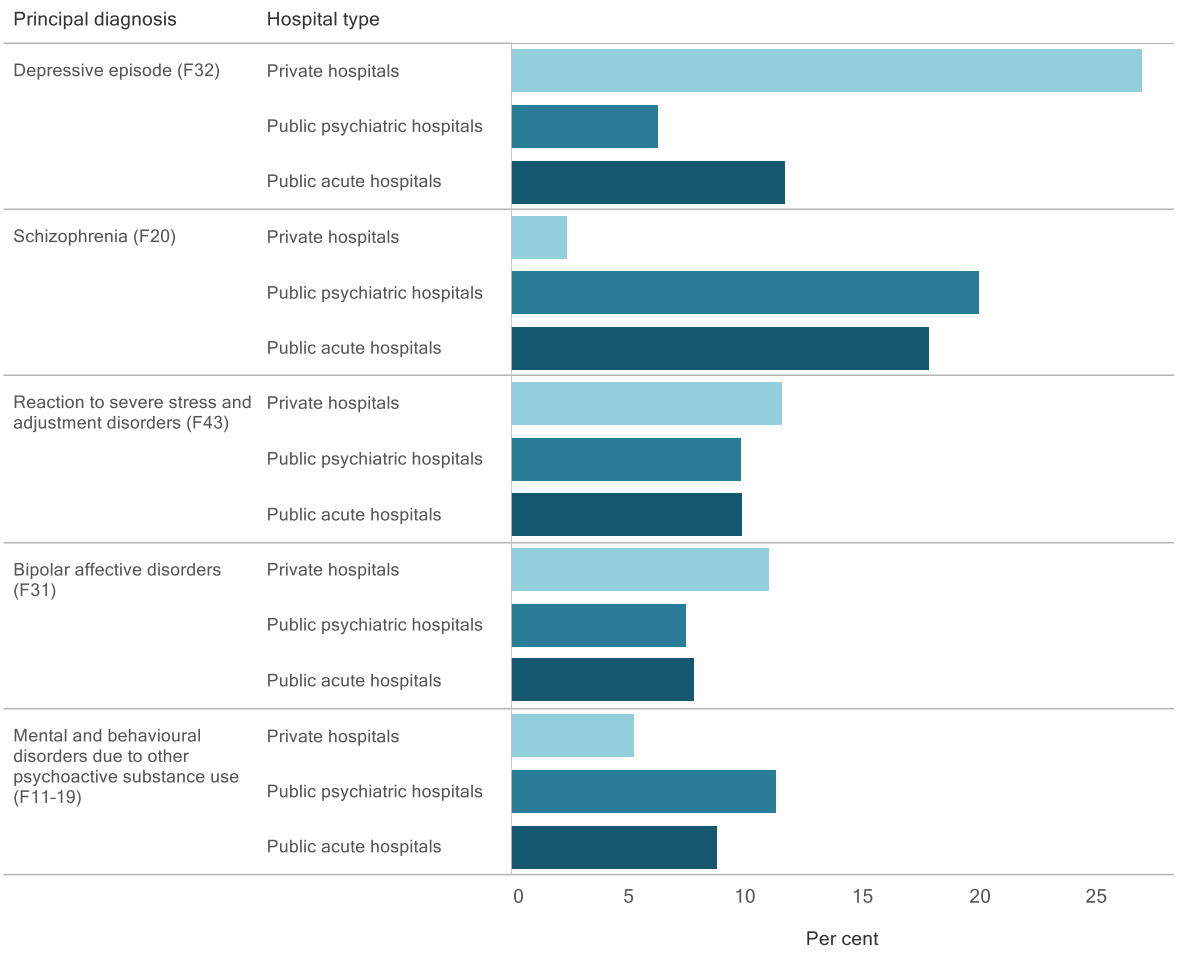
For male and female populations aged 18–24 years, the separations per 10,000 population have increased 23.6% and 65.9% respectively since 2006–07, and the female separation rate is 1.3 times the male separation rate in 2018-19. The pattern is different for those aged 35–44 years. The 2018–19 male and female separation rates for 35-44 year olds were 113.1 and 100.1 per 10,000 population respectively, which are 36.9% and 23.6% higher than 2006–07 rates (82.6 and 81.0 per 10,000 population respectively). In recent years, the rate for males has been 13% to 15% higher rate than the female rate in this age group.

Principal diagnosis

The most frequently reported principal diagnoses in 2018–19 for an overnight mental health-related separation with specialised psychiatric care were *Depressive episode* (ICD-10-AM code: F32) (15.7%) followed by *Schizophrenia* (F20) (13.6%), and *Reaction to severe stress and adjustment disorders* (F43) (10.3%).

The profile of diagnoses varies with hospital type. For example, about 1 in 5 separations in public acute hospitals and public psychiatric hospitals had a principal diagnosis of *Schizophrenia* (F20) (17.8% and 19.9% respectively), compared with about 1 in 42 for private hospitals (2.4%). Over 1 in 4 (26.9%) separations with specialised psychiatric care in private hospitals had a principal diagnosis of *Depressive episode* (F32), compared with 11.7% and 6.2% for public acute and public psychiatric hospitals respectively (Figure ON.3).

Figure ON.3: Proportion of overnight mental health-related separations with specialised psychiatric care, for 5 commonly reported principal diagnoses, by hospital type, 2018–19



Source: National Hospital Morbidity Database; Table ON.6.

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Procedures

The most frequently reported procedure block for overnight mental health-related separations with specialised psychiatric care in 2018–19 was *Generalised allied health interventions* (42.7% of procedures, and associated with 55.8% of separations). Of these allied health interventions, procedures provided by *Social work* were the most common (27.8% of allied health interventions), followed by *Occupational therapy* (18.1%) and *Psychology* (18.0%). The second most frequently reported procedure block was *Psychological/psychosocial therapies* (13.0% of procedures and 17.5% of separations), and *Cerebral anesthesia* was the third most frequently reported procedure block (11.8% of procedures and associated with 5.3% of separations). *Cerebral anesthesia* is most likely

associated with the administration of electroconvulsive therapy (ECT), the fourth most frequently reported procedure block, and a form of treatment for depression, which was the most common principal diagnosis for separations with specialised psychiatric care.

Non-specialised admitted patient mental health care

Service provision

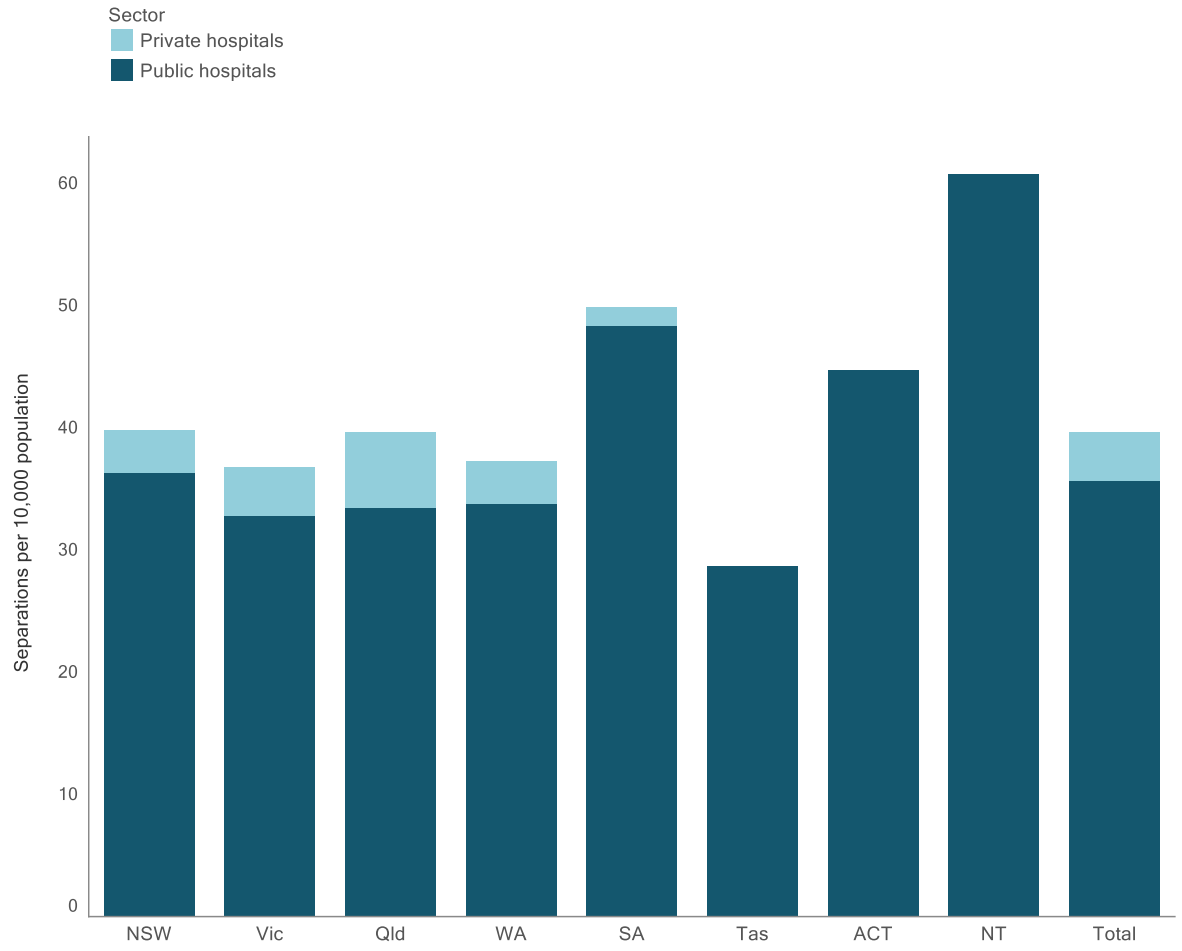
Non-specialised admitted patient mental health care takes place outside a designated psychiatric unit but for which the principal diagnosis is considered to be mental health-related. A list of mental health-related principal diagnoses is available in the technical information section. Data for public acute and public psychiatric hospitals are combined in this section, as there were very few separations without specialised psychiatric care in public psychiatric hospitals in 2018–19.

States and territories

In 2018–19, the national rate of public hospital mental health-related separations without specialised psychiatric care was 35.7 per 10,000 population. The rate ranged between 28.7 and 60.8 for individual jurisdictions, with only Tasmania reporting a rate below 30 (28.7) and only the Northern territory reporting a rate above 50 (60.8) (Figure ON.4).

The rate of mental health-related separations without specialised psychiatric care in private hospitals for the Australian Capital Territory, Tasmania, and the Northern Territory are not published for confidentiality reasons. In all other reported jurisdictions, the rates were less than 7 separations per 10,000 population.

Figure ON.4: Overnight mental health-related separations without specialised psychiatric care, states and territories, by hospital type, 2018–19



Note: Private hospital figures for Tasmania, the Australian Capital Territory and the Northern Territory are not published for confidentiality reasons.
Source: National Hospital Morbidity Database; Table ON.4.

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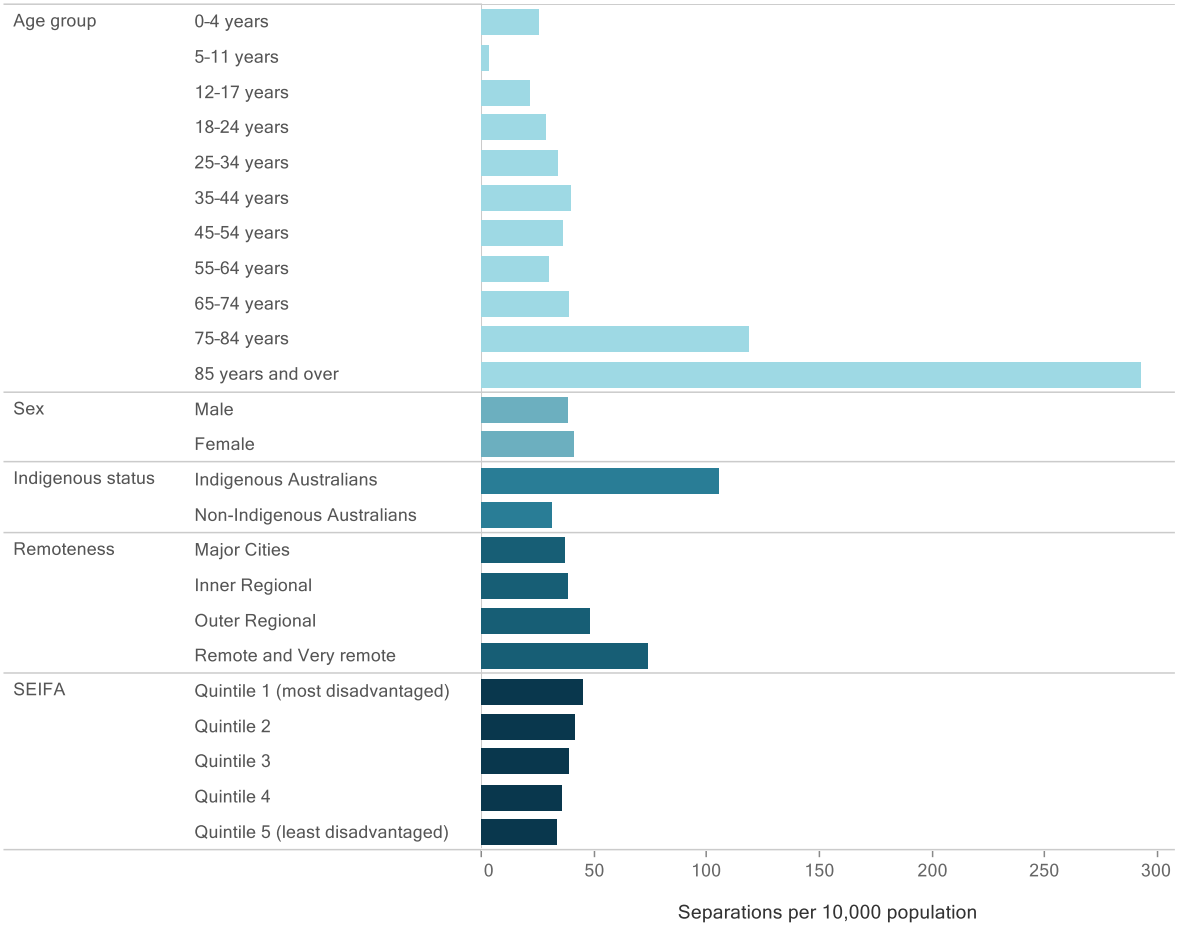
Patient characteristics

Patient demographics

In 2018–19, the highest rate of overnight mental health-related separations without specialised psychiatric care was for patients aged 85 and older (292.8 per 10,000 population) and the lowest for those aged 5–11 (3.4). The separation rate was slightly higher for females than males (40.6 and 38.5 per 10,000 population respectively) (Figure ON.5), but there is variation across individual age groups. Females had higher rates for age groups 12–17 years, 18–24 years, and 25–34 years, while males had higher rates for all other age groups.

Figure ON.5: Overnight mental health-related separations without specialised psychiatric care, by demographic variable, 2018–19



Note: Age-standardised rate is shown for Indigenous status.
Source: National Hospital Morbidity Database; Table ON.5.

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There were 7,214 overnight mental health-related separations without specialised psychiatric care for Aboriginal and Torres Strait Islander people in 2018–19, or 86.9 per 10,000 population, which is 2.3 times higher than the rate of 37.7 per 10,000 population for other patients. Rates standardised on the 2001 age profile were 105.2 and 31.4 per 10,000 population respectively, so the standardised rate for Indigenous people was 3.4 times that of other patients.

People living in *Remote and very remote* areas had the highest rate of overnight mental health-related separations without specialised psychiatric care in 2018–19 and those living in *Major cities* had the lowest rate (73.5 and 37.0 per 10,000 population respectively).

People living in the most disadvantaged socioeconomic quintile (SEIFA Quintile 1) had the highest rate of overnight mental health-related separations without specialised psychiatric care at 44.6 per 10,000 people. Those living in the least disadvantaged quintile (SEIFA Quintile 5) had the lowest rate of 33.4 per 10,000 people.

Changes over time

The rate of overall overnight mental health-related separations without specialised psychiatric care per 10,000 population has increased over the past decade at an average annual rate of 3.2% between 2008–09 and 2018–19, and an larger increase of 5.6% in the 5 years from 2014–15 and 2018–19.

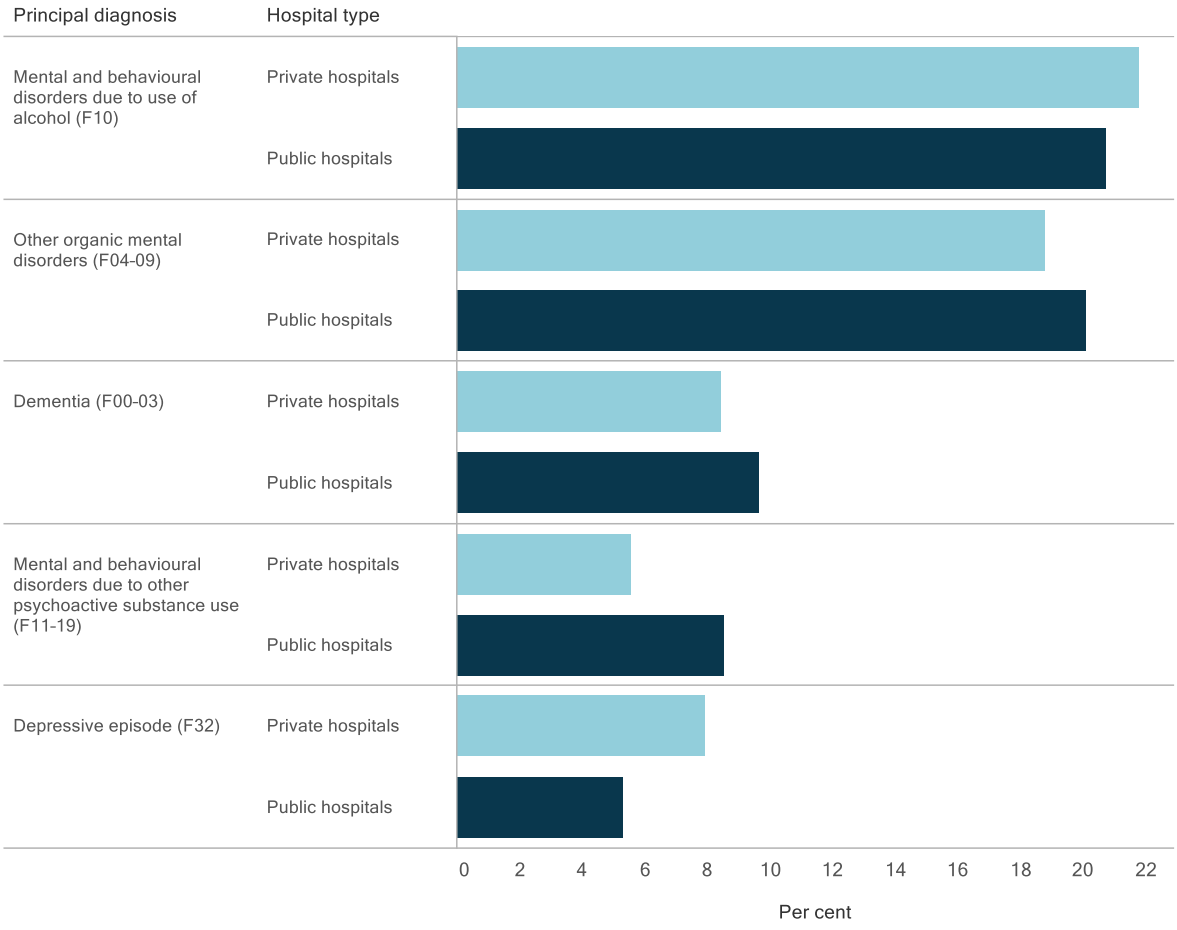
For each year examined, and for each sex, the rate of overnight mental health-related separations without specialised care per population was highest for older adults (75–84 years, and 85+ years). For the 12–17 years age group, the rate of separations for females was almost 3 times the rate of separations as males, a similar pattern to that seen for separations with specialised psychiatric care.

In both the 75–84 year old and 85+ year old age groups, the number of separations per 10,000 population have been increasing over time. For these age groups, males have consistently had a higher rate than the female population. The contrast with the rates for overnight mental health related separations with specialised care should be noted for these older age groups.

Principal diagnosis

In 2018–19, the most frequently reported principal diagnosis for overnight mental health-related separations without specialised psychiatric care were *Mental and behavioural disorders due to use of alcohol* (ICD-10-AM code F10) (20.7% in public hospitals and 21.8% in private hospitals), followed by *Other organic mental disorders* (20.1% in public and 18.8% in private hospitals) (Figure ON.6).

Figure ON.6: Proportion of overnight mental health-related separations without specialised psychiatric care, for 5 commonly reported principal diagnoses, by hospital type, 2018–19



Source: National Hospital Morbidity Database; Table ON.6.

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Procedures

Almost two-thirds (68.3%) of overnight mental health-related separations without specialised psychiatric care recorded at least 1 procedure in 2018–19. The most frequently reported procedure block was *Generalised allied health intervention* (67.0%), which was recorded for just over half of separations without specialised psychiatric care (51.8%). The most frequent *Allied health interventions* were *Social work* (22.2% of allied health procedures), followed by *Physiotherapy* (21.9%) and *Occupational therapy* (17.0%).

The next most frequently reported procedure block was *Alcohol and drug rehabilitation and detoxification*, which was recorded for 9.0% of overnight separations without specialised psychiatric care.

Regional reporting

Information on overnight mental health-related separations is reportable at smaller geographic areas than state and territory boundaries. Sub-jurisdictional reporting provides the opportunity to consider differences within jurisdictions. For the analysis presented here, the geographical area is based on the usual residence of the patient rather than the geographical location of the hospital. There are 2 types of geographical areas which are reported here:

- Primary Health Network (PHN) areas – 31 geographic areas covering Australia, with boundaries defined by the Australian Government Department of Health.
- Statistical Areas Level 3 (SA3s) – 337 geographic areas covering Australia, with boundaries defined by the Australian Bureau of Statistics.

In 2018–19, the national rate of mental health-related separations both with and without specialised psychiatric care was 107.6 per 10,000 population. At the PHN level, *Western Queensland* (PHN code 305) had the highest rate (137.2 per 10,000 population) and *Western Sydney* (PHN code 103) had the lowest (82.9 per 10,000 population).

The observed variability in hospitalisation rates between geographical areas may be due to a range of factors including the proportion of the population in an area with a diagnosable mental illness who are admitted to hospital, availability of community-based services and variability in approaches to planning and delivering mental health support services across and within states and territories.

Data source

National Hospital Morbidity Database

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level 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. For further details on the scope and quality of data in the NHMD, refer to *Admitted patient care: Australian Hospital Statistics 2018–19*.

Further information on admitted patient care for the 2018–19 reporting period can be found in the report *Admitted patient care 2018–19: Australian hospital statistics* (AIHW 2020). The 2018–19 collection contains data for hospital separations that occurred between 1 July 2018 and 30 June 2019. Admitted patient episodes of care/separations that began before 1 July 2018 are included if the separation date fell within the collection period (2018–19). A record is generated for each separation rather than each patient. Therefore, those patients who separated from hospital more than once in the reference year have more than one record in the database.

Specialised mental health care is identified by the patient having 1 or more psychiatric care days recorded—that is, care was received in a specialised psychiatric unit or ward during that separation. In public acute 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.

Although there are national standards for data on admitted patient care, the results presented here may be affected by variations in admission and reporting practices between states and territories. Interpretation of the differences between states and territories therefore needs to be made with care. The 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. For 2018–19, diagnoses are classified according to the *International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification* (ICD-10-AM 10th edition) (ACCD 2016). Further information on this is included in the technical information section.

For 2018–19, procedures are classified according to the *Australian Classification of Health Interventions, 10th edition*. Further information on this classification is included in the

technical information section. More than one procedure can be reported for a separation and not all separations have a procedure reported.

The large decline in patient days associated with public hospital mental health-related separations from 2016–17 to 2017–18 followed large increases from 2014–15 to 2015–16 and 2015–16 to 2016–17. These fluctuations are likely to be related to the introduction of the *Mental health* care type from 1 July 2015. For example, to change the care type of patients receiving mental health care, Queensland (in 2015–16) and New South Wales (in 2016–17) discharged and readmitted patients, causing the rise in separations and patient days counted in those years. The rise in patient days is substantially impacted by long stay mental health patients, who can individually account for hundreds or thousands of days. The subsequent decline in patient days seen in 2017–18 is impacted by days accrued before the change in care type being counted in an earlier year.

References

AIHW (Australian Institute of Health and Welfare) 2020. Admitted patient care 2018–19: Australian hospital statistics. Health services series Canberra: AIHW. Viewed August 2020 < https://www.aihw.gov.au/reports-data/myhospitals/sectors/admitted-patients>

ACCD (Australian Consortium for Classification Development) 2016. The international statistical classification of diseases and related health problems, 10th revision, Australian modification (ICD-10-AM), Australian Classification of Health Interventions (ACHI) and Australian Coding Standards (ACS), 10th ed. Sydney: University of Sydney.

Key Concepts

Overnight admitted mental health-related care

Key Concept	Description
Average length of stay	**Average length of stay** is the average number of patient days for admitted patient separations.
Care type	The care type defines the overall nature of a clinical service provided to an admitted patient during an episode of care (admitted care), or

	the type of service provided by the hospital for boarders or posthumous organ procurement (other care).

Mental health related	A separation is classified as **mental health-related** for the purposes of this report if:
	• 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:
	  ○ 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
	  ○ a number of other selected diagnoses (see the technical information for a full list of applicable diagnoses), and/or
	• it included any specialised psychiatric care.

Overnight admitted patient care	For this report **overnight admitted patient separations** refers to those separations when a patient undergoes a hospital's formal admission process, completes an episode of care, is in hospital for more than one day and 'separates' from the hospital. Same-day separations are reported separately in the Admitted patient care – same-day care section of this report.
Patient day	**Patient day** 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 length of stay for an overnight patient is calculated by subtracting the date the patient was admitted from the date of separation and deducting days the patient was on leave. A same-day patient is allocated a length of stay of 1 day. Patient day statistics can be used to provide information on hospital activity that, unlike separation statistics, account for differences in 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 a small number 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.
Principal diagnosis	The principal diagnosis is the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of admitted patient care.
Procedure	**Procedure** refers to a clinical intervention that is surgical in nature, carries an anaesthetic risk, requires specialised training and/or requires special facilities or services available only in an acute care setting. Procedures therefore encompass surgical procedures and non-surgical investigative and therapeutic procedures, such as X-rays. Patient support interventions that are neither investigative nor therapeutic (such as anaesthesia) are also included. Procedures are grouped together in blocks (**Procedure blocks**) based on the area of the body, health professional or intervention involved.
Psychiatric care days	**Psychiatric care days** 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** is the term used to refer to the episode of admitted patient care, 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 care 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. Each record includes information on patient length of stay. A same-day separation occurs when a patient is admitted and separated from the hospital on the same date. An overnight separation occurs when a patient is admitted to and separated from the hospital on different dates. The numbers of separations and patient days can be a less reliable measure of the activity for establishments such as public psychiatric hospitals, and for patients receiving care other than acute care, for which more variable lengths of stay are reported.
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 (technical information).