

Mental health-related prescriptions

On this page:

- Key points
- Summary
- Overview
- Patient characteristics
- Prescriptions by type

Key points

- **42.7 million** mental health-related medications (subsidised and under co-payment) were dispensed in 2020–21.
- **4.5 million patients (17.7% of the Australian population)** filled a prescription for a mental health-related medication in 2020–21, with an average of 9.4 prescriptions per patient.
- **62.3%** of mental health-related prescriptions filled were subsidised by the PBS/RPBS in 2020–21.
- **84.7%** of mental health-related prescriptions filled were prescribed by GPs; **7.5%** prescribed by psychiatrists; **4.9%** prescribed by non-psychiatrist specialists in 2020–21.
- **73.1%** of mental health-related prescriptions filled were for Antidepressant medications in 2020–21.

+/- Insert single accordian

Summary

This section presents Pharmaceutical Benefits Scheme (PBS) information on [prescriptions for mental health-related medications](#); both [subsidised prescriptions](#) and [under co-payment prescriptions](#) (that is, prescriptions that cost less than the threshold for subsidy under the PBS). Mental health-related medications reported in this section comprise *Psycholeptics, Antipsychotics, Anxiolytics, Hypnotics and sedatives, Psychoanaleptics, Antidepressants, and Psychostimulants*, agents used for Attention-deficit hyperactivity disorder (ADHD) and nootropics prescribed by all medical practitioners.

For further information on the PBS and Repatriation Pharmaceutical Benefits Scheme (RPBS) and the medications covered by these schemes, refer to the [data source](#) section.

Related data on expenditure on medications subsidised under the PBS and RPBS are presented in the [Expenditure](#) section.

From February 2020, a range of restrictions on travel, business, social interaction and border control were introduced to prevent and reduce the spread of SARS-CoV-2, the virus that causes COVID-19. While this report explores the impact on mental health-related prescriptions, the AIHW has published a report on the [Impacts of COVID-19 on Medicare Benefits Scheme and Pharmaceutical Benefits Scheme service use](#) more broadly.

How many patients received a mental health-related prescription in 2020–21?

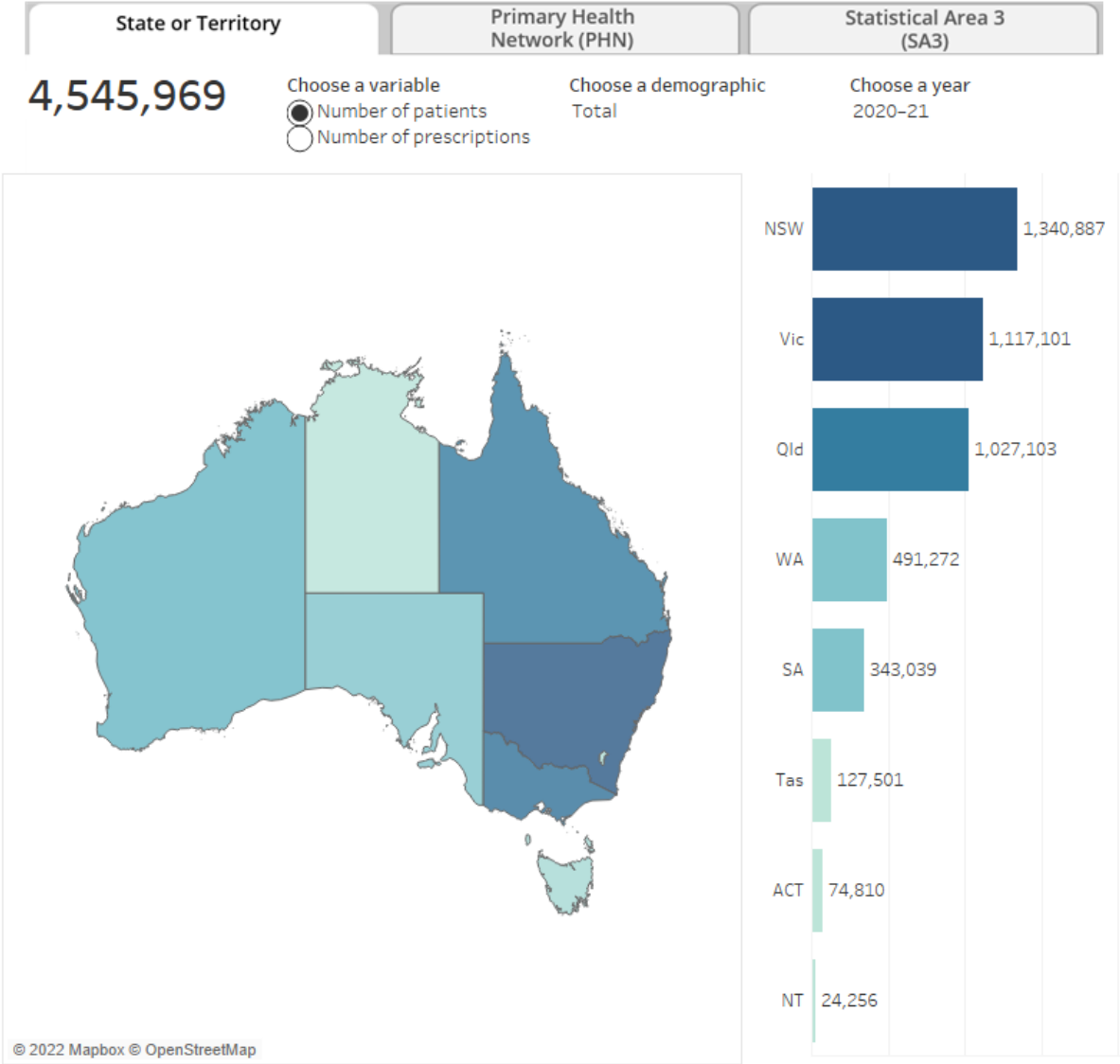


Figure PBS.1: Number of patients and prescriptions dispensed by demographic and geographic variables, 2014–15 to 2020–21 <http://www.aihw.gov.au/mhse>

Data downloads

Excel – Mental health-related prescriptions 2020–21 tables (1.1MB XLSX)

PDF – Mental health-related prescriptions 2020–21 section (766KB PDF)

Link - Data source and key concepts related to this section.

Data coverage includes the time period 2005–06 to 2020–21. Data in this section were last updated in August 2022.

You might also be interested in:

- [Medicare-subsidised mental health-related services 2020–21](#)

Overview

There were 42.7 million prescriptions filled for mental health-related medications (both subsidised and under co-payment) in Australia in 2020–21. This is equivalent to 1,663.5 mental health-related prescriptions per 1,000 population. These medications were dispensed to 4.5 million patients, which equates to 17.7% of Australians.

There was an average of 9.4 prescriptions filled per patient in 2020–21. Of the 42.7 million mental health-related prescriptions, 26.6 million were subsidised under the PBS/RPBS and filled by 2.6 million patients; an average of 10.3 subsidised prescriptions per patient in 2020–21.

Under the PBS and the RPBS, the Australian Government sets a maximum 'co-payment' amount that people pay towards the cost of their medicines. The co-payment is the amount people pay towards the cost of their PBS subsidised medicine. Many PBS medicines cost significantly more than the co-payment amount. From 1 January 2022, a person may pay up to \$42.50 for most PBS medicines or \$6.80 if he/she has a concession card. The amount of co-payment is adjusted on 1 January each year in line with the Consumer Price Index (CPI). The Australian Government pays pharmacies the difference between a consumer's co-payment and the PBS price of a medicine, as listed on the Schedule of Pharmaceutical Benefits. Some prescriptions are priced below the co-payment threshold for a patient, so the consumer pays the total cost, and the government does not contribute. Further information is available in [data source](#).

Unless otherwise stated in this report, prescriptions filled (or dispensed) include total prescriptions, that is, both subsidised and under co-payment arrangements.

Patient characteristics

More than 1 in 6 Australians (17.7% of the population) filled a mental health-related prescription in 2020–21. Tasmania had the highest proportion (23.6% of the population), while New South Wales (16.4%) had the lowest (excluding the Northern Territory – see the Note accompanying Figure PBS.2). Victoria (16.8%) and the Australian Capital Territory (17.4%) had similar rates to New South Wales.

Figure PBS.2: People (per cent) dispensed one or more mental health-related medications, by states and territories, 2020–21

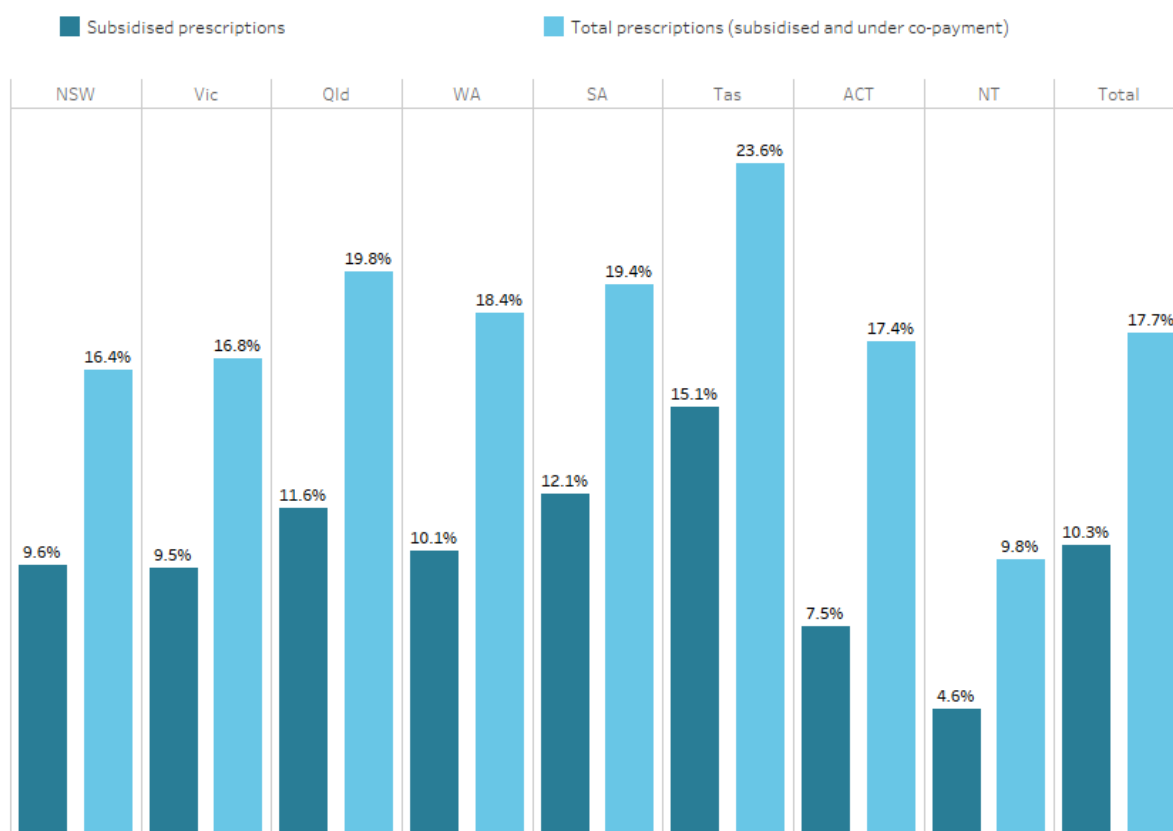


Figure PBS.2: People (per cent of the population) dispensed one or more mental health-related prescription, by states and territories, 2020–21

Note: A proportion of the Australian Government subsidy of pharmaceuticals in remote Aboriginal communities (primarily the Northern Territory) is funded through the Aboriginal Health Services program, where drugs are supplied directly to patients and hence are not included in this data. Therefore, figures presented for the Northern Territory are considered to be an underestimate.

Source: PBS/RPBS data (sourced from Australian Government Department of Health): Table PBS.2.

The proportion of people filling mental health-related prescriptions in 2020–21 was lowest for the youngest age groups (0.2% of people aged 0–4 years, 4.8% of people aged 5–11 years and 9.5% of people aged 12–17 years), increasing by age group to 41.0% for

people aged 85 years and over (Figure PBS.3). A higher proportion of females filled mental health-related prescriptions than males (21.0% and 14.3% respectively). A greater proportion of people living in *Inner regional* areas were dispensed mental health-related medications (22.2%), followed by people living in *Outer regional* areas (20.2%), *Major cities* (16.5%), *Remote* (14.9%) and *Very remote* (8.5%) areas.

Figure PBS.3: People (per cent) dispensed one or more mental health-related medications, by patient demographics, 2020-21

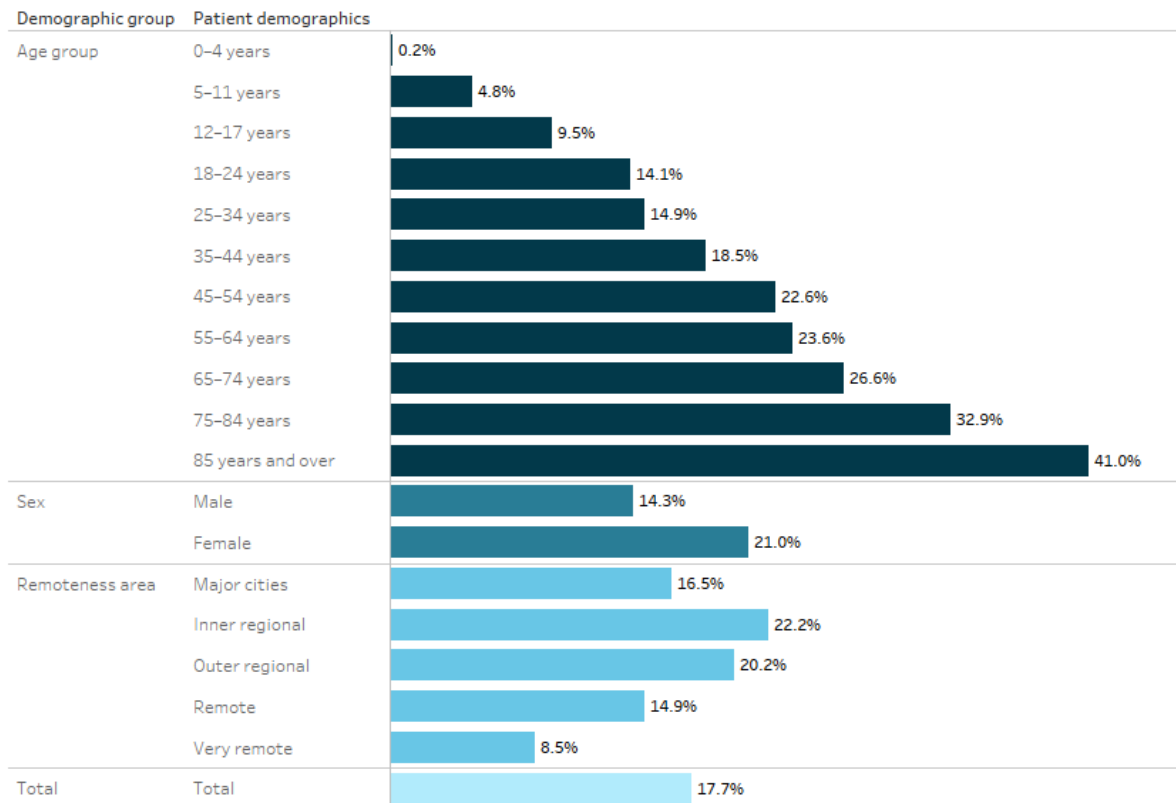


Figure PBS.3: People (per cent of the population) dispensed one or more mental health-related prescription (subsidised and under co-payment), by patient demographics, 2020-21..

Source: PBS/RPBS data (sourced from Australian Government Department of Health): Table PBS.4.

The population rate for females aged 85 and over filling mental health-related prescriptions was higher than all other age groups for all drug types, except for *Psychostimulants, agents used for ADHD and nootropics* where those aged 12-17 had the highest population rate. A similar pattern was seen in males with the highest population rate for *Psychostimulants, agents used for ADHD and nootropics* also for those aged 12-17. When comparing males and females, a higher proportion of males were dispensed *Psychostimulants, agents used for ADHD and nootropics*, while a higher proportion of females were dispensed *Anxiolytics, hypnotics and sedatives*, and *Antidepressants*. The rates for *Antipsychotics* were the same for males and females.

Over time

The proportion of the population filling PBS and RPBS mental health-related prescriptions has risen from 16.7% in 2016–17 to 17.7% in 2020–21. The proportion of people filling subsidised mental health-related prescriptions declined by an average of 0.9% per year until 2019–20, from 9.8% in 2016–17 to 9.7% in 2019–20, however it has seen a rise to 10.3% in 2020–21 (Figure PBS.4).

Figure PBS.4: People (per cent) dispensed one or more mental health-related medications 2007–08 to 2020–21

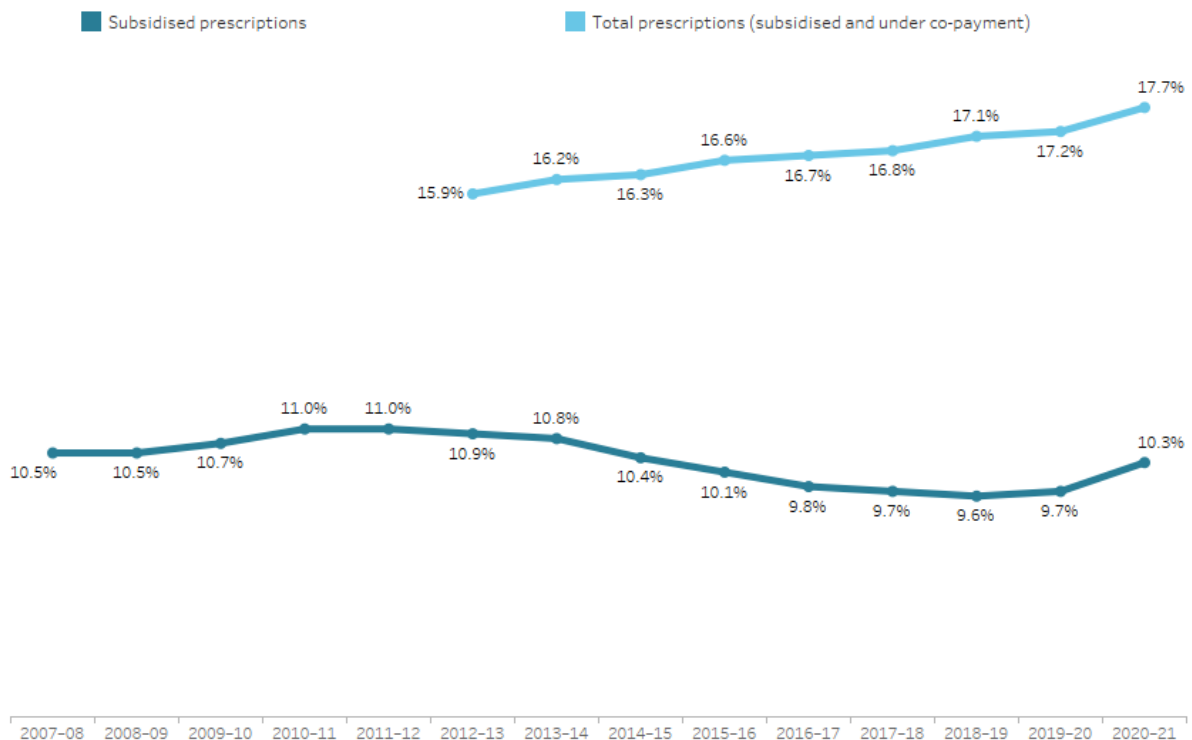


Figure PBS.4: People (per cent of the population) dispensed one or more mental health-related prescription, 2007-08 to 2020-21

<http://www.aihw.gov.au/mhsa>

Source: PBS/RPBS data (sourced from Australian Government Department of Health): Table PBS.3.

Prescriptions by type

In 2020–21, Tasmania had the highest rate of mental health-related prescriptions filled for subsidised prescriptions (1,558.1 per 1,000 population) and total prescriptions (2,301.1).

The Australian Capital Territory had the the lowest rate of subsidised prescriptions filled (737.8) and New South Wales had the lowest rate of total prescriptions (1,511.8).

Due to arrangements in the Northern Territory where prescription medications are supplied through the Aboriginal Health Services program, the Northern Territory's PBS/RPBS statistics are recognised as an underestimate.

Figure PBS.5: Number of mental-health related prescriptions per 1,000 population, by states and territories, 2020–21

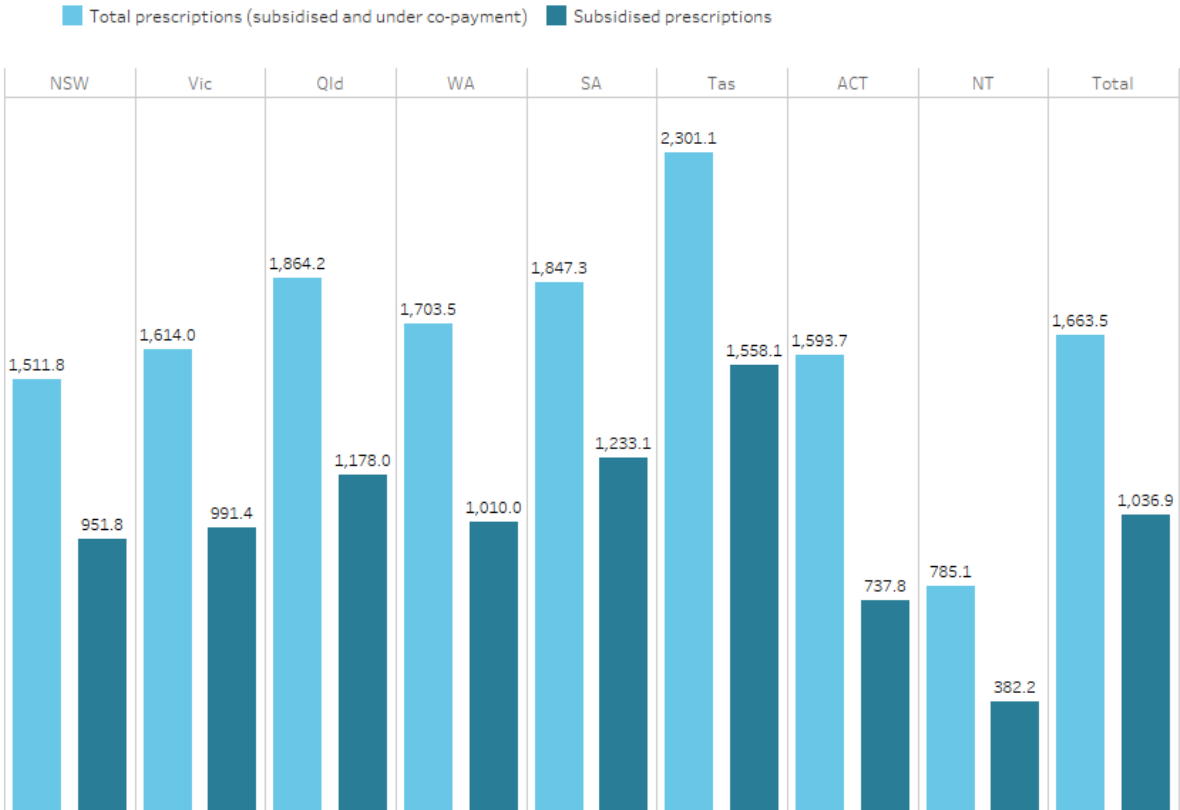


Figure PBS.5: Number of mental health-related prescriptions per 1,000 population, by states and territories, 2020–21

<http://www.aihw.gov.au/mhsa>

Note: A proportion of the Australian Government subsidy of pharmaceuticals in remote Aboriginal communities (primarily the Northern Territory) is funded through the Aboriginal Health Services program, where drugs are supplied directly to patients and hence are not included in this data. Therefore, figures presented for the Northern Territory are considered to be an underestimate.

Source: PBS/RPBS data (sourced from Australian Government Department of Health): Table PBS.11.

Prescription characteristics

Of the 42.7 million mental health-related medications dispensed in 2020–21, the majority (84.7%) were prescribed by general practitioners (GPs), with another 7.5% prescribed by psychiatrists and 4.9% by non-psychiatrist specialists. These proportions were similar for subsidised prescriptions.

The majority of total mental health-related prescriptions filled were for *Antidepressants* (73.1%, or 31.2 million) in 2020–21, followed by *Antipsychotics* (10.1%), *Anxiolytics* (7.6%), *Psychostimulants, agents used for ADHD and nootropics* (4.7%) and *Hypnotics and sedatives* (4.4%) (Figure PBS.6). Among the categories of medications, the majority of prescriptions were issued by GPs, except for *Psychostimulants, agents used for ADHD and nootropics*. Similar patterns were observed for subsidised prescriptions.

Figure PBS.6: Number of mental health-related prescriptions, by type of medication and prescribing medical practitioner, 2020–21

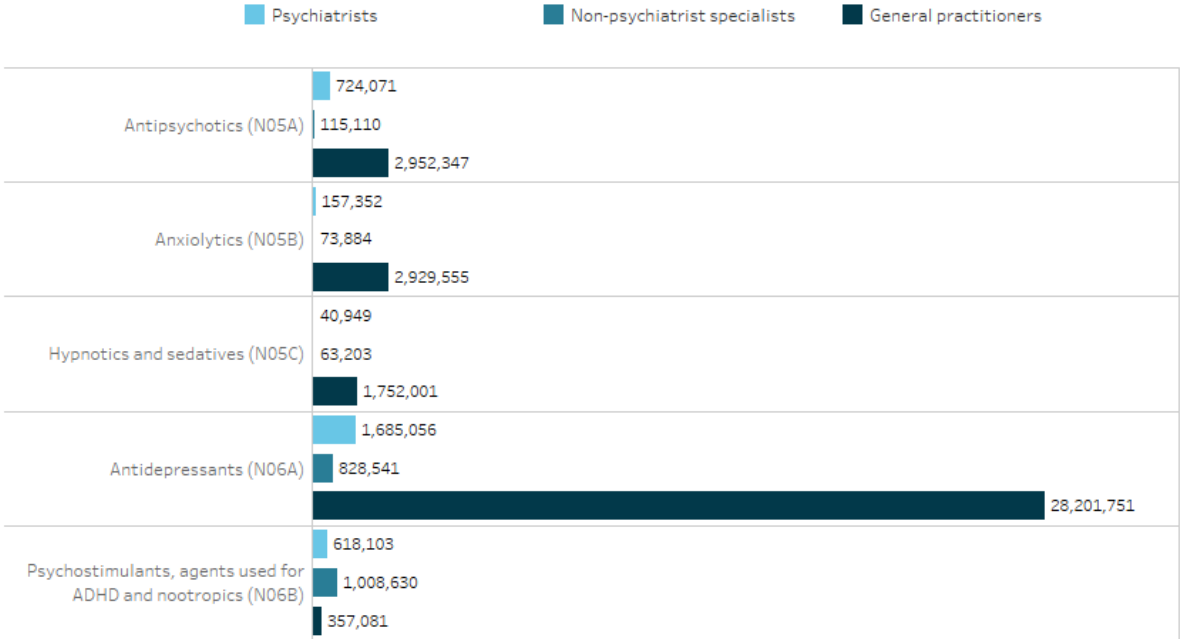


Figure PBS.6: Number of mental health-related prescriptions (subsidised and under co-payment), by type of medication and prescribing medical practitioner, 2020–21

<http://www.aihw.gov.au/mhsa>

Source: PBS/RPBS data (sourced from Australian Government Department of Health): Table PBS.11.

Antidepressants and *Antipsychotics* had the highest average number of total prescriptions filled per patient (8.9 and 8.7, respectively) in 2020–21. *Psychostimulants, agents used for ADHD and nootropics* had a lower number of prescriptions filled, but had the third highest rate of prescriptions filled per patient (7.0). A similar pattern was observed for subsidised prescriptions.

Females had a higher rate of mental health-related prescriptions filled (1,984.6 per 1,000 population) than males (1,316.4) in 2020–21. However males and females filled a similar number of scripts per patient, averaging 9.2 for males and 9.4 for females.

Over time

For the period 2016–17 to 2020–21, the rate (per 1,000 population) of total mental health-related prescriptions being filled increased from 1,506.1 to 1,663.5, an average annual increase of 2.5%. The rate of PBS/RPBS subsidised prescriptions being filled also increased over the same period from 982.6 to 1,036.9 per 1,000 population, an average annual increase of 1.4% (Figure PBS.7). This is partly due to price reductions on medications no longer under patent. More information about this is available in [Expenditure on mental health-related services](#).

Figure PBS.7: Number of mental health-related prescriptions per 1,000 population, 2006-07 to 2020-21

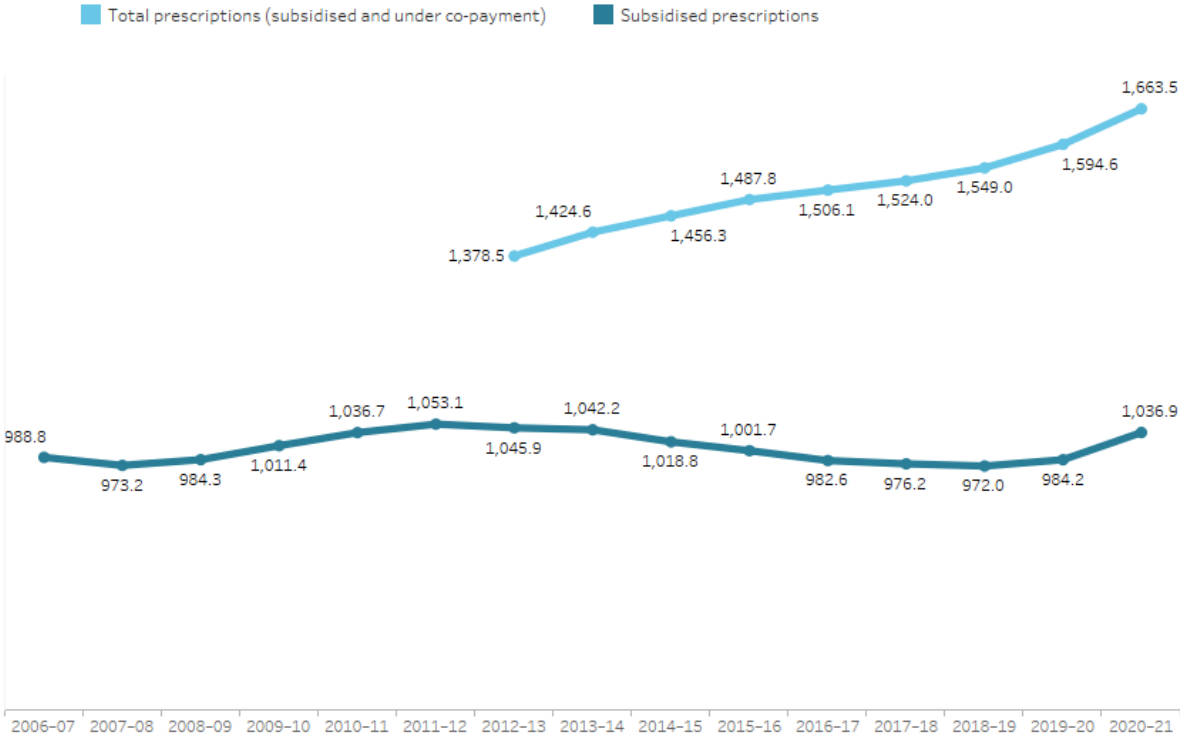


Figure PBS.7: Number of mental health-related prescriptions per 1,000 population, 2006-07 to 2020-21

<http://www.aihw.gov.au/mhss>

Source: PBS/RPBS data (sourced from Australian Government Department of Health): Table PBS.12.

Between 2016-17 and 2020-21, the rate (per 1,000 population) of mental health-related prescriptions filled decreased from 152.2 to 126.5 for *Anxiolytics* and from 98.0 to 73.7 for *Hypnotics and sedatives*, an average annual decrease of 4.5% and 6.9% respectively. Conversely, the prescription rates have increased over the same period of time from 164.6 to 168.2 for *Antipsychotics*; from 1042.7 to 1216.7 for *Antidepressants*; and from 48.5 to 78.4 for *Psychostimulants, agents used for ADHD and nootropics*, an average annual increase of 0.5%, 3.9% and 12.7% respectively.

Prescriptions during the COVID-19 pandemic

Analyses of prescriptions for mental health-related medications by financial year quarter have been included to show seasonal variations in medications dispensed, and provide more insight into the impact of events, such as the COVID-19 pandemic. These include service and person counts disaggregated by medication type, age group and sex (Tables PBS.8-9, PBS.18-19).

Between 2019–20 and 2020–21, the January to March quarter had the highest percentage increase in both the total prescriptions filled and the patients dispensed one or more mental health-related medications. This is consistent with the general trend seen across the PBS, with a 23.1% increase in the number of medications dispensed in March 2020 compared with March 2019 (AIHW, 2020).

Regional reporting

Information on health-related prescriptions can also be reported at the sub-jurisdictional level, within state and territory boundaries. See also Figure PBS.1

Insert accordian widget +/-

Sub-jurisdictional data

Sub-jurisdictional data for 2020–21 are included with the data downloads for this section (Table PBS.20, Table PBS.21, Table PBS.22 and Table PBS.23). This data shows variation in the number and rate of prescriptions and patients across Australia's 31 Primary Health Network (PHN) areas, as well as at the Statistical Area 3 (SA3) region level. For the analysis presented here, geographical area is based on the patient's residential address, or, if the patient's address is unknown, the location of the supplying pharmacy is used.

The South Australian Adelaide City SA3 region had the highest rate of mental health-related medications dispensed in 2020–21 (3,080.1 per 1,000 of the population), followed by the Queensland Redcliffe SA3 region (2,770.3), while East Arnhem and Barkly SA3 regions in the Northern Territory had the lowest rate of medications dispensed (263.0 and 370.6 of the respective populations).

The Queensland Maryborough SA3 region had the highest rate of patients filling mental health-related prescriptions in 2020–21 (27.5% of the population), followed by the Queensland Hervey Bay and Great Lakes SA3 region in New South Wales (26.9% and 26.8% of the respective populations), while East Arnhem and Daly-Tiwi-West Arnhem SA3 regions in the Northern Territory had the lowest rates of patients filling prescriptions (3.7% and 4.4% of the respective populations).

Data source

+/- Insert single accordian:

On this page:

- Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data
- References
- Key Concepts

Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data

The Australian Government subsidises the cost of prescription medicines through two schemes, the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS) for eligible veterans and their dependants.

People fall into 2 broad classes: general and concessional. Concessional beneficiaries include pensioners, Health Care card holders, Commonwealth Seniors Health card holders and Veterans card holders. Under the PBS/RPBS, the patient is required to contribute a [co-payment](#) which is indexed annually; \$42.50 for general patients and \$6.80 for those with a concession card as of 1 July 2022. If a medicine is priced below the relevant co-payment threshold the consumer pays the full price and the prescription is classified as 'under co-payment'. If a medicine is not listed in the PBS Schedule of Pharmaceutical Benefits, the consumer pays the full price as a private prescription, and the data is not included in the presented tables.

The collection of under co-payment prescription data for the PBS and RPBS commenced on 1 April 2012. The data collected is identical to that collected for subsidised prescriptions. Prior to 2012 the only source of under co-payment data was a survey of pharmacies funded by the Australian Government Department of Health and Aged Care (DHAC) (see the information on the Drug Utilisation Sub-Committee (DUSC) below). Time series presentation of survey data with the under co-payment data is not possible prior to 2012–13 as the DUSC data may have been an underestimate of prescription volumes.

Most prescriptions for General Schedule medicines (Section 85) are dispensed through community pharmacies, but PBS is also available in private hospitals and through eligible public hospitals to patients on discharge and day patients. In addition, a number of drugs are distributed under alternative arrangements where these are considered more appropriate (Section 100). Examples are the Highly Specialised Drugs program and General Schedule medicines that are supplied directly to Indigenous patients via Aboriginal Health Services in remote areas of Australia (AHS program).

PBS/RPBS does not include the following:

- Private prescriptions
- Over the counter medicines
- Medicines supplied to public hospital inpatients.

Services Australia processes all prescriptions dispensed under the PBS/RPBS and provides this data to the DHAC. The PBS/RPBS data maintained by the DHAC has been used to produce this report. Information collected includes the characteristics of the person who is provided with the prescription, the medication prescribed (for example, type and cost), the prescribing practitioner and the supplying pharmacy (for example, location). The figures reported relate to the number of mental health-related prescriptions supplied by pharmacies and processed by Services Australia in the reporting period, the number of people provided with the prescriptions and their characteristics, as well as the prescription costs funded by the PBS and RPBS (further information can be found in the [Expenditure](#) section).

Although the PBS and RPBS data capture most of the prescribed medicines dispensed in Australia, these data have the following limitations:

- The number of patients dispensed under co-payment prescriptions cannot be derived by subtracting the number of patients receiving subsidised prescriptions from the total number of patients shown in the tables. Patients may receive both subsidised and under co-payment prescriptions which means there is duplication of some people in tables PBS.2–5.
- Programs funded by the PBS/RPBS that do not use the Services Australia online processing system include:
 - Public hospitals
 - Aboriginal health services program
 - Opiate Dependence Treatment Program.

Only one of these has a bearing on the mental health-related prescriptions data published in the Prescriptions and Expenditure sections: the Aboriginal health services program. Most affected are the data for Remote and Very remote areas and the data for the Northern Territory. Consequently, the mental health-related prescriptions data in these sections will not fully reflect Australian Government expenditure on mental health-related medications.

- All data is presented by the date of supply, that is, when the prescription was dispensed to the patient. For demographic tables, patient characteristics are determined at a single point in each year, ensuring each person is only counted once in the year.

- State and territory are determined according to the patient's residential address as recorded on the Medicare Enrolment file. If the patient's state or territory is unknown, then the state or territory of the pharmacy supplying the item is reported.

The Anatomical Therapeutic Chemical (ATC) classification version used is the primary classification as it appears in the PBS Schedule of Pharmaceutical Benefits. This can differ slightly from the World Health Organization (WHO) version (WHO 2021). There are 3 differences between the WHO ATC classification and the PBS Schedule classification that have a bearing on mental health data:

- Prochlorperazine is regarded as an antiemetic (A04A) in the PBS Schedule while it is an antipsychotic (N05A) according to the WHO classification. This means that information on prochlorperazine will not appear in the data provided as it is not listed as a mental health drug in the PBS Schedule.
- Bupropion is listed as an anti-smoking drug (N07B) in the PBS Schedule while it is an antidepressant (N06A) according to the WHO classification. This means that bupropion will not appear in the data as it is not listed as a mental health drug in the PBS schedule.
- Lithium carbonate is classified as an antidepressant (N06A) in the PBS Schedule while it is an antipsychotic (N05A) according to the WHO classification. This means that lithium carbonate will appear in the data as an antidepressant rather than an antipsychotic.

Clozapine (N05A) historical data incomplete

Clozapine is PBS listed under the Highly Specialised Drugs (HSD) program, and prior to 2015 was only available through public and private hospital pharmacies. Due to differing HSD funding arrangements over time, historical prescription/patient data is incomplete:

Public hospitals

- Prior to 1 July 2010 – no data available
- 1 July 2010 to 31 December 2013 - partial data available - gradual transition to prescription based payments increasing over time, transition complete by December 2013
- 1 January 2014 onwards – complete data available.

Private hospitals

- Complete data available.

Drug Utilisation Sub-Committee (DUSC) database

Previous *Mental health services in Australia* prescription data products included data sourced from the DUSC database. From 1 April 2012, following the implementation of the under co-payment data collection, the DUSC-sponsored Pharmacy Guild survey ceased to be the source of under co-payment prescription data. As a result, time series

data prior to 2012–13 for under co-payment data has been removed from the tables as the previous survey methodology may be an underestimate of the volumes of under co-payment prescriptions.

Insert accordian widget +/-

References

AIHW (Australian Institute of Health and Welfare) 2020. [Impacts of COVID-19 on Medicare Benefits Scheme and Pharmaceutical Benefits Scheme service use](#). Cat. no. ACM 42, AIHW, Australian Government, accessed 28 June 2022.

World Health Organisation (WHO) 2021. [ATC: Structure and principles](#). Oslo: WHO Collaborating Centre for Drug Statistics Methodology, accessed 28 June 2022.

Key concepts

Mental health-related prescriptions

Key Concept	Description
Mental health-related medications	Mental health-related medications are defined in this section as 5 selected medication groups as classified in the Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2021), namely antipsychotics (code N05A), anxiolytics (code N05B), hypnotics and sedatives (code N05C), antidepressants (code N06A), and psychostimulants, agents used for ADHD and nootropics (code N06B)—prescribed by all medical practitioners (that is, general practitioners (GPs), non-psychiatrist specialists and psychiatrists).
Patient co-payment	Under the PBS/RPBS the cost of prescription medicines is subsidised by the Australian Government. Patients are classified as either general or concessional, and are required to pay a patient co-payment towards the cost of their prescription according to their patient status. At 1 July 2022 the co-payment was \$42.50 (general) and \$6.80 (concessional).
Prescriptions	The information on prescriptions in this section is sourced from the processing of the PBS/RPBS and refers to medications prescribed by medical practitioners and subsequently dispensed by approved suppliers (community pharmacies or hospital pharmacies). Consequently, it is a count of prescriptions dispensed rather than a count of the prescriptions written by medical practitioners.
Subsidised prescriptions	A PBS/RPBS prescription is subsidised when the dispensed price of a medication exceeds the patient co-payment. The PBS/RPBS covers the difference between the full cost of the medication and the patient co-payment.
Under co-payment prescriptions	A PBS/RPBS prescription is classified as under co-payment when there is no government subsidy as the dispensed price of the prescription does not exceed the patient co-payment, and the patient pays the full cost of the medication.