

# Mental health-related prescriptions

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 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.

## Data downloads

<xlsx and pdf links to be added>

Data coverage includes the time period 2005–06 to 2018–19. Data in this section were last updated in January 2020.

## Key points

**39.0 million** mental health-related prescriptions (subsidised and under co-payment) were provided in 2018–19.

**4.3 million patients (17.1% of the Australian population)** received mental health-related prescriptions, an average of 9.0 prescriptions per patient, in 2018–19.

**62.7%** of mental health-related prescriptions were subsidised by the PBS/RPBS in 2018–19.

**86.3%** of mental health-related prescriptions were prescribed by GPs; **7.7%** prescribed by psychiatrists; **4.5%** prescribed by non-psychiatrist specialists in 2018–19.

**70.9%** of mental health-related prescriptions were Antidepressant medications in 2018–19.

## Overview

There were 39.0 million prescriptions for mental health-related medications (subsidised and under co-payment) dispensed in Australia in 2018–19. This is equivalent to 1,548.2 mental health-related prescriptions per 1,000 population. These prescriptions were provided to

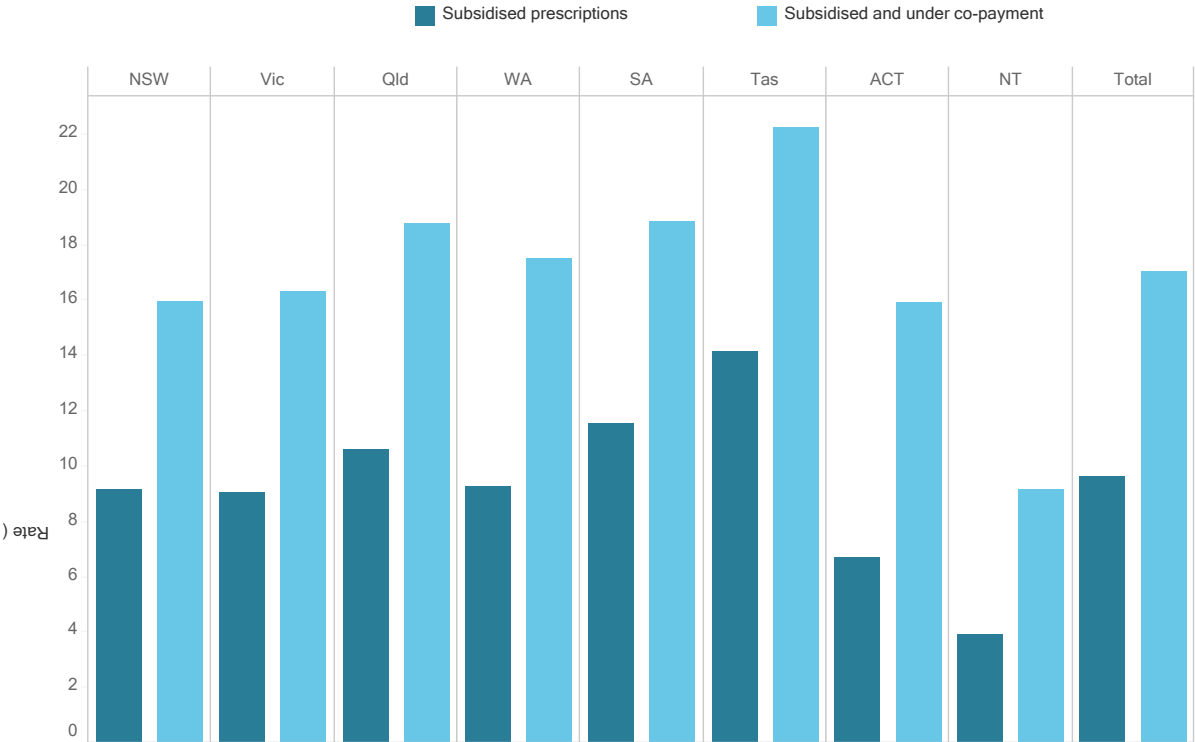
4.3 million patients, which equates to 17.1% of Australians. There was an average of 9.0 prescriptions per patient in 2018–19.

Of the 39.0 million mental health related prescriptions, 24.5 million were subsidised under the PBS/RPBS and were provided to 2.4 million patients; an average of 10.0 prescriptions per patient in 2018–19.

## Patient characteristics

More than 1 in 6 Australians (17.1% of the Australian population) received a mental health-related prescription in 2018–19. Tasmania (22.3% of the Tasmanian population) had the highest proportion of people dispensed with mental health-related prescriptions (subsidised or under co-payment), while the Australian Capital Territory (15.9%) had the lowest (excluding the Northern Territory – see the Note accompanying Figure PBS.1).

Figure PBS.1: People (per cent of the population) dispensed with mental health-related prescriptions, by states and territories, 2018-19



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

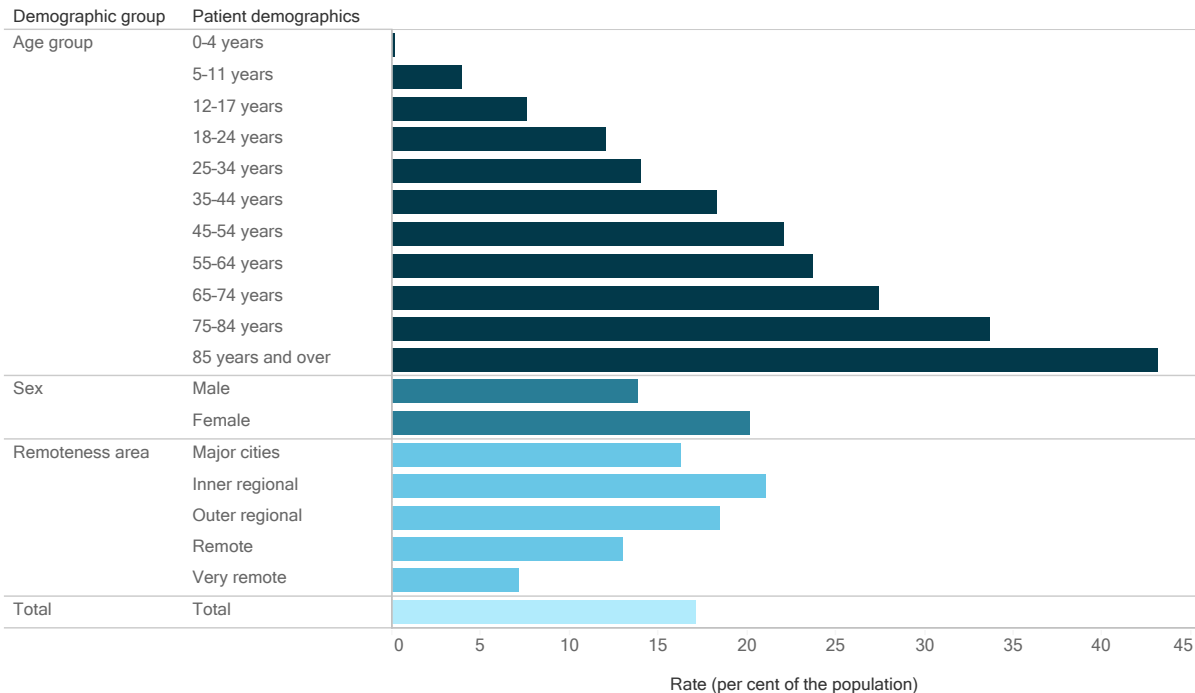
[www.aihw.gov.au/mhsa](http://www.aihw.gov.au/mhsa)

**Note:**

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

The proportion of people receiving mental health-related subsidised and under co-payment prescriptions in 2018–19 was lowest for the youngest age groups (0.1% of people aged 0–4 years, 3.9% of people aged 5–11 years and 7.6% of people aged 12–17 years), increasing by age group to 43.2% for people aged 85 years and over (Figure PBS.2). A higher proportion of females received mental health-related prescriptions than males (20.2% and 13.8% of the respective populations). A greater proportion of people living in *Inner regional* areas were dispensed with mental health-related prescriptions (21.1% of the *Inner regional* population), followed by people living in *Outer regional* areas (18.4%), *Major cities* (16.3%), *Remote* (13.0%) and *Very remote* (7.1%) areas.

Figure PBS.2: People (per cent of the population) dispensed with mental health-related prescriptions (subsidised and under co-payment), by patient demographics, 2018-19



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

## Over time

The proportion of the population receiving PBS and RPBS subsidised and under co-payment mental health-related prescriptions has risen from 16.3% in 2014–15 to 17.1% in 2018–19, an average increase of 1.1% each year during this period. The proportion of people receiving subsidised mental health-related prescriptions has declined by an average of 1.9% per year over the same period, from 10.4% in 2014–15 to 9.6% in 2018–19 (Figure PBS.3).

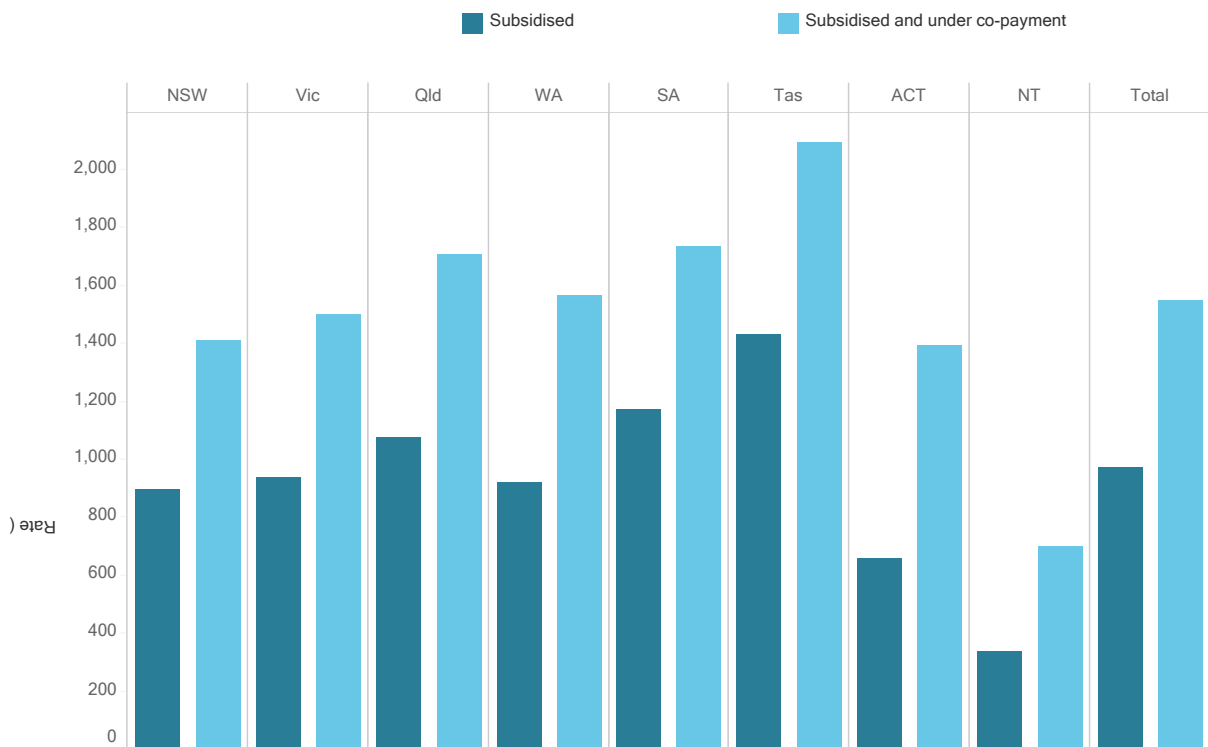
Figure PBS.3: People (per cent of the population) dispensed with mental health-related prescriptions, 2005-06 to 2018-19



# Prescriptions

## States and territories

The Australian Capital Territory (658.2 subsidised and 1,392.7 subsidised and under co-payment prescriptions per 1,000 population) had the lowest rate of PBS and RPBS prescriptions per 1,000 population for both subsidised and subsidised and under co-payment prescriptions in 2018–19 (with the exception of the Northern Territory; see Figure PBS.4, and the associated note). Tasmania had the highest rate of prescriptions (1,430.7 subsidised and 2,093.4 subsidised and under co-payment prescriptions per 1,000 population). These patterns were similar to the patient rates (see Figure PBS.1).

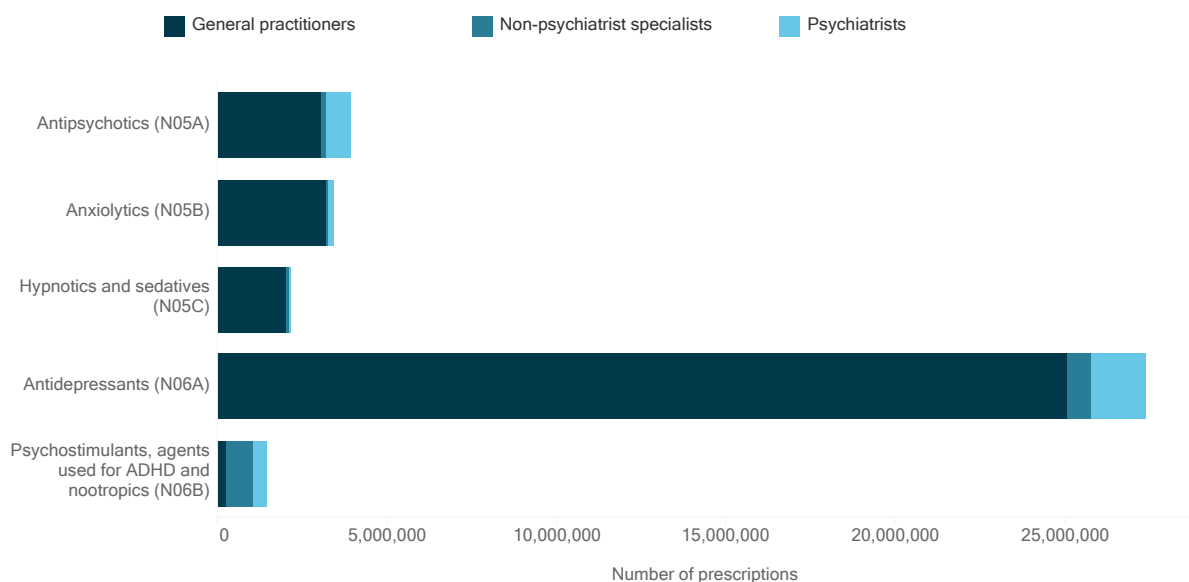


*Note:* A proportion of the Australian Government subsidy of pharmaceuticals in remote Aboriginal communities (primarily the Northern Territory) is funded through the Aboriginal Health Service program, where medications are supplied directly to patients and hence are not included in this data. Therefore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

## Prescription characteristics

Of the 39.0 million mental health-related prescriptions (subsidised and under co-payment) provided in 2018–19, the majority (86.3%) were prescribed by general practitioners (GPs), with another 7.7% prescribed by psychiatrists and 4.5% by non-psychiatrist specialists. These proportions were similar for subsidised prescriptions.

The majority of subsidised and under co-payment mental health-related prescriptions were for Antidepressants (70.9%, or 27.6 million) in 2018–19, followed by Antipsychotics (10.7%), Anxiolytics (9.0%), Hypnotics and sedatives (5.6%) and Psychostimulants, agents used for ADHD and nootropics (3.8%) (Figure PBS.5). 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.



Antidepressants and Antipsychotics had the highest average number of subsidised and under co-payment prescriptions per patient (8.7 and 8.6, respectively) in 2018–19. Psychostimulants, agents used for ADHD and nootropics had the least number of prescriptions dispensed, but had the third highest rate of prescriptions per patient (7.2). A similar pattern was observed for subsidised prescriptions.

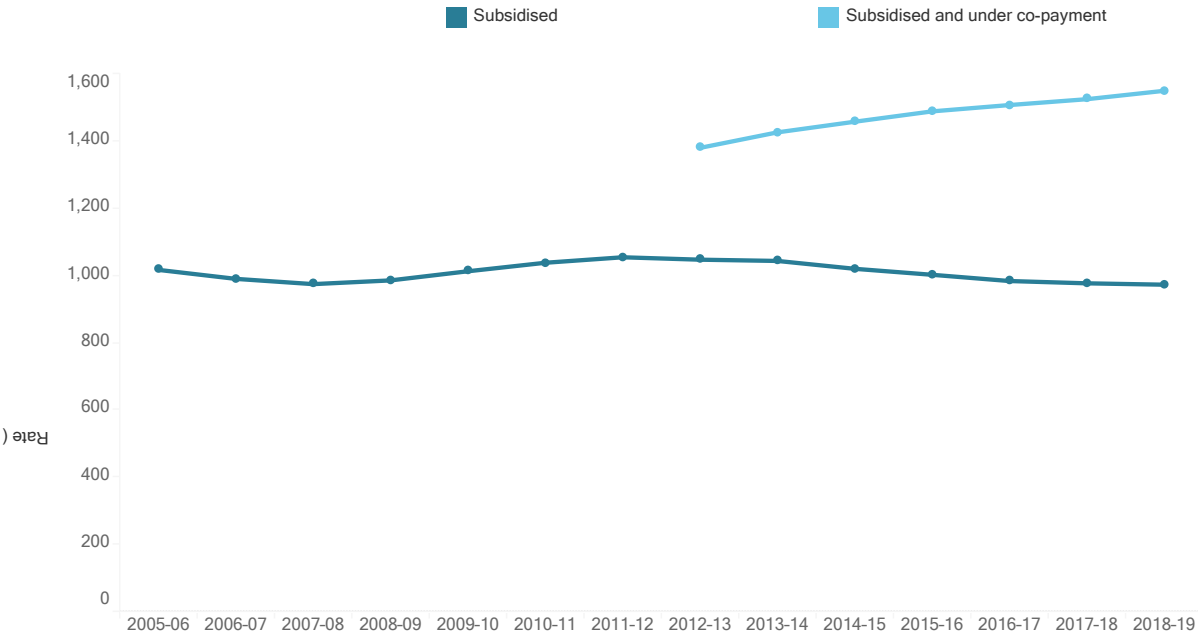
Females had a higher rate of subsidised and under co-payment mental health-related prescriptions (1,847.1 per 1,000 population) than males (1,223.2) in 2018–19. Of the age groups, the lowest prescription rate was for those aged 0–4 years (4.0 per 1,000 population), with the rate increasing by age group to 4,307.9 for those aged 85 years

and over. For remoteness areas, while the majority of mental health-related prescriptions were for people living in *Major cities* (67.2%), people living in *Inner regional* areas had the highest prescription rate (1,977.1 per 1,000 population), followed by people living in *Outer regional* areas (1,687.5). The variation in prescription rates among demographic groups was broadly consistent with the number of people receiving mental health-related prescriptions (see Figure PBS.2).

### Over time

For the period 2014–15 to 2018–19, the rate (per 1,000 population) of subsidised and under co-payment mental health-related prescriptions increased from 1,456.3 to 1,548.2, an average annual increase of 1.5%. In contrast, the rate of PBS and RPBS subsidised prescriptions decreased over the same period from 1,018.8 to 971.5 per 1,000 population, an average annual decrease of 1.2% (Figure PBS.6).

Information on the Government spend on subsidised PBS and RPBS scripts is available in the [Expenditure on mental health services](#) section.



## Regional reporting

Information on subsidised and under co-payment mental health-related prescriptions can also be reported at the sub-jurisdictional level, within state and territory boundaries.

Sub-jurisdictional data for 2018–19 are included with the data downloads for this section (Table PBS.10 and Table PBS.11). 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 Geelong and Wyong SA3 regions had the highest number of subsidised and under co-payment mental health-related prescriptions dispensed in 2018–19 (406,871 and 354,868 prescriptions, respectively), while the Tasmanian Central Highlands SA3 region had the highest rate of prescriptions dispensed (3057.8 per 1,000 of the specific population), followed by the Adelaide City SA3 region (2960.1).

Similarly, the Geelong and Wyong SA3 regions had the highest number of patients receiving subsidised and under co-payment mental health-related prescriptions in 2018–19 (42,106 and 38,337 patients, respectively). The Tasmanian Central Highlands SA3 region had the highest rate of patients receiving prescriptions (29.8% of the specific population), followed by the Bribie – Beachmere SA3 and South East Coast SA3 regions (26.6% of the respective populations).



## Data source

### Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data

The Commonwealth 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 two 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; \$40.30 for general patients and \$6.50 for those with a concession card as of 1 January 2019. 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 Department of Health (see the information on 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.

The Department of Human Services (DHS) processes all prescriptions dispensed under the PBS/RPBS and provides this data to the Department of Health. The PBS/RPBS data maintained by the Department of Health 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 DHS 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 with 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 DHS online processing system include:
  - 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 ATC classification version used is the primary classification as it appears in the PBS Schedule of Pharmaceutical Benefits. This can differ slightly from the WHO version ([WHO 2019](#)). There are three 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. Also not appearing in the data is bupropion, listed as an anti-smoking drug (N07B) in the PBS Schedule while it is an antidepressant (N06A) according to the WHO classification. Lithium carbonate, on the other hand 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 (see the following table).

### Data Source PBS.1 Differences between the WHO ATC classification and the PBS Schedule of Pharmaceutical Benefits classification

Drug name	WHO ATC Code	PBS Schedule Code	Scripts dispensed in 2018-2019	
			Subsidised prescriptions	Subsidised and under co-payment
Prochlorperazine	N05A	A04A	514,610	777,673
Lithium carbonate	N05A	N06A	109,115	181,657
Bupropion	N06A	N07B	22,483	22,487

Source: PBS/RPBS data maintained by Health and sourced from DHS.

### 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.

## References

WHO 2019. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed 18 November 2019, <[http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)>

# Key concepts

## Mental health-related prescriptions

Key Concept	Description
<b>Mental health-related medications</b>	<b>Mental health-related medications</b> are defined in this section as 5 selected medication groups as classified in the Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2019), 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).
<b>Prescriptions</b>	The information on <b>prescriptions</b> 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.
<b>Patient co-payment</b>	Under the PBS/RPBS the cost of prescription medicines is subsidised by the Commonwealth 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 January 2019 the co-payment was \$40.30 (general) and \$6.50 (concessional).
<b>Subsidised prescriptions</b>	A PBS/RPBS prescription is <b>subsidised</b> 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.
<b>Under co-payment prescriptions</b>	A PBS/RPBS prescription is classified as <b>under co-payment</b> 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.

## References

WHO 2019. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed 18 November 2019, <[http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)>