

## Mental health-related prescriptions

This section presents information on [prescriptions](#) for mental health-related [medications](#). In this 2012–13 update, data on both subsidised and under co-payment (non-subsidised) mental health-related medications are presented for the first time based on a single source. Information on prescribed mental health-related medications subsidised by the Australian Government through the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS) has been presented in past years based on Medicare records (DoH 2013). Information on non-subsidised (under co-payment) mental health-related medications was previously obtained from the Drug Utilisation Sub-Committee (DUSC) database (DoHA 2012). However, from 1 April 2012 changes to the National Health Act 1953 required prescription data for items priced below the patient co-payment to be supplied by pharmacists to the Department of Human Services. As a result, data on non-subsidised medications are now available from the Department of Human Services and allow comparison with data for subsidised medications.

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.

### Key points

- There were 31.1 million prescriptions for mental health-related medications (subsidised and under co-payment) in 2012–13, accounting for 11.4% of all prescriptions.
- There were a total of 23.7 million prescriptions for subsidised mental health-related medications in 2012–13, comprising almost three quarters (76%) of the total number of prescriptions.
- 86% of the mental health-related prescriptions (subsidised and under co-payment) were provided by GPs, with 8% being prescribed by psychiatrists and 6% by non-psychiatrist specialists.
- Antidepressant medications accounted for 66% of total (subsidised and under co-payment) prescriptions.
- Females, those aged 65 and over and those people living in *Inner regional* areas had the highest mental health-related prescription and patient rates per 1,000 population.

There were 272 million prescriptions (subsidised and under co-payment) in 2012–13 (DOH 2013), of which 31.1 million (11.4%) were for mental health-related medications. This is equivalent to 1,292 mental health-related prescriptions per 1,000 population. These prescriptions for mental health-related medications were provided to 3.6 million patients, which equates to 151 patients per 1,000 population. Combining these data, there were an average of 8.6 prescriptions per patient in 2012–13.

There was a total of 23.7 million subsidised mental health-related prescriptions for 2.5 million patients, an average of 9.6 prescriptions per patient in 2012–13.

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### References

DoH (Department of Health) 2014. Schedule of Pharmaceutical Benefits, various issues, Canberra: Commonwealth of Australia. Viewed 3 March 2014, <<http://www.pbs.gov.au/info/publication/schedule/archive>>.

DoH 2013. Expenditure and Prescriptions Twelve Months to 30 June 2013. Viewed June 2014, <<http://www.pbs.gov.au/info/statistics/expenditure-and-prescriptions-30-06-2013>>

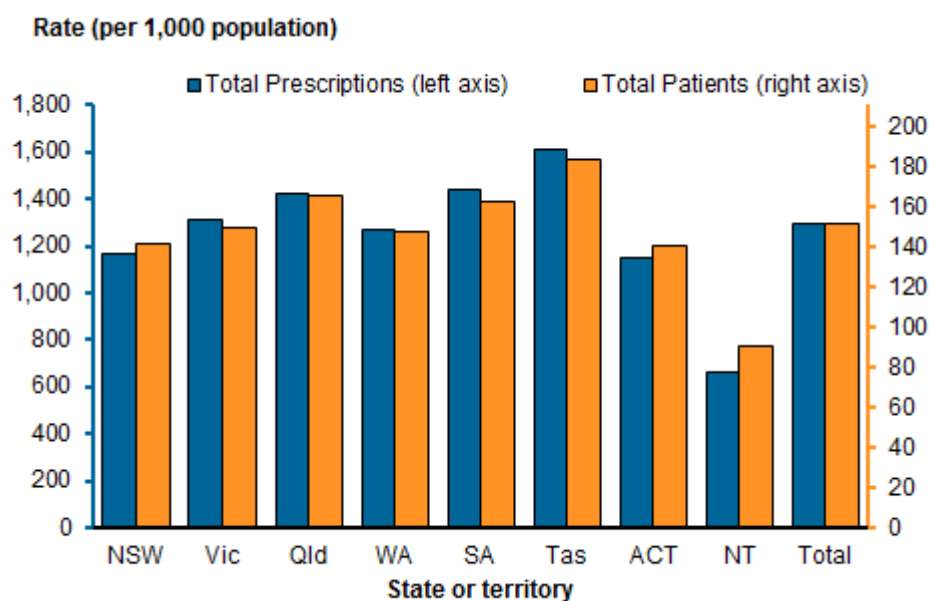
DoHA 2012. Australian statistics on medicines 2010. Canberra: Commonwealth of Australia.

DHS 2013. Annual Report 2012-13, Canberra: Commonwealth of Australia. Viewed 5 March 2014, <<http://www.humanservices.gov.au/corporate/publications-and-resources/annual-report/resources/1213/chapter-05/pharmaceutical-benefits-scheme>>

## States and territories PBS/RPBS prescriptions

The annual rate of PBS- and RPBS prescriptions (subsidised and under co-payment) per 1,000 population was relatively low in the Australian Capital Territory (736.8 subsidised and 1,146.5 total prescriptions per 1,000 population) when compared to the national average (975.8 subsidised and 1,292.0 total prescriptions). Tasmania had a considerably higher rate of prescriptions than the national average (1,267.5 subsidised and 1,613.2 total prescriptions per 1,000 population). The jurisdictional rates of patients receiving these medications (per 1,000 population) showed a similar pattern to the rates of prescriptions (Figure PBS.1)..

**Figure PBS.1: Mental health-related prescriptions (subsidised and under co-payment) and patients (recipients of subsidised and under co-payment), by states and territories, 2012–13**



*Note:* A substantial proportion of the Australian Government subsidy of pharmaceuticals in the Northern Territory is funded through the Aboriginal Health Service program, which is supplied through the Aboriginal Health Services and not through the PBS payment system. Figures presented for the Northern Territory represent an underestimate.

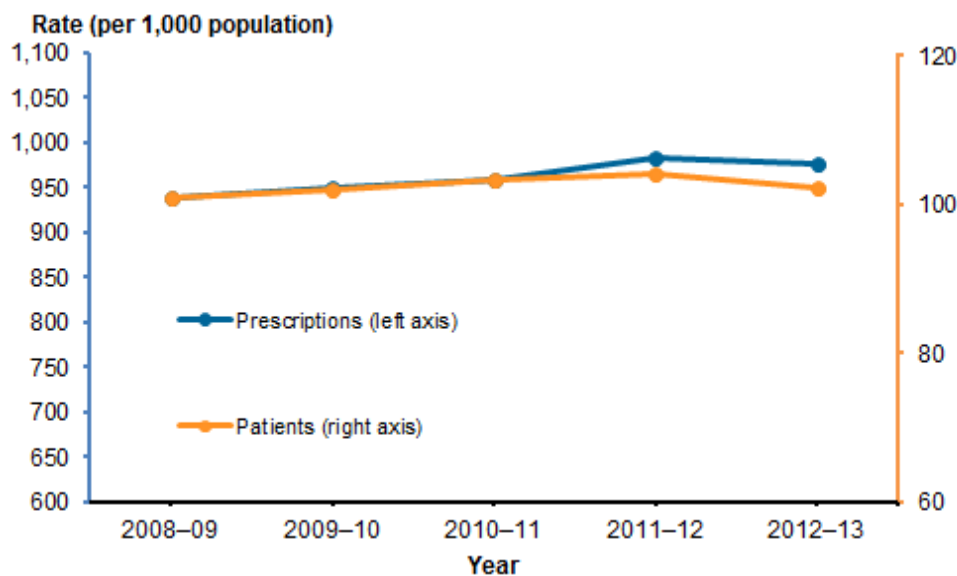
*Sources:* Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health). Source data mental health-related prescriptions Table PBS.3 & Table PBS.7 (245KB XLS).

**Alt text:** Bar chart showing the rate of mental health-related prescriptions (both subsidised and under co-payment) and patients per 1,000 population, by jurisdiction in 2012-13. Prescription rates are on the left axis and patient rates on the right axis. Tasmania had the highest rate of prescriptions (1,613.2) and patients (184.1), while the NT had the lowest rate of prescriptions (666.2) and patients (90.7). The national average prescription rate was 1,292.0 and the patient rate was 151.4. Refer to Table PBS.3 & 7.

## PBS/RPBS subsidised prescriptions over time

The rate of PBS- and RPBS-subsidised mental health-related prescriptions and patients per 1,000 population declined slightly between 2011–12 and 2012–13 after steady growth over the previous 4 years (Figure PBS.2). In 2012–13, the rate of prescriptions per 1,000 population was 975.8, down 0.6% on the previous year, while the patients rate was 102.3 per 1,000 population, down 1.6%. Data on under co-payment prescriptions have only been collected on the same basis as subsidised prescriptions data since 1 April 2012 and so time series data are not yet available.

**Figure PBS.2: Mental health-related subsidised prescriptions and patients, 2008–09 to 2012–13**



Sources: Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health). Source data mental health-related prescriptions Table PBS.4 & Table PBS.8 (245KB XLS).

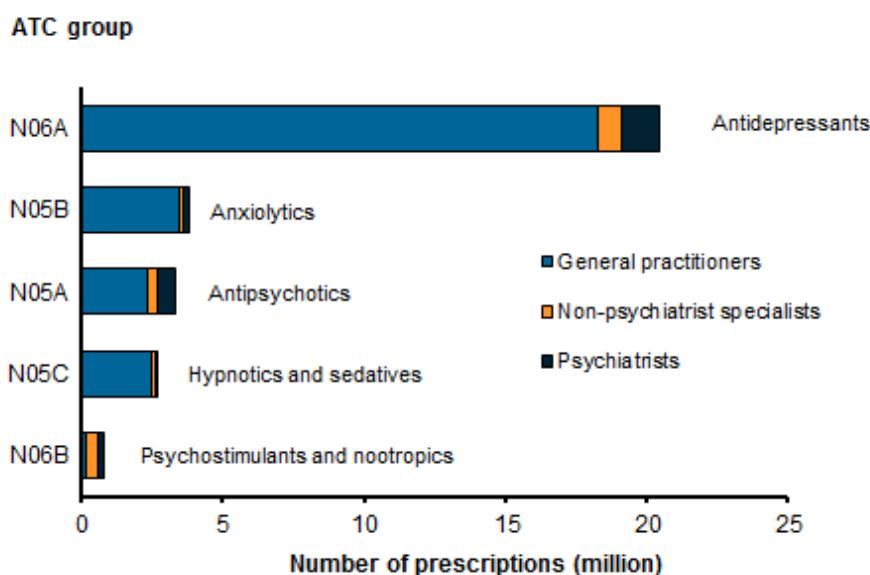
**Alt text:** Line chart showing the rate of mental health-related subsidised prescriptions and patients per 1,000 population between 2008–09 and 2012–13. Prescription rates are displayed on the left axis and patient rates are displayed on the right axis. Mental health-related subsidised prescription and patient rates increased from 2008–09 to 2011–12 and slightly decreased in 2012–13. Refer to Table PBS.4 & 8.

## PBS/RPBS prescription characteristics

Of the 31.1 million mental health-related prescriptions (subsidised and under co-payment), the majority (86.0%) were prescribed by GPs, with another 7.9% prescribed by psychiatrists and 6.1% by non-psychiatrist specialists. These percentages were very similar when considering only subsidised prescriptions.

The majority of prescriptions were for antidepressant medications (65.9%, or 20.5 million), followed by anxiolytics (12.2%), antipsychotics (10.6%) and hypnotics and sedatives (8.7%) (Figure PBS.3). When considering subsidised prescriptions only, a similar pattern was observed. However, the percentage of subsidised antidepressant medications prescribed was slightly lower (61.8%) than the percentage of total antidepressant medications (65.9%).

**Figure PBS.3: Mental health-related prescriptions (subsidised and under co-payment), by ATC group of medication prescribed and prescribing medical practitioner, 2012–13**

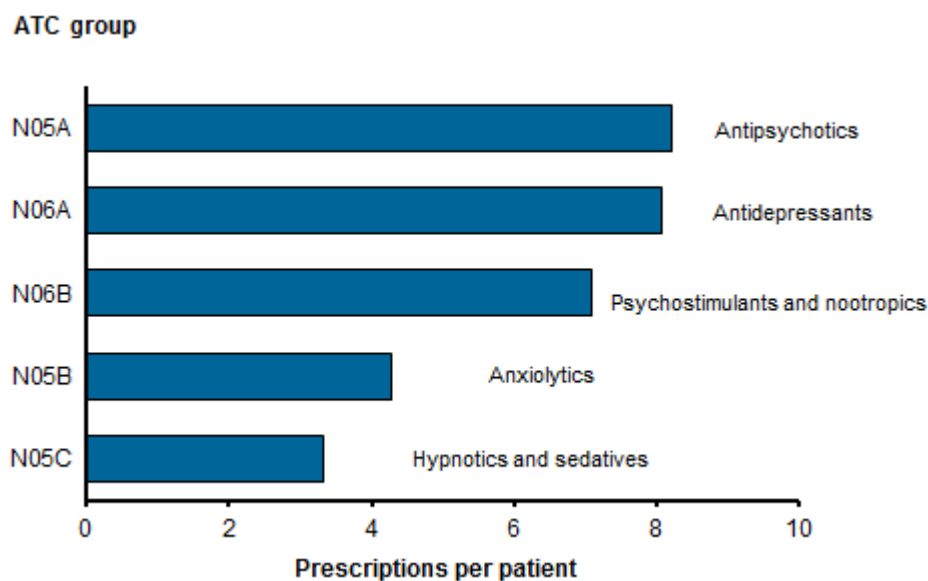


Sources: Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health); Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2011). Source data mental health-related prescriptions Table PBS.2 (245KB XLS).

**Alt text:** Stacked horizontal bar chart showing the number of mental health-related prescriptions (subsidised and under co-payment), by ATC group of medication prescribed and prescribing medical practitioner for 2012–13. General practitioners prescribed the greatest number of mental health related prescriptions, followed by psychiatrists and non-psychiatrist specialists. Antidepressants were the most frequently prescribed medication, followed by anxiolytics and antipsychotics. Refer to Table PBS.2.

Antipsychotics and antidepressants had the highest rate of prescriptions per patient (8.2 and 8.1 respectively). The prescription category psychostimulants and nootropics, which had the least number of prescriptions, had the third highest rate of prescriptions per patient (7.1) in 2012–13 (Figure PBS.4). A similar pattern was observed for subsidised prescriptions only.

**Figure PBS.4: Mental health-related prescriptions (subsidised and under co-payment) per patient, by ATC group of medication prescribed, 2012–13**



Sources: Pharmaceutical Benefits Scheme Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health); Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2011). Source data mental health-related prescriptions Table PBS.2 (245KB XLS).

**Alt Text:** Horizontal bar chart showing the number of mental health-related prescriptions (subsidised and under co-payment) per patient, by ATC group of medication prescribed for 2012-13. Antipsychotics had the greatest number of prescriptions per patient (8.2) followed by antidepressants (8.1) psychostimulants and nootropics (7.1), anxiolytics (4.3) and hypnotics and sedatives (3.3). Refer to Table PBS. 2.

There was variation in the rate of patients and prescriptions by sex, age and remoteness area. Females, those aged 65 and over and those people living in *Inner regional* areas had the highest mental health-related prescription and patient rates per 1,000 population. This variation was observed for total prescriptions (subsidised and under co-payment) and subsidised only prescriptions.

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## Reference

WHO (World Health Organization) 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed March 2014, [http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)

## Data source

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

The Department of Human Services provides data on prescriptions funded through the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) to the Department of Health. 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 processed by Medicare 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.

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

- They refer only to prescriptions scripted by registered medical practitioners who are approved to work within the PBS and RPBS and to paid services processed from claims presented by approved pharmacists who comply with certain conditions. They exclude adjustments made against pharmacists' claims, any manually paid claims or any benefits paid as a result of retrospective entitlement or refund of patient contributions.
- Until 1 April 2012 the PBS and RPBS data supplied by the Department of Health excluded non-subsidised medications, such as private and under co-payment prescriptions (where the patient co-payment covers the total costs of the prescribed medication) and over-the-counter medications. As of 1 April 2012, under co-payment prescription data are supplied directly to the Department of Human Services (DHS 2013). This permits a more accurate count of this data, similar in quality to that of PBS and RPBS data, so they can be incorporated in the same tables. However, a time series presentation of these data is not possible at this time and comparison with the data from the previously used Drug Utilisation Sub-Committee (DUSC) database should be interpreted with caution as the DUSC survey methodology may have been an underestimate of under co-payment prescription volumes.
- The number of patients dispensed with under co-payment prescriptions cannot be derived by subtracting the number of subsidised prescriptions from the total number of prescriptions. This is due to double counting as a number of patients receiving under co-payment prescriptions may also have received subsidised prescriptions. Tables for prescription numbers also show data in this way (subsidised and total) so that they are compatible with patient number tables.
- The level of the co-payment increases annually and drug prices can reduce for a variety of factors (for example, patent changes), which means that some medicines that were captured in previous years might fall below the co-payment level and thus be excluded from the subsidised category in following years.
- Programs funded by the PBS that do not use the Medicare PBS processing system include
  - most Section 100 drugs funded through public hospitals (although the pharmaceutical reform measures for public hospitals under the National Healthcare Agreement and the Chemotherapy Pharmaceutical Access Program are paid through Medicare)
  - Aboriginal health services program
  - Opiate Dependence Treatment Program
  - Special Authority Program
  - Botox (including Dysport)
  - in vitro fertilisation
  - human growth hormones.

Only one of these has a significant 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.

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 2011). There are two differences between the WHO ATC classification and the PBS Schedule classification that have a bearing on mental health data. Prochlorperazine is regarded as an other antiemetic (A04AD) in the PBS Schedule while it is an antipsychotic according to the WHO classification. This means that information on prochlorperazine will not appear in the data provided as it is not classed as an N code in the PBS Schedule. Lithium carbonate on the other hand is classified as an antidepressant in the PBS Schedule while it is an antipsychotic 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).

#### **DataSource PBS.1 Differences between the WHO ATC classification and the PBS Schedule of Pharmaceutical Benefits classification**

<b>Drug name</b>	<b>WHO ATC Code</b>	<b>PBS Schedule Code</b>	<b>Scripts dispensed in 2012–13<sup>(a)</sup></b>
Prochlorperazine	N05AB04	A04AD	591,597
Lithium carbonate	N05AN01	N06AX	98,734

(a) Prescriptions data using date of service basis.

Source: DHS (Department of Human Services) 2014. Pharmaceutical Benefits Schedule Item Reports website, Canberra: Commonwealth of Australia. Viewed 2 June 2014, <[https://www.medicareaustralia.gov.au/statistics/pbs\\_item.shtml](https://www.medicareaustralia.gov.au/statistics/pbs_item.shtml)>

To avoid double counting in the demographic tabulations, patients are allocated to the last category in which they appear. The category most affected by this will be age group as age is calculated at the time of supply, and patients' ages will be one year greater for prescriptions supplied after their birthday than before it.

State and territory are determined by DoH according to the patient's residential address. If the patient's state or territory is unknown, then the state or territory of the pharmacy supplying the item is reported.

Unless otherwise indicated, the year was determined from the date the service was processed by Medicare, rather than the date of prescribing or the date of supply by the pharmacy.

#### **Reference**

WHO (World Health Organization) 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed March 2014, [http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)

DHS (Department of Human Services) 2013. Collection of under co-payment prescription data, Canberra: Commonwealth of Australia. Viewed 26 March 2013,

<[http://www.medicareaustralia.gov.au/provider/pbs/pharmacists/collection\\_of\\_under\\_co-payment\\_prescription\\_data.jsp](http://www.medicareaustralia.gov.au/provider/pbs/pharmacists/collection_of_under_co-payment_prescription_data.jsp)>.

## 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 2011), namely antipsychotics (code N05A), anxiolytics (code N05B), hypnotics and sedatives (code N05C), antidepressants (code N06A), and psychostimulants 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 together with under co-payment prescription data supplied to the Department of Human Services and refers to medications prescribed by medical practitioners and subsequently dispensed in community pharmacies (or, for Section 100 drugs, by hospital pharmacies). Consequently, it is a count of medications dispensed rather than a count of the prescriptions written by medical practitioners.

### References

WHO (World Health Organization) 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed March 2014, [http://www.whocc.no/atc/structure\\_and\\_principles/](http://www.whocc.no/atc/structure_and_principles/)