Mental health-related prescriptions

This section presents information on prescriptions for mental health-related medications; both subsidised and under co-payment. Mental health-related medications reported in this section comprise antipsychotics, anxiolytics, hypnotics and sedatives, antidepressants, and psychostimulants and nootropics prescribed by all medical practitioners. Trend data for the period 2011–12 to 2015–16 are limited to subsidised mental health-related medications, because under co-payment data were not available from the Department of Human Services prior to 1 April 2012.

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 36.0 million prescriptions for mental health-related medications (subsidised and under co-payment) provided to just over 4.0 million patients in 2015–16, equating to an average of 9.0 prescriptions per patient.
- There were a total of 24.2 million prescriptions for subsidised mental health-related medications in 2015–16, which was nearly 7 in 10 (67.2%) of the total number of mental health-related prescriptions.
- 87.6% of the mental health-related prescriptions (subsidised and under co-payment) were provided by GPs, with 8.0% being prescribed by psychiatrists and 4.4% by non-psychiatrist specialists in 2015–16.
- Antidepressant medications accounted for 68.7% of total mental health-related (subsidised and under co-payment) prescriptions in 2015–16.
- Females, those aged 65 and over and those people living in *Inner regional* areas had the highest mental health-related prescription and patient rates.

Data in this section were last updated in May 2017.

There were 36.0 million prescriptions for mental health-related medications (subsidised and under co-payment) in 2015–16. This is equivalent to 1,503.9 mental health-related prescriptions per 1,000 population. These prescriptions were provided to 4.0 million patients, which equates to 167.6 patients per 1,000 population (or 16.7% of Australians). There were an average of 9.0 prescriptions per patient in 2015–16 (Table PBS.6).

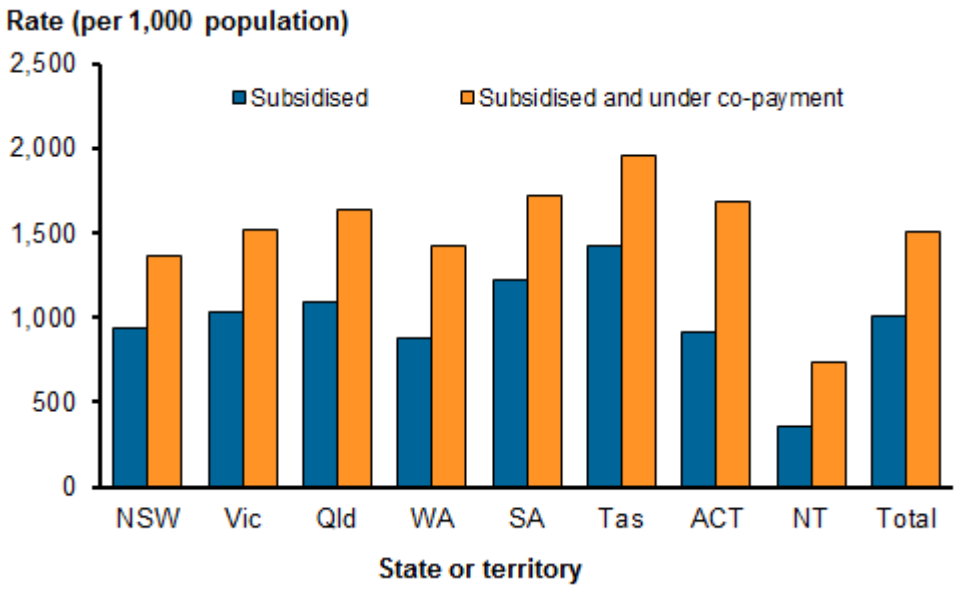
Of the 36.0 million mental health related prescriptions, 24.2 million were subsidised prescriptions provided to 2.4 million patients; an average of 9.9 prescriptions per patient in 2015–16.

Prescription patterns

States and territories

Western Australia (878.3 subsidised per 1,000 population) and New South Wales (1,365.6 subsidised and under co-payment prescriptions) had the lowest rate of PBS and RPBS prescriptions per 1,000 population (excluding the Northern Territory – see the Note accompanying Figure PBS.1) compared to the national averages (1,010.0 subsidised and 1,503.9 subsidised and under co-payment prescriptions). Conversely, Tasmania had the highest rate of prescriptions (1,420.5 subsidised and 1,957.5 subsidised and under co-payment prescriptions per 1,000 population) (Figure PBS.1). The rates of patients receiving these medications (per 1,000 population) showed a similar pattern to the prescription rates (Figure PBS.2).

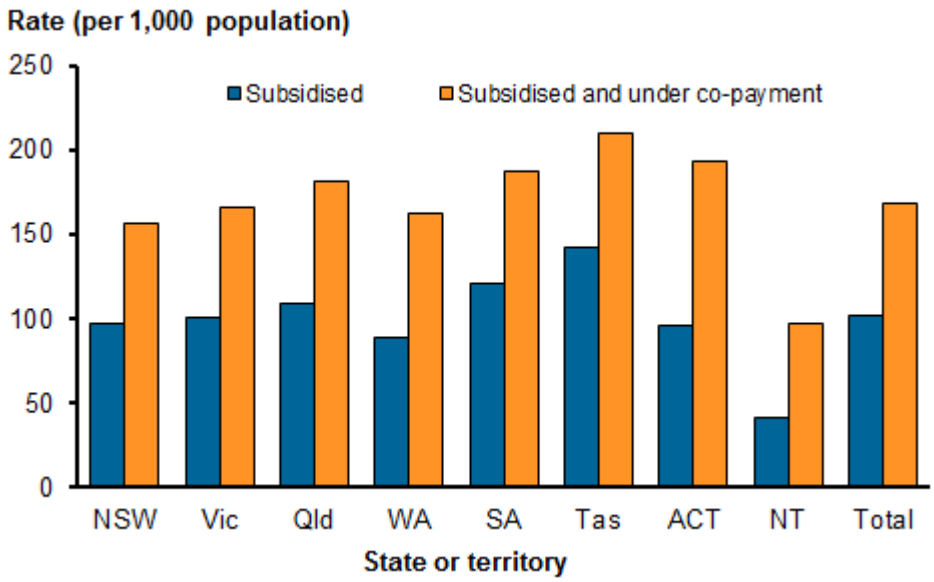
Figure PBS.1: Mental health-related prescriptions (subsidised and subsidised and under co-payment), by states and territories, 2015–16



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 (253KB XLS).

Figure PBS.2: Mental health-related patients (recipients of subsidised and subsidised and under co-payment), by states and territories, 2015–16



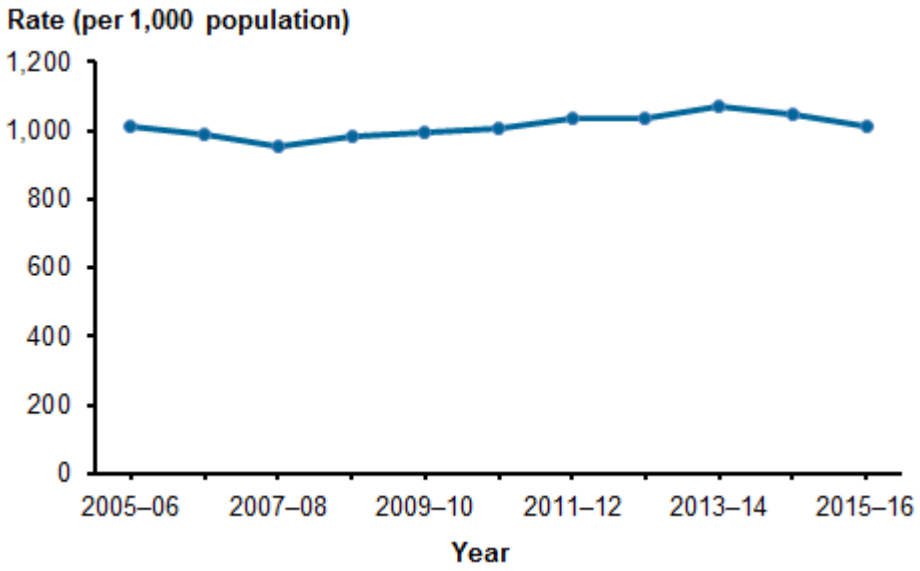
Note: A substantial proportion of the Australian Government subsidy of pharmaceuticals in the Northern Territory is funded through the Aboriginal Health Service program, which is supplied through the Aboriginal Health Services and not through the PBS payment system. Figures presented for the Northern 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.7 (253KB XLS).

Over time

For the period 2011–12 to 2015–16, the rate (per 1,000 population) of patients receiving PBS and RPBS subsidised mental health-related prescriptions declined by an average annual rate of 1.9% (Table PBS.8). The rate of prescriptions decreased by an annual average of 0.7% over the same period (Table PBS.4). The longer term data available in these tables indicates that the rate of patients receiving mental health-related subsidised prescriptions has decreased from 118.1 in 2005–06 to 101.6 in 2015–16 (Figure PBS.4), while the rate of prescriptions has remained relatively stable (Figure PBS.3).

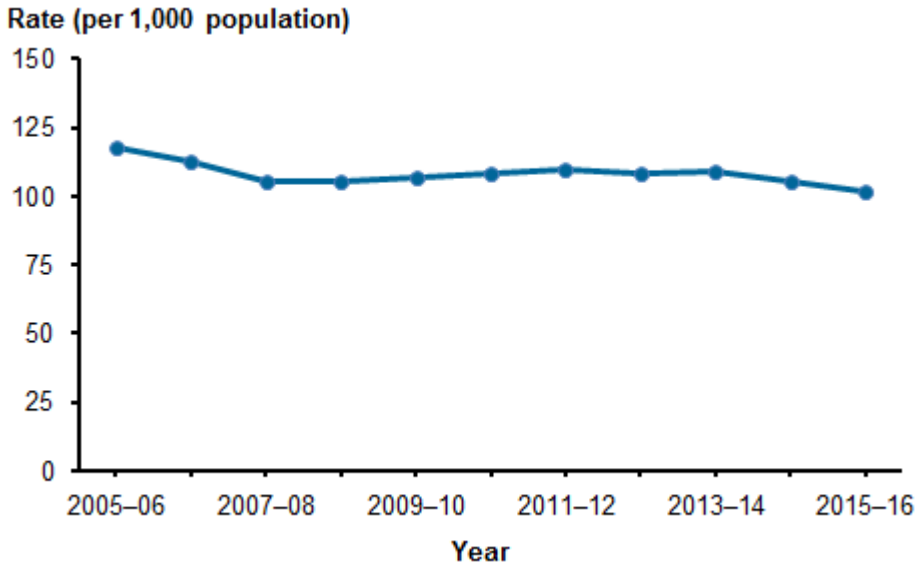
Figure PBS.3: Mental health-related subsidised prescriptions, 2005–06 to 2015–16



Note: The rates presented are crude rates.

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 (248KB XLS).

Figure PBS.4: Patients receiving mental health-related subsidised prescriptions, 2005–06 to 2015–16



Note: The rates presented are crude rates.

Sources: Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health). Source data: Mental health-related prescriptions Table PBS.8 (253KB XLS).

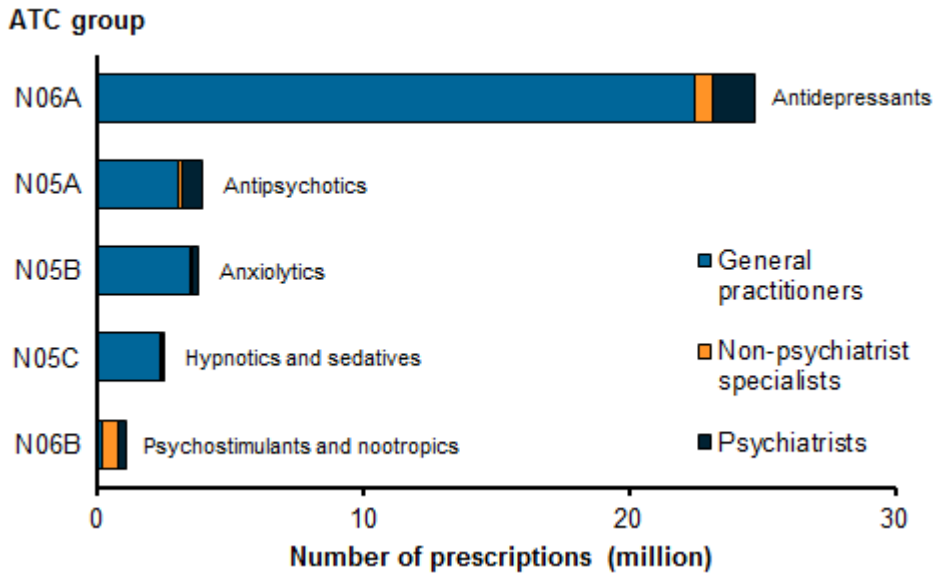
Data on subsidised and under co-payment prescriptions have only been collected using a consistent methodology since 2012. These data will be published as time series in the future when sufficient data becomes available.

Prescription characteristics

Of the 36.0 million mental health-related prescriptions (subsidised and under co-payment) provided in 2015–16, the majority (87.6%) were prescribed by GPs, with another 8.0% prescribed by psychiatrists and 4.4% by non-psychiatrist specialists (Table PBS.2). These percentages were very similar when considering only subsidised prescriptions.

The majority of prescriptions were for antidepressant medications (68.7%, or 24.7 million), followed by antipsychotics (10.9%), anxiolytics (10.5%) and hypnotics and sedatives (6.9%) (Figure PBS.5). When considering subsidised prescriptions only, a similar pattern was observed.

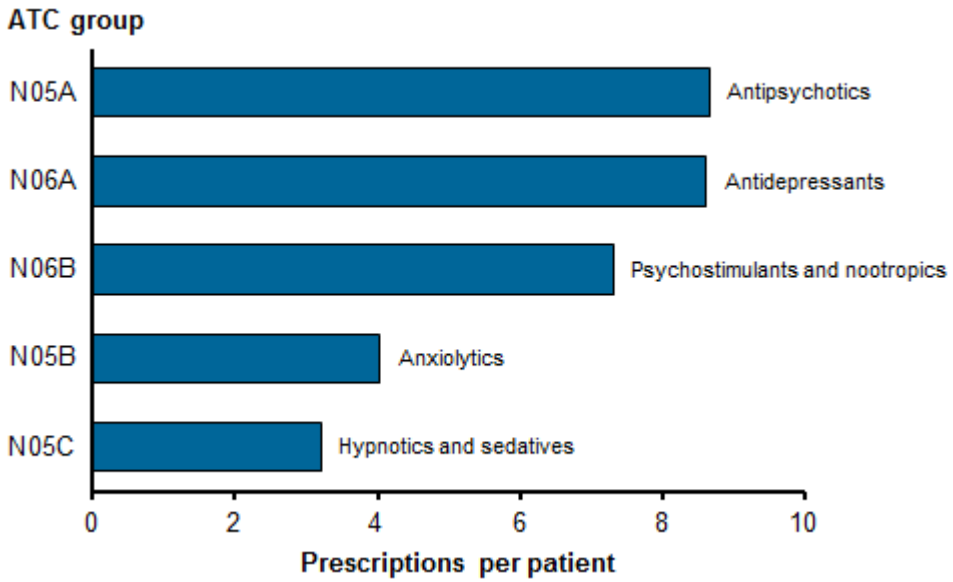
Figure PBS.5: Mental health-related prescriptions (subsidised and under co-payment), by ATC group of medication prescribed and prescribing medical practitioner, 2015–16



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 (253KB XLS).

Antipsychotics and antidepressants had the highest rate of prescriptions per patient (8.6 for both) in 2015–16. The prescription category psychostimulants and nootropics had the least number of prescriptions, but had the third highest rate of prescriptions per patient (7.3) (Figure PBS.6). A similar pattern was observed for subsidised prescriptions only.

Figure PBS.6: Mental health-related prescriptions (subsidised and under co-payment) per patient, by ATC group of medication prescribed, 2015–16



Sources: Pharmaceutical Benefits Scheme Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health); Anatomical Therapeutic Chemical (ATC) Classification System (WHO 2011).

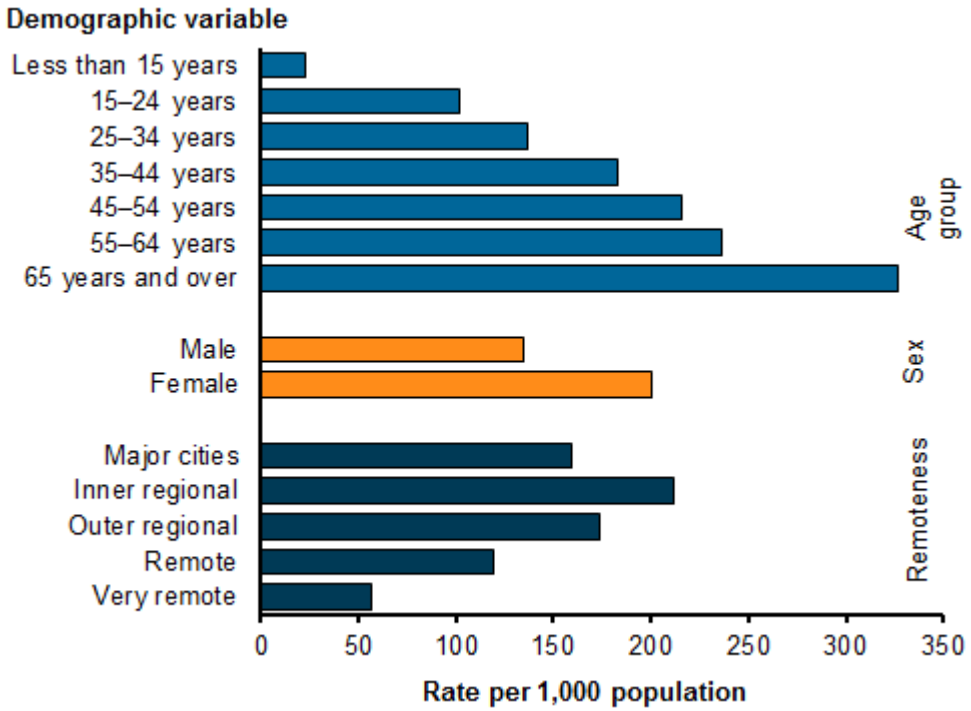
Source data mental health-related prescriptions Table PBS.2 (253KB XLS).

There was variation observed in the rate of patients and prescriptions by sex, age and remoteness area. Females (1,823.2 and 200.3 per 1,000 population), those aged 65 and over (3,062.5 and 327.1 per 1,000) and those people living in *Inner regional* areas (1,964.3 and 211.8 per 1,000) had the highest mental health-related prescription and patient rates per 1,000 population for subsidised and co-payment mental health-related prescriptions. This variation among the population groups was similar for subsidised prescriptions (Table PBS.6).

Patient characteristics

In 2015–16, patients 65 years and over (327.1 people per 1,000 population) had the highest rate of mental health-related prescriptions (subsidised and under co-payment) (Figure PBS.7) (Table PBS.6). The rate of females receiving health-related prescriptions was around 1.5 times the rate for males (200.3 and 134.5 per 1,000 population respectively).

Figure PBS.7: Mental health-related prescriptions (subsidised and under co-payment), by patient characteristics, 2015–16



Sources: Pharmaceutical Benefits Scheme, Repatriation Pharmaceutical Benefits Scheme and under co-payment data (Department of Health).

Source data: mental health-related prescriptions Table PBS.6 (253KB XLS).

Reference

WHO (World Health Organization) 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed January 2017, <http://www.whocc.no/atc/structure_and_principles/>

Data source

Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme data

Information for dispensed mental health-related prescriptions is sourced through the Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS). Through both of these schemes, Medicare Australia makes payments to subsidise pharmaceutical products listed in the Schedule of Pharmaceutical Benefits.

The Department of Human Services (DHS) provides data on prescriptions funded through the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) to the Department of Health. Government subsidy is applied when the cost of a medication dispensed at a pharmacy exceeds the patient co-payment threshold. The patient co-payment threshold is set each year by the Australian Government depending on income, age, health status and certain other factors. The PBS and RPBS cover the gap between the full cost of the medication and the patient co-payment threshold (subsidised medicine). The medicines listed in PBS and RPBS at below co-payment threshold are fully paid by the patient (under co-payment medicine).

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 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.

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 to the AIHW 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 April 2012, under co-payment prescription data are supplied directly to the DHS (DoH 2014). This permits a more accurate count of these 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 which occurs due to a number of patients receiving under co-payment prescriptions who are also receiving 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 DHS PBS processing system include:
    - Most Section 100 drugs funded through public hospitals (although the pharmaceutical reform measures for public hospitals under the National Health Reform Agreement and the Chemotherapy

Pharmaceutical Access Program are paid through Medicare). (Note that the funding arrangements for Section 100 drugs supplied through public hospitals ceased as of 1 July 2015)

- 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 another 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).

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 2015–16[(a)]
Prochlorperazine	N05AB04	A04AD	586,284
Lithium carbonate	N05AN01	N06AX	108,034

(a) Prescriptions data using date of service basis.
Source: DHS (Department of Human Services) 2017.

To avoid double counting patients are allocated to the last category in which they appear. The reporting 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 the Department of Health 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 2011. ATC: Structure and principles. Oslo: WHO Collaborating Centre for Drug Statistics Methodology. Viewed February 2017, <http://www.whocc.no/atc/structure_and_principles/>

DHS (Department of Human Services) 2017. Pharmaceutical Benefits Schedule Item Reports website, Canberra: Commonwealth of Australia. Viewed 1 February 2017, < http://medicarestatistics.humanservices.gov.au/statistics/pbs_item.jsp >

DoH 2014. Pharmaceutical Benefits Scheme Collection of Under Co-payment Data. Viewed 1 February 2017 <http://www.pbs.gov.au/info/statistics/under-co-payment/under-co-payment-data >.

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 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) (WHO 2016).
Prescriptions	The information on **prescriptions** 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 April 2016, http://www.whocc.no/atc/structure_and_principles/

WHO 2016. Lexicon of alcohol and drug terms published by the World Health Organization. Viewed May 2016, http://www.who.int/substance_abuse/terminology/who_lexicon/en/