

5.4 Antipsychotic medicines dispensing, 18–64 years

Context

This section examines antipsychotic medicines dispensing for people aged 18–64 years between 2013–14 and 2016–17.

Antipsychotic medicines are used to manage psychotic disorders such as schizophrenia, and the psychotic symptoms of mood disorders. In adults, antipsychotic medicines are commonly used to reduce or sometimes eliminate the distressing and disabling symptoms of psychosis, such as paranoia, confused thinking, delusions and hallucinations.

Effective treatment of schizophrenia and related disorders usually includes ongoing clinical support in the community and psychological therapy, including education about symptoms and how to manage them, psychosocial rehabilitation, assistance with accommodation and employment, and educational support. Antipsychotic medicines are considered to be just one component of treating mental health conditions and rarely considered sufficient when used on their own.¹

The rate of antipsychotic medicines dispensing per 100,000 people aged 18–64 years was mapped in the first *Australian Atlas of Healthcare Variation*, published in November 2015. The first Atlas reported that, in 2013–14, just over 2.5 million Pharmaceutical Benefits Scheme (PBS) prescriptions for antipsychotic medicines were dispensed in Australia to people aged 18–64 years. Dispensing rates were lower than for people aged 65 years and over. Rates were similar in major cities and regional areas, but higher rates were observed in areas with socioeconomic disadvantage. Dispensing rates were lower in remote communities, which was partly attributed to medicines dispensed by remote-area Aboriginal health services not being captured in the PBS database.¹

Antipsychotic medicines dispensing, 18–64 years

Why is it important to monitor antipsychotic medicines use nationally?

Improving use of antipsychotic medicines in this age group is of national importance because of the wide variation in use across Australia. Of particular concern is that these medicines are being inappropriately prescribed to manage sleep disorders, which is outside their approved indication for use.^{1–3}

What initiatives have taken place since 2015?

Since 2015, initiatives to improve use of antipsychotic medicines in people aged 18–64 years have been undertaken as part of a wider strategy to improve the management of mental health conditions in Australia. The National Mental Health Commission, which was established in 2012, continues to provide advice on ways to improve Australia's mental health and acts as a catalyst for change.⁴ In 2016, the Australian Bureau of Statistics published *Patterns of Use of Mental Health Services and Prescription Medications, 2011*.⁵ Regulatory changes have also been made to the number of repeat supplies that can be ordered on prescriptions for low-dose quetiapine.

About the data

Data are sourced from the PBS dataset. This dataset includes all prescriptions dispensed under the PBS or the Repatriation Pharmaceutical Benefits Scheme, including prescriptions that do not receive an Australian Government subsidy. Note that some dispensed medicines may not be consumed by the patient.

The dataset does not include prescriptions dispensed for patients during their hospitalisation in public hospitals, discharge prescriptions dispensed from public hospitals in New South Wales and the Australian Capital Territory, direct supply of medicines to remote Aboriginal health services, over-the-counter purchase of medicines, doctor's bag medicines and private prescriptions.

The PBS data do not include prescriptions for clozapine dispensed by public hospitals and claimed through offline arrangements up to 2014–15. The Technical Supplement has further details about clozapine prescriptions.

This analysis was not undertaken by Aboriginal and Torres Strait Islander status because this information was not available for PBS data at the time of publication.

Changes have been made to the data specification used in the first Atlas to improve the robustness of comparing rates over time. The main change is the addition of sex standardisation, as the data specification for the first Atlas standardised for age only. These changes have resulted in small differences in the rates reported for 2013–14 in the first Atlas and this Atlas. The rates reported in this Atlas should be used to monitor changes over time.

What do the data show?

Magnitude of variation*

In 2016–17, the rate of dispensing of antipsychotic medicine prescriptions in people aged 18–64 years was **14.1 times as high** in the area (Statistical Area Level 3 – SA3) with the highest rate as in the SA3 with the lowest rate. The magnitude of variation **decreased** from 2013–14, when there was an 18.5-fold difference between the highest and lowest rates (Figure 5.13).

Rate of prescriptions dispensed

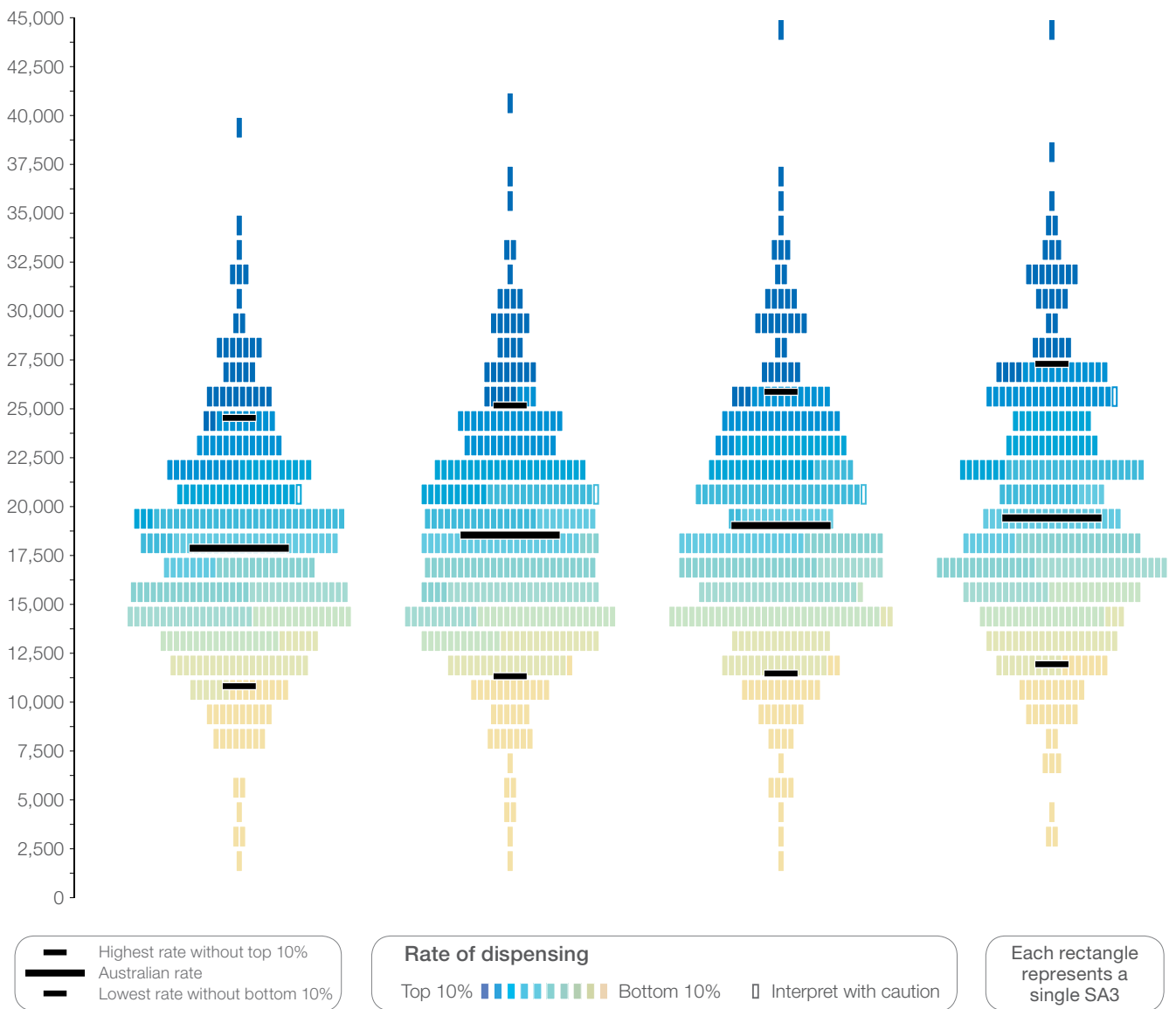
In 2016–17, there were 2,908,555 PBS prescriptions dispensed for antipsychotic medicines to people aged 18–64 years, representing an Australian rate of **19,420** prescriptions dispensed per 100,000 people aged 18–64 years. The Australian rate **increased** during the four years from 2013–14, when 17,873 prescriptions per 100,000 people were dispensed (Figure 5.13).

* Some of the published SA3 rates were considered more volatile than others. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

Rates across years

Figure 5.13: Number of PBS prescriptions dispensed for antipsychotic medicines per 100,000 people aged 18–64 years, age and sex standardised, by Statistical Area Level 3 (SA3) of patient residence, 2013–14 to 2016–17

	2013–14	2014–15	2015–16	2016–17
Highest rate	39,283	41,104	43,795	44,085
Australian rate	17,873	18,544	19,032	19,420
Lowest rate	2,126	2,006	2,297	3,124
Magnitude of variation	18.5	20.5	19.1	14.1
Magnitude of variation without top & bottom 10%	2.3	2.2	2.3	2.3



Notes:

Hollow rectangles (□) indicate rates that are considered more volatile than other published rates and should be interpreted with caution. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia. For further detail about the methods used, please refer to the Technical Supplement.

Sources: AIHW analysis of Pharmaceutical Benefits Scheme data and ABS Estimated Resident Population 30 June 2013 to 2016.

Antipsychotic medicines dispensing, 18–64 years

People dispensed at least one prescription

In 2016–17, there were **2,074** people per 100,000 people aged 18–64 years nationally who had at least one prescription dispensed for an antipsychotic medicine. The number of people who had at least one prescription dispensed in a year **increased** during the four years from 2013–14, when 1,975 people per 100,000 people nationally had at least one antipsychotic medicine prescription dispensed (Table 5.14).

Table 5.14: Number of people dispensed at least one PBS prescription for an antipsychotic medicine per 100,000 people aged 18–64 years, age and sex standardised, 2013–14 to 2016–17

	2013–14	2014–15	2015–16	2016–17
Australian rate	1,975	2,006	2,046	2,074

Estimated proportion of population treated daily with antipsychotic medicines

In 2016–17, there were 15.23 defined daily doses[†] (DDDs) of antipsychotic medicines per 1,000 people aged 18–64 years dispensed on any given day – this is equivalent to 1.5% of the population receiving an antipsychotic medicine each day in that year. The national DDD rate per 1,000 people per day **increased** during the four years from 2013–14, when it was 14.06 (Table 5.15).

Table 5.15: Number of defined daily doses of antipsychotic medicines dispensed per 1,000 people aged 18–64 years per day, age and sex standardised, 2013–14 to 2016–17

	2013–14	2014–15	2015–16	2016–17
Australian rate	14.06	14.71	15.02	15.23

[†] A defined daily dose (DDD) is a measure of medicines use that allows comparison between different therapeutic groups, and between countries. The DDD is based on the average dose per day of the medicine when used for its main indication by adults. Refer to the Technical Supplement for more information.

Interpretation

Between 2013–14 and 2016–17, the rate of antipsychotic medicines dispensed per 100,000 people aged 18–64 years increased by 9% in Australia during the four-year period. The magnitude of variation in dispensing rates decreased from 2013–14, but was still high in 2016–17. The rate of people dispensed at least one prescription increased. The volume of antipsychotic medicines used in the Australian community in this age group, as indicated by the DDD per 1,000 people per day, increased, indicating that the overall amount of antipsychotic medicines supplied to people in this age group increased during the four-year period.

Potential reasons for this pattern include:

- The prevalence of mental health conditions in this age group
- The number of people in this age group seeking care
- Use in conditions other than psychosis
- Prescribing indications and behaviours, affecting the type of antipsychotic medicine chosen and dose dispensed (as doses for different indications will affect the DDD)
- Access to psychosocial interventions, mental health services, or psychiatric and psychological services.

To explore this, further analysis could potentially focus on:

- Types of antipsychotic medicines, reasons for prescribing and doses being prescribed
- Dispensing rates based on practitioner type to determine whether there is variation in prescribing between primary care and specialist care providers (currently under analysis by the Australian Commission on Safety and Quality in Health Care – the Commission)
- Dispensing rates excluding low-dose quetiapine, given concerns about its non-approved use as a sedative.

Is there more to be done?

Dispensing rates and the volume of antipsychotic medicines in the community on any given day in people aged 18–64 years continued to increase during the four years from 2013–14. It is unclear whether this reflects increased incidence of mental health conditions and diagnosis, improved access to medicines, or increased inappropriate use. Although variation in the magnitude of dispensing of antipsychotic medicines has fallen since 2013–14, it is still high. Further investigation is required to identify whether these patterns are unwarranted, and what ongoing vigilance is needed to promote safe and appropriate use of these medicines.

The Commission will publish a further analysis of these data in 2019, including analyses by state and territory, and local area; and an analysis by practitioner type. This information will help to identify what further targeted interventions are needed to improve the use of antipsychotic medicines.

Antipsychotic medicines dispensing, 18–64 years

References

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