

5.3 Antipsychotic medicines dispensing, 17 years and under

Context

This section examines antipsychotic medicines dispensing for children and adolescents aged 17 years and under between 2013–14 and 2016–17.

Antipsychotic medicines are primarily used to manage psychotic disorders such as schizophrenia, and the psychotic symptoms of mood disorders. They are used to reduce or sometimes eliminate the distressing and disabling symptoms of psychosis, such as paranoia, confused thinking, delusions and hallucinations. In adolescents, this is the most common use of these medicines.

In children and some adolescents, antipsychotic medicines are also used to treat a range of behavioural disturbances related to developmental and behavioural conditions, including autism spectrum disorder, attention deficit hyperactivity disorder and conduct disorder.

Effective management of psychosis and behavioural disorders usually includes ongoing clinical support in the community and psychological therapy, including family therapy, education about symptoms and how to manage them, 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 17 years and under was mapped in the first *Australian Atlas of Healthcare Variation*, published in November 2015.¹ The first Atlas reported that, in 2013–14, nearly 105,000 Pharmaceutical Benefits Scheme (PBS) prescriptions for antipsychotic medicines were dispensed in Australia to people aged 17 years and under. Variation was marked, with a 22.5-fold difference in rates of dispensing between local areas. Dispensing rates were similar in major cities and regional areas, and lowest in remote communities. Socioeconomic groupings had a small association with dispensing rates. Lower rates of dispensing of antipsychotic medicines in remote communities were partly attributed to medicines dispensed by remote-area Aboriginal health services not being captured in the PBS database.¹

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Why is it important to monitor antipsychotic medicines use nationally?

Antipsychotic medicines can cause long-term harm, even at low doses. It is therefore essential that these medicines are prescribed appropriately in young people to ensure that their benefits outweigh the risks. Use of antipsychotic medicines for non-approved indications, such as acute sedation in the absence of psychotic symptoms, is a particular concern.^{2,3}

What initiatives have taken place since 2015?

Since 2015, initiatives to improve use of antipsychotic medicines in people aged 17 years and under 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

Updated guidelines from the Royal Australian and New Zealand College of Psychiatrists – *Professional Practice Guideline 7: Guidance for psychotropic medication use in children and adolescents* (2015) – were also published.⁶ Mental health organisations such as Beyond Blue and the Black Dog Institute provide support to all people across Australia, including children and adolescents, who are living with a mental health condition. Other programs such as Headspace have been developed to specifically focus on supporting youth mental health.

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.

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What do the data show?

Magnitude of variation

In 2016–17, the rate of dispensing of antipsychotic medicine prescriptions in people aged 17 years and under was **19.8 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 a 23.5-fold difference between the highest and lowest rates (Figure 5.10).

Rate of prescriptions dispensed

In 2016–17, there were 117,511 PBS prescriptions dispensed for antipsychotic medicines to people aged 17 years and under, representing an Australian rate of **2,256** prescriptions per 100,000 people aged 17 years and under. The Australian rate **increased** during the four years from 2013–14, when 2,082 prescriptions per 100,000 people aged 17 years and under were dispensed (Figure 5.10).

People dispensed at least one prescription

In 2016–17, there were **438** people per 100,000 people aged 17 years and under nationally who had at least one prescription dispensed for an antipsychotic medicine. The number of people nationally who had at least one prescription dispensed in a year **increased** during the four years from 2013–14, when 393 people per 100,000 people aged 17 years and under nationally had at least one antipsychotic medicine prescription dispensed (Table 5.11).

Table 5.11: Number of people dispensed at least one prescription for an antipsychotic medicine per 100,000 people aged 17 years and under, age and sex standardised, 2013–14 to 2016–17

	2013–14	2014–15	2015–16	2016–17
Australian rate	393	407	423	438

Volume of antipsychotic medicines use in people aged 17 years and under

In 2016–17, there were 0.92 defined daily doses* (DDDs) of antipsychotic medicines per 1,000 people aged 17 years and under dispensed on any given day. The national DDD rate per 1,000 people aged 17 years and under per day **increased** during the four years from 2013–14, when it was 0.83 (Table 5.12).

Table 5.12: Number of defined daily doses of antipsychotic medicines dispensed per 1,000 people aged 17 years and under per day, age and sex standardised, 2013–14 to 2016–17

	2013–14	2014–15	2015–16	2016–17
Australian rate	0.83	0.86	0.90	0.92

* 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 17 years and under increased by 8% in Australia during the four-year period. The magnitude of variation in dispensing rates decreased, but was still high in 2016–17. The rate of people dispensed at least one prescription increased during the four years from 2013–14. 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, also 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:

- An increase in the prevalence of mental health conditions in this age group
- An increase in the number of people in this age group seeking care
- Changes to guidelines and prescribing behaviours, affecting the type of antipsychotic medicine chosen and the dose dispensed (as doses for different indications will affect the DDD)
- Changes in access to psychosocial interventions, mental health services, or psychiatric and psychological services.

To explore this, further analysis could potentially focus on:

- Types of antipsychotics, 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).

Is there more to be done?

Dispensing rates and the volume of antipsychotic medicines in the community on any given day in people aged 17 years and under 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 the magnitude of variation in dispensing rates fell from 2013–14, it was still high in 2016–17. 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 management of mental illness, and that of behavioural disturbances in autism spectrum disorder.

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References

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