5.5 Antipsychotic medicines dispensing, 65 years and over

Context

This section examines antipsychotic medicines dispensing for people aged 65 years and over between 2013–14 and 2016–17.

Antipsychotic medicines are used to manage psychotic disorders such as schizophrenia, and the psychotic symptoms of mood disorders. 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. In older adults, antipsychotic medicines are also used where non-pharmacological approaches have failed to manage behavioural and psychological symptoms of dementia (BPSD).

Effective treatment of psychosis and related disorders 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]

Although antipsychotic medicines may be appropriate for adults with severe mental health issues or long-term mental illness, there is concern that these medicines are being prescribed inappropriately in people aged 65 years and over for their sedative effects – that is, as a form of chemical restraint for people with psychological and behavioural symptoms of dementia or delirium.[1,2]

The rate of antipsychotic medicines dispensing per 100,000 people aged 65 years and over was mapped in the first *Australian Atlas of Healthcare Variation*, published in November 2015.[1] The first Atlas reported that, in 2013–14, nearly 1 million Pharmaceutical Benefits Scheme (PBS) prescriptions for antipsychotic medicines were dispensed in Australia to people aged 65 years and over. Dispensing rates were higher than for people aged 18–64 years. Rates were higher in major cities than in regional and remote areas, and there was a weak pattern of higher rates in areas with socioeconomic disadvantage. 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?

Improving use of antipsychotic medicines in this age group is of national importance because of concerns about overuse to manage BPSD, and variation in use of these medicines across Australia. Of particular concern is that these medicines are being prescribed to manage behavioural disturbances related to dementia or delirium before secondary causes have been excluded or non-pharmacological treatment has been tried, which is outside current guideline recommendations.[1-5] People with behavioural disturbances related to dementia or delirium should be treated in the first instance with approaches that do not include antipsychotic medicines. Antipsychotic medicines offer only a modest benefit and are associated with harms such as confusion, falls, pneumonia, hip fracture and stroke.[6-8] For people with severe symptoms – for example, if a person is severely distressed or is a significant risk of harm to themselves or others – antipsychotic medicines may be indicated alongside ongoing non-pharmacological management.[2,5]

What initiatives have taken place since 2015?

Concerns about the misuse of antipsychotic medicines in people aged 65 years and over have prompted a number of national responses during the past three years. These have included:

- The Caring for Cognitive Impairment campaign by the Australian Commission on Safety and Quality in Health Care (the Commission) – see the infographic at Figure 5.19, page 275. The campaign builds on initiatives to increase awareness of cognitive impairment as a safety and quality issue, including the use of antipsychotic medicines.[9] Actions have included
  - release of the Delirium Clinical Care Standard, which emphasises the importance of minimising use of antipsychotic medicines for behavioural disturbances related to delirium[10]
  - incorporation of actions relating to managing cognitive impairment and minimising use of antipsychotic medicines into the National Safety and Quality Health Service Standards (second edition)[11]
- Two roundtable meetings with key experts convened by the Commission, to specifically discuss ways to reduce inappropriate use of antipsychotic medicines in this age group; the meetings identified the need for a range of multi-component strategies, and system and regulatory levers to address the issue[2]
- Regulatory changes by the Therapeutic Goods Administration, limiting the indication for risperidone use to BPSD of the Alzheimer's type only, and limiting the duration of therapy to a maximum of 12 weeks[2]
- The Veterans' MATES program, funded by the Australian Government Department of Veterans' Affairs, to reduce the use of antipsychotic medicines for treating BPSD[2,12]

- Updated guidelines from the Royal Australian and New Zealand College of Psychiatrists on use of antipsychotic medicines for treatment of BPSD[5,13]
- NPS MedicineWise and Alzheimer's Australia consumer awareness campaign about medicines and dementia[14]
- Training programs from Dementia Training Australia for staff working in aged care homes about optimising use of antipsychotic medicines in people with dementia[15]
- The Empowered Project, funded by the Australian Government Dementia and Aged Care Services Fund, to empower people living with dementia and their carers to be informed decision-makers about the care and treatment (including any medicines) they receive for their condition[16]
- The RedUSe project (Reducing Use of Sedatives in residential aged care facilities), a prospective, longitudinal program across 150 Australian aged care homes to improve prescribing and use of antipsychotic medicines and benzodiazepines in residents of aged care homes[17,18]
- Inclusion of advice about appropriate use of antipsychotic medicines in Evolve[19] and Choosing Wisely Australia campaigns[20]
- Development of the new Aged Care Quality Standards; assessment and monitoring against these standards will commence from 1 July 2019[21]
- Review of National Aged Care Quality Regulatory Processes and the proposal to establish an Aged Care Quality and Safety Commission.[22]

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 do 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 65 years and over was **13.2 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 **increased** from 2013–14, when there was a 7.9-fold difference between the highest and lowest rates (Figure 5.18).

Rate of prescriptions dispensed

In 2016–17, there were 947,941 PBS prescriptions dispensed for antipsychotic medicines to people aged 65 years and over, representing an Australian rate of **25,788** prescriptions dispensed per 100,000 people aged 65 years and over. The Australian rate **decreased** during the four years from 2013–14, when 27,396 prescriptions per 100,000 people were dispensed (Figure 5.18).

People dispensed at least one prescription

In 2016–17, there were **3,594** people per 100,000 people aged 65 years and over 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 **decreased** during the four years from 2013–14, when 3,738 people per 100,000 nationally had at least one antipsychotic medicine prescription dispensed (Table 5.16).

Table 5.16: Number of people dispensed at least one PBS prescription for an antipsychotic medicine per 100,000 people aged 65 years and over, age and sex standardised, 2013–14 to 2016–17

	2013–14	2014–15	2015–16	2016–17
Australian rate	3,738	3,713	3,652	3,594

Volume of antipsychotic medicines use in people aged 65 years and over

In 2016–17, there were 11.54 defined daily doses† (DDDs) of antipsychotic medicines per 1,000 people aged 65 years and over dispensed on any given day. The national DDD rate per 1,000 people per day was **stable** from 2013–14 to 2016–17 (Table 5.17).

Table 5.17: Number of defined daily doses of antipsychotic medicines dispensed per 1,000 people aged 65 years and over per day, age and sex standardised, 2013–14 to 2016–17

	2013–14	2014–15	2015–16	2016–17
Australian rate	11.48	11.55	11.56	11.54

Interpretation

Between 2013–14 and 2016–17, the rate of antipsychotic medicine prescriptions dispensed per 100,000 people aged 65 years and over decreased by 6% in Australia during the four year period, and the rate of people dispensed at least one prescription also decreased. The volume of antipsychotic medicines used in the community in this age group, as indicated by the DDD per 1,000 people per day, remained relatively stable, indicating that there was little change in the overall amount of antipsychotic medicines supplied to people in this age group during the four-year period. The magnitude of variation in dispensing rates also increased from 2013–14, which might indicate changes in medicine use in some areas but not in others.

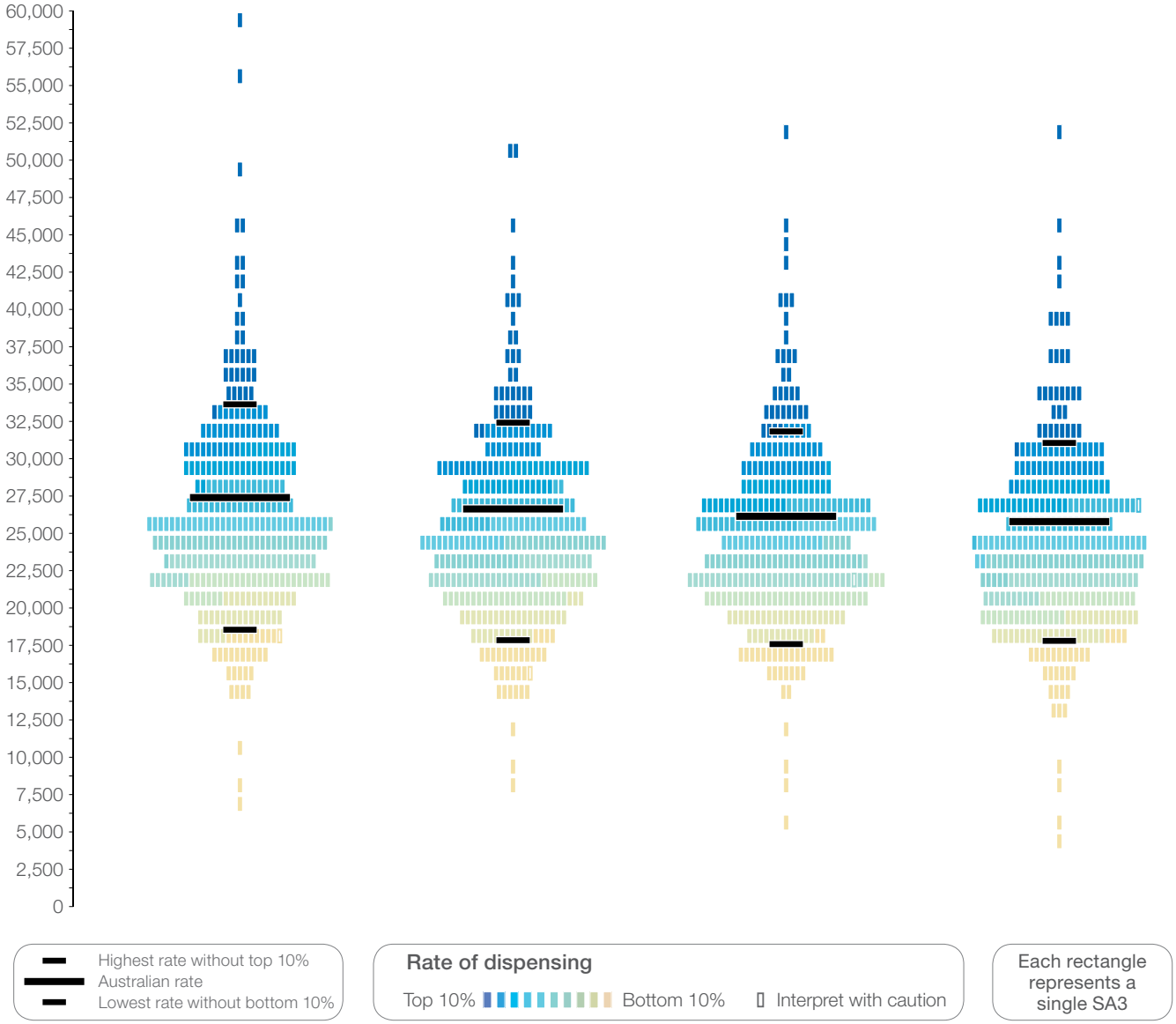
* Some of the published SA3 rates were considered more volatile than others. These rates are excluded from the calculation of the difference between the highest and lowest SA3 rates in Australia.

† 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.

Rates across years

Figure 5.18: Number of PBS prescriptions dispensed for antipsychotic medicines per 100,000 people aged 65 years and over, 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	59,076	50,350	51,608	52,257
Australian rate	**27,396**	**26,636**	**26,145**	**25,788**
Lowest rate	7,446	8,654	5,635	3,969
Magnitude of variation	7.9	5.8	9.2	13.2
Magnitude of variation without top & bottom 10%	1.8	1.8	1.8	1.7



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, 65 years and over

Potential reasons for this pattern include:

- Changes in guidelines and prescribing behaviours, affecting the type of antipsychotic medicine chosen and the dose dispensed (as different doses for different indications will affect the DDD)
- People in this age group using these treatments for longer durations.

To explore this, further analysis could potentially focus on:

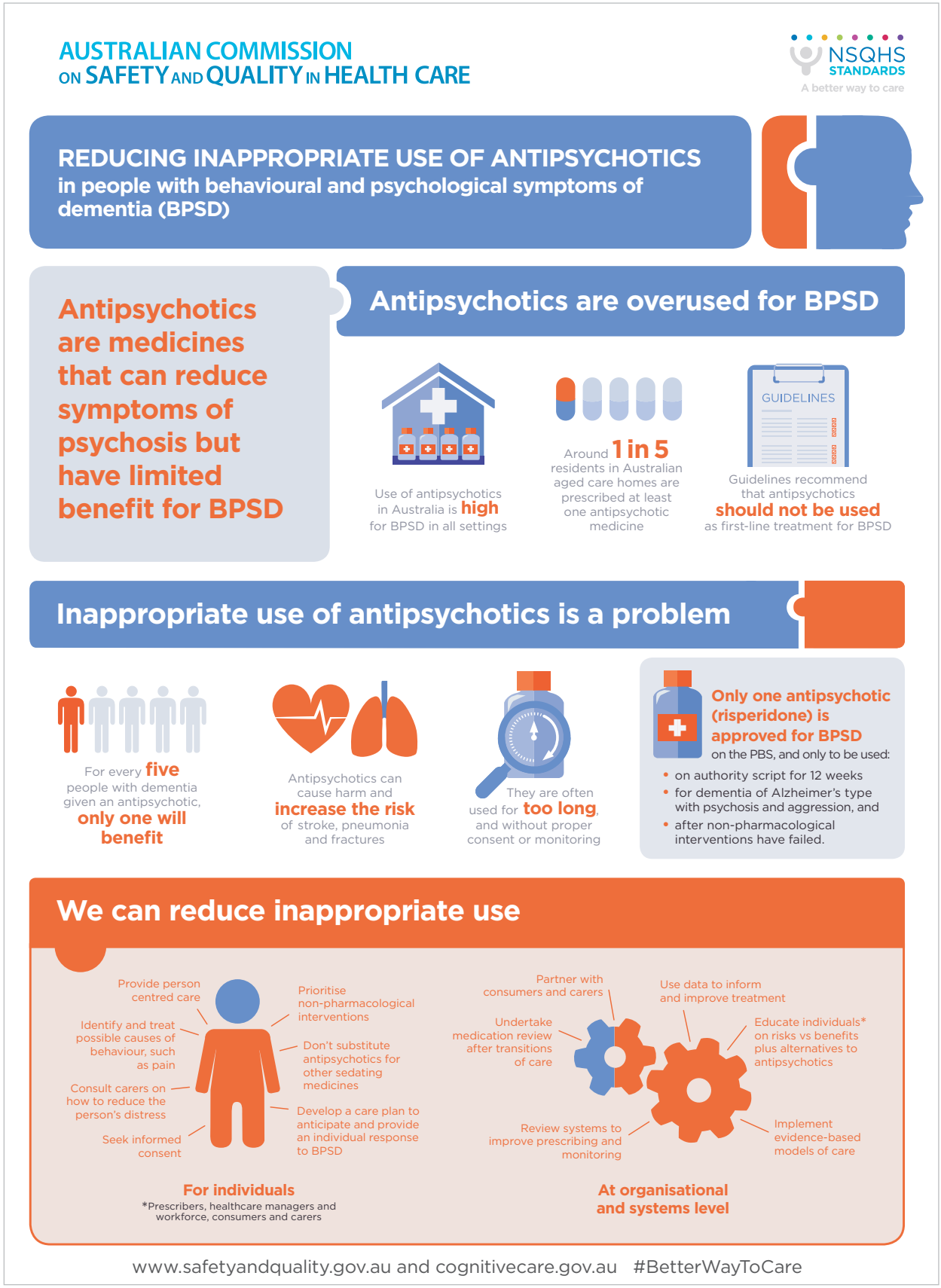
- Types of antipsychotic medicines, reasons for prescribing (for example, behavioural disturbances in older people) and doses being prescribed
- Possible substitution with other sedating medicines
- Quantities of antipsychotic medicines being dispensed on authority prescriptions
- The relationship between dispensing rates and location of aged care facilities.

Is there more to be done?

Although the rate of prescriptions dispensed for antipsychotic medicines for people aged 65 years and over fell in Australia during the four years from 2013–14, the findings suggest that a continued focus on improving use in older people is warranted. The magnitude of variation in dispensing rates of antipsychotic medicines between areas increased from 2013–14, and there was no major change in the overall volume of antipsychotic medicines supplied on any given day in the Australian community to people in this age group. Improved data on the reasons antipsychotic medicines are prescribed are essential for identifying whether prescribing is appropriate. This will help to identify whether further targeted strategies and regulatory changes are needed to discourage the use of antipsychotic medicines as a restrictive practice, and encourage non-pharmacological management of behavioural and psychological symptoms of dementia and delirium.

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 promote the safe and appropriate use of these medicines.

Figure 5.19: Infographic from the Caring for Cognitive Impairment Campaign



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