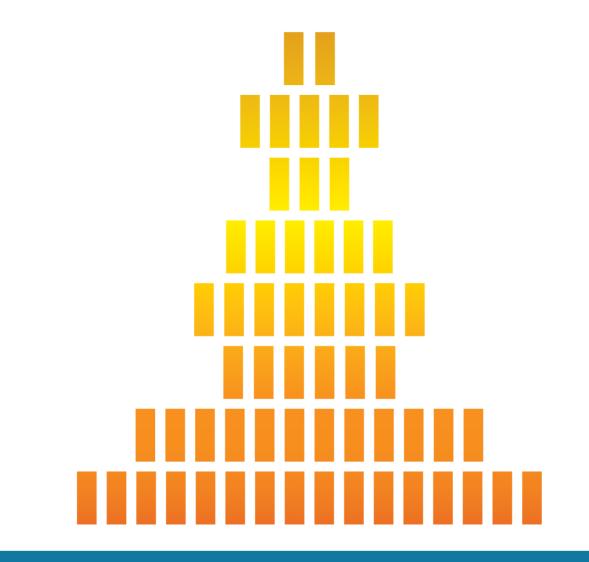
**Technical note** 

# Antimicrobial medicines dispensing 2013-14 to 2017-18



May 2020

# Summary

This technical note accompanies the report: *Antimicrobial medicines dispensing 2013-14 to 2017-18* and builds on the third Atlas reporting of antimicrobial medicines dispensing rates. Information regarding data from 2013-14 to 2016-17 is available in the <u>Technical Supplement</u> for the <u>Third Australian Atlas of Healthcare Variation</u>.

This report presents statistics on the number of PBS/RPBS prescriptions dispensed for three commonly dispensed medicines: antimicrobials, amoxicillin and amoxicillin-clavulanate for people of all ages, between 2013-14 and 2017-18.

### About the data

Data are sourced from the Pharmaceutical Benefits Scheme (PBS) and Repatriation Pharmaceutical Benefits Scheme (RPBS) database. The PBS and RPBS are the two main Australian Government subsidy schemes for medicines managed by the <u>Department of</u> <u>Health</u> and the Department of Veterans' Affairs respectively.

Data are from claim records of prescriptions dispensed under the PBS or RPBS where either:

- The Australian Government paid the subsidy
- The prescription was dispensed at a price less than the relevant patient co-payment (under co-payment prescriptions) and did not attract a subsidy

The PBS/RPBS data cover all prescriptions dispensed by approved suppliers, including community pharmacies, public and private hospital pharmacies, and dispensing doctors

Exclusions include:

- If a patient's date of birth and/or sex are unknown
- Doctor's bag prescriptions
- Medicines dispensed through alternative arrangements for example, direct supply to Aboriginal health services via the <u>S100 Remote Area Aboriginal Health Services</u> (<u>RAAHS</u>) <u>Program</u>. PBS items are supplied directly to participating remote Aboriginal Health Services (AHS) and dispensed to patients by an appropriate health professional, (medical practitioner or an Aboriginal Health Worker or Nurse). A patient supplied with a pharmaceutical benefit under this arrangement is not charged a patient co-payment.

The PBS /RPBS data do not cover:

- Over the counter purchases (non-prescription)
- Private prescriptions
- Medicines supplied to admitted patients in public hospitals (although discharge prescriptions dispensed in all states and territories except New South Wales and the Australian Capital Territory are included).

# **Indicator specifications**

Name Population	<ul> <li>Number of PBS/RPBS prescriptions dispensed for antimicrobial medicines per 100,000 people 2013-14 to 2017-18</li> <li>Number of PBS/RPBS prescriptions dispensed for amoxicillin per 100,000 people 2013-14 to 2017-18</li> <li>Number of PBS/RPBS prescriptions dispensed for amoxicillin-clavulanate per 100,000 people 2013-14 to 2017-18</li> <li>All ages</li> </ul>
·	5
Description	Number of PBS/RPBS prescriptions dispensed per 100,00 people, age-sex standardised from 2013-14 to 2017-18
	Presented as the following rates:
	<ul> <li>Statistical Area Level 3 (SA3)</li> <li>Primary Health Network (PHN)</li> <li>State and territory</li> </ul>
	Rates are directly age-sex standardised, to the 2001 Australian population, using 5-year age groups: 0-4, 5-9,85 and over.
	A patient's age is calculated in years as the difference between the patient's date of birth and date of supply for the prescription. Date of birth and sex are as reported on a patient's last prescription for any drug
Indicator disaggregation	The indicators are reported by:
	<ul> <li>Statistical Area Level 3 (SA3)</li> <li>Primary Health Network (PHN)</li> <li>State and territory</li> </ul>
	Analysis by Statistical Area Level 3 (SA3) 2016 is based on the patient's enrolment postcode as last reported by the patient to Medicare, valid at date of supply
Data sources	Pharmaceutical Benefits Scheme (PBS) data
	Repatriation Pharmaceutical Benefits Scheme (RPBS) data
Computation	(a) (b) (Numerator ÷ denominator) x 100,000
	(c) ([Numerator x 1,000] ÷ [Denominator x 365])
Numerator	<ul> <li>(a) Number of prescriptions dispensed</li> <li>(b) Number of patients dispensed at least one prescription</li> <li>(c) Number of DDD of medicines dispensed [mass amount x quantity dispensed ÷ DDD amount]</li> </ul>

Denominator	As at 30 June for each year;
	(a), (b), (c) Total population
Disaggrogation	(a) SA3 2016 by:
Disaggregation	Remoteness (ASGS Remoteness structure 2016) and Socio- Economic Indexes for Areas (SEIFA 2016) Index of Relative Socioeconomic Disadvantage (IRSD 2016) Primary Health Network (2017) State and Territory
	<ul><li>(b) State and territory</li><li>(c) State and territory</li></ul>
Suppression rules	The following suppression rules were applied:
	Data (number and rate) were suppressed if at least one of the following conditions were met (to manage volatility):
	<ul><li>the total denominator is less than 1,000</li><li>the total numerator is less than 20.</li></ul>
	Age-sex standardised rates are also suppressed where the denominator for at least one of the age-sex groups used to calculate the rate is below 30 and results of sensitivity analysis indicate that the rates are volatile.
	However, for SA3 data, if the volatility of the rate is not found to have a material impact on its decile, the rate was published with caution(*).
	If applicable, cells (counts and crude rates) were also consequentially suppressed to manage confidentiality.
	For more information about the sensitivity analysis, see the Technical Supplement of the Third Atlas.
Data specifications	<ul> <li>Data specifications are available here: 2017-18 Data specifications:</li> <li>Number of PBS/RPBS prescriptions dispensed for antimicrobials per 100,000 people 2017-18</li> <li>Number of PBS/RPBS prescriptions dispensed for amoxicillin per 100,000 people, 2017-18</li> <li>Number of PBS/RPBS prescriptions dispensed for amoxicillin- clavulanate per 100,000 people, 2017-18</li> <li>2013-14 to 2016-17 Data specifications:</li> <li>Number of PBS/RPBS prescriptions dispensed for antimicrobials per 100,000 people, 2013-14 to 2017-18</li> <li>Number of PBS/RPBS prescriptions dispensed for antimicrobials per 100,000 people, 2013-14 to 2017-18</li> <li>Number of PBS/RPBS prescriptions dispensed for antimicrobials per 100,000 people, 2013-14 to 2017-18</li> </ul>
	<ul> <li>100,000 people, 2013-14 to 2017-18</li> <li>Number of PBS/RPBS prescriptions dispensed for amoxicillin- clavulanate per 100,000 people, 2013-14 to 2017-18</li> </ul>

#### AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Level 5, 255 Elizabeth Street, Sydney NSW 2000 GPO Box 5480, Sydney NSW 2001

**PHONE:** (02) 9126 3600 **FAX:** (02) 9126 3613

@ACSQHC safetyandquality.gov.au

