Australian Atlas of Healthcare Variation 2018: Number of PBS/RPBS prescriptions dispensed for antibiotic medicines per 100,000 children aged 9 years and under, 2016-17

Exported from METEOR (AIHW's Metadata Online Registry)

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Identifying and definitional attributes

Metadata item type: Indicator

Indicator type: Indicator

Short name: Antibiotic medicines dispensing for children, 9 years and under, 2016-17

METEOR identifier: 709170

Registration status: Australian Commission on Safety and Quality in Health Care, Standard 13/12/2018

Description: Number of PBS/RPBS prescriptions dispensed for antibiotic medicines per 100,000 children aged 9 years and under, age-sex standardised. .

Indicator set: Australian Atlas of Healthcare Variation 2018
Australian Commission on Safety and Quality in Health Care, Standard 13/12/2018

Collection and usage attributes

Population group age from: 0-9 years

Computation description:

Inclusion codes, description and additional requirements

Anatomical Therapeutic Chemical (ATC) Code	Description (Drug Name)	Comments
J01 – Antibacterials for systemic use		
J01AA - Tetracyclines	DOXYCYCLINE	
	MINOCYCLINE	
J01CA - Penicillins with extended spectrum	AMOXICILLIN	
	AMPICILLIN	
J01CE - Beta-lactamase sensitive penicillins	BENZATHINE BENZYLPENICILLIN	
	BENZYLPENICILLIN	
	PHENOXYMETHYLPENICILLIN	
	PROCAINE BENZYLPENICILLIN (PROCAINE PENICILLIN)	
J01CF - Beta-lactamase resistant penicillins	DICLOXACILLIN	
	FLUCLOXACILLIN	
J01CR - Combinations of penicillins, incl. beta-lactamase inhibitors	AMOXICILLIN + CLAVULANIC ACID	
	TICARCILLIN + CLAVULANIC ACID	

J01DB - First-generation cephalosporins	CEFALEXIN	
	CEFAZOLIN	
	CEPHALOTHIN	
J01DC - Second-generation cephalosporins	CEFACLOR	
	CEFUROXIME	
J01DD - Third-generation cephalosporins	CEFOTAXIME	
	CEFTRIAXONE	
J01DE - Fourth-generation cephalosporins	CEFEPIME	
J01EA - Trimethoprim and derivatives	TRIMETHOPRIM	
J01EE - Combinations of sulfonamides and trimethoprim, incl. derivatives	TRIMETHOPRIM + SULFAMETHOXAZOLE	
J01FA - Macrolides	AZITHROMYCIN	
	CLARITHROMYCIN	
	ERYTHROMYCIN	
	ERYTHROMYCIN ETHYLSUCCINATE	
	ROXITHROMYCIN	
J01FF - Lincosamides	CLINDAMYCIN	
	LINCOMYCIN	
J01GB - Other aminoglycosides	GENTAMICIN	
	TOBRAMYCIN	
J01MA - Fluoroquinolones	CIPROFLOXACIN	
	NORFLOXACIN	
J01XA - Glycopeptide antibacterials	VANCOMYCIN	
J01XC - Steroid antibacterials	FUSIDATE	
J01XD - Imidazole derivatives	METRONIDAZOLE	
	TINIDAZOLE	
J01XE - Nitrofuran derivatives	NITROFURANTOIN	
J01XX - Other antibacterials	METHENAMINE HIPPURATE	

Presented as the following rates:

(a) number of prescriptions per 100,000 population

(b) number of patients per 100,000 population

Rates are directly age-sex standardised, to the 2001 Australian population, using 5-year age groups: 0-4 and 5-9.

For more information about age-standardisation in general see /content/index.phtml/itemId/327276

A patient's age is calculated in years as difference between 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, extracted on 18/04/2018.

Prescriptions are allocated to a financial year based on the date the medicine was supplied to the patient. For example for 2016–17, the date of supply is between 1 July 2016 and 30 June 2017.

Analysis by Statistical Area Level 3 (SA3) 2016 is based on the patient's postcode of usual residence as last reported by the patient to Medicare, valid at date of supply.

Suppress data (number and rate) if at least one of the following conditions are met:

- the total denominator is less than 1,000
- the total numerator is less than 20.

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 is published with caution. For more information about the sensitivity analysis, see the Technical supplement of the Third Atlas.

Computation: (a), (b) (Numerator ÷ Denominator) x 100,000

Numerator: (a) Number of antibiotic prescriptions dispensed, 9 years and under

(b) Number of patients dispensed at least one antibiotic prescription, 9 years and under

Numerator data elements:

Data Element / Data Set

Person—date of birth, MMYYYY

Guide for use

Data source type: Administrative by-product data

Data Element / Data Set

Pharmaceutical Benefits Scheme (PBS) prescription—PBS item prescribed, code NN[NNN]A

Data Element / Data Set

Pharmaceutical Benefits Scheme (PBS) prescription—patient identifier, identifier N(9)

Data Element / Data Set

Person—sex, code A

Data Element / Data Set

Pharmaceutical Benefits Scheme (PBS) prescription—date of supply, DDMMYYYY

Denominator:

As at 30 June 2016:

(a), (b) Total Population, aged 9 years and under

Denominator data elements:

Data Element / Data Set

Person—estimated resident population of Australia, total people N[N(7)]

Data Source

ABS Australian Demographic Statistics

Guide for use

Data source type: Census based plus administrative by-product data

Disaggregation:

(a) SA3 2016 by:

- remoteness (ASGS Remoteness structure 2016) and Socio-Economic Indexes for Areas (SEIFA 2016) Index of Relative Socioeconomic Disadvantage (IRSD 2016)

Primary Health Network (PHN) 2017

State and Territory by:

- age group (0-4 years, 5-9 years, 0-9 years)

(b) State and territory

Disaggregation data elements:

Data Element / Data Set

Address - statistical area, level 3 (SA3) code (ASGS 2016) NNNNN

Data Element / Data Set

Person—date of birth, DDMMYYYY

Guide for use

GPO postcodes 2001, 2124, 3001, 4001, 5001, 6843 excluded from the SA3 analysis but included in state/territory and national level analysis.

Data source type: Administrative by-product data

Used for disaggregation by Statistical Area Level 3.

Data Element / Data Set

Address—Australian postcode, code (Postcode datafile) NNNN

Representational attributes

Representation class: Rate

Data type: Integer

Unit of measure: Service type

Format: (a) Prescription event (b) Person

NN[NNNN]

Data source attributes

Data sources:

Data Source

ABS Australian Demographic Statistics

Frequency

Quarterly

Data custodian

Australian Bureau of Statistics

Accountability attributes

Methodology:	Statistical Area Level 3 (SA3s) are geographic areas defined in the ABS Australian Statistical Geography Standard (ASGS). The aim of SA3s is to create a standard framework for the analysis of ABS data at the regional level through clustering groups of SA2s that have similar regional characteristics. There are 340 spatial SA3s covering the whole of Australia without gaps or overlaps. They are designed to provide a regional breakdown of Australia. SA3s generally have a population of between 30,000 and 130,000 people. There are approximately 78 with fewer than 30,000 people and 46 with more than 130,000 as at 30 June 2016. The Other Territories of Jervis Bay, Cocos (Keeling) Islands, Christmas Island and Norfolk Island are each represented by a SA3 in the 2016 ASGS. For further information see the ABS publication, Population by Age and Sex, Regions of Australia, 2016. ABS. cat. no. 3235.0. The Anatomical Therapeutic Chemical (ATC) code is recommended by the World Health Organization (WHO) as an internationally accepted classification for presenting and comparing drug usage data. Since 1982, the WHO Collaborating Centre for Drug Statistics Methodology (WHOCC), located in Norway, has been the central body responsible for coordinating ATC use. Note that the ATC codes used in this specification are from the Australian Department of Health's version of the WHO ATC classifications, which have some minor differences from the WHO version, based upon a particular drug's usage in Australia. The Department of Health's ATC version is available at http://www.pbs.gov.au/browse/body-system.
Reporting requirements:	Australian Commission on Safety and Quality in Health Care *The Third Australian Atlas of Healthcare Variation 2018*
Organisation responsible for providing data:	Australian Institute of Health and Welfare
Accountability:	The Australian Commission on Safety and Quality in Health Care
Release date:	11/12/2018

Source and reference attributes

Submitting organisation:	The Australian Commission on Safety and Quality in Health Care