

Indicator: Antibiotic Use

Data Source	Definition	Numerator	Denominator	Comments	Covariates
PBS	Proportion of residents dispensed an antibiotic.	Number of permanent residents dispensed at least one antibiotic for systemic use ¹ (Table 1).	Number of permanent residents.		Age, sex, number of health conditions.

¹Dermatological and ophthalmological antibiotics not included. Days of use is defined as quantity dispensed/DDD quantity per day. **PBS**: Pharmaceutical Benefits Scheme.

Data rules:

- Dispensed antibiotics for systemic use, substr(ATC,1,3)= 'J01' OR vancomycin, ATC='A07AA09' OR rifaximin, ATC= 'A07AA11' OR amoxicillin + clarithromycin + omeprazole, ATC= 'A02BD05' OR clarithromycin + amoxicillin + esomeprazole, ATC= 'A02BD06' OR (rifampicin, ATC=' J04BA02' AND PBS item_code = '08025J', '01983J', '01984K', '01981G', '01982H') OR (isoniazid, ATC= 'J04AC01' AND PBS item_code = '01554T') (Table 1).

Table 1. Antibiotics for Systemic Use, Descriptions, ATC Codes, PBS Codes, and Defined Daily Dose (DDD).

Description	ATC Code	PBS Code	DDD
omeprazole + clarithromycin + amoxicillin	A02BD05	08272J, 08376W	0.1429
esomeprazole + clarithromycin + amoxicillin	A02BD06	08738X	0.1429
vancomycin	A07AA09	03114X	8
		03113W	16
rifaximin	A07AA11	10001J	1.09
doxycycline	J01AA02	01800R, 02702F, 02703G, 02708M, 02709N, 02714W, 02715X, 03321T, 03322W, 05082L, 09105F, 09107H, 09108J, 10176N, 10777F, 10779H, 10781K	1
		02707L, 02711Q, 09106G	2
tetracycline hydrochloride	J01AA07	02134H, 02135J, 03383C, 02145X, 02146Y, 03386F	4
minocycline	J01AA08	03037W	2
		01616C	4
ampicillin	J01CA01	02671N, 05014X	4
		02977Q, 03314K, 06531R, 06533W, 06536B	6
		01048E	8

		02390T, 06527M	12
amoxicillin	J01CA04	05225B, 08705E	0.15
		01887H, 03393N	0.3
		01878W, 03309E	0.5
		01886G, 03302T	0.6
		08581P	1.5
		01889K, 03300Q	3
		01883D, 01884E, 03301R	6
		03303W	8
		01888J	15
benzylpenicillin	J01CE01	02647H, 06569R, 06572X	1.2
		01775K, 03398W, 06561H, 06563K, 06564L, 06566N	6
phenoxymethylpenicillin	J01CE02	05029Q, 08977L	0.4
		02965C, 03028J, 03361X, 03364C	4
		01703P, 01705R, 01787C, 01789E, 03360W, 03363B	8
procaine benzylpenicillin	J01CE09	01794K, 03371K	0.4
dicloxacillin	J01CF01	07064T, 07065W, 07067Y, 08124N	2
		05097G, 07061P, 08122L, 08123M, 10790X	4
		05096F, 08121K	8
flucloxacillin	J01CF05	01529L, 09150N	0.4
		01528K, 09149M	0.8
		01525G, 06729E, 06731G, 06732H, 06734K, 10605E	2
		01524F, 01527J, 05091Y, 06723W, 06725Y, 06728D, 07018J, 10788T	4
		01526H, 05090X	8
amoxicillin + clavulanic acid	J01CR02	05011R	0.25
		08319W	0.3125
		01892N, 05009P	0.8
		05006L, 08254K	1.71
		01891M, 05008N	3
ticarcillin + clavulanic acid	J01CR03	02179Q, 10113G	5
		06879C, 06881E, 06884H	5
cefotaxime	J01DA10	01086E, 01759N, 06599H, 06602L	2
		01085D, 01758M, 06593B, 06596E, 06591X	4
ceftriaxone	J01DA13	01785Y, 06875W, 06876X, 06878B, 06873R	1
		01784X, 01788D, 06869M, 06870N, 06872Q, 06867K, 06868L	2
		01783W, 06866J, 09058R	4
		01782T, 01790F, 06857X	8
cefalexin	J01DB01	03095X, 03320R	0.4
		03094W, 03319Q	0.8
		03119E, 03318P, 10778G	4
		02655R, 03058Y, 03317N	8

cefalotin	J01DB03	02964B, 03376Q, 06609W, 06611Y, 06614D	4
cefazolin	J01DB04	05479J, 09326W	1.5
		01257E, 01797N, 01799Q, 05478H, 06633D, 06635F, 06638J	3
		01256D, 05477G, 06629X	6
cefuroxime	J01DC02	05499K	0.2857
		05052X, 08292K	2
cefaclor	J01DC04	02461M	0.267
		02460L	0.4
		01169M, 05045M	2.67
trimethoprim	J01EA01	02666H, 02922T, 10785P	1.33
trimethoprim + sulfamethoxazole	J01EE01	03103H	0.5
		02951H, 03390K, 10784N	2.5
		02949F	5
erythromycin	J01FA01	02425P	0.4
		01401R, 01404X, 03325B, 03328E	4
		01400Q	5.71
erythromycin ethylsuccinate	J01FA01	02428T, 03337P	0.25
		02424N, 03334L	0.5
		02750R, 03336N	5
erythromycin lactobionate	J01FA01	01397M	1
		01398N	3.33
roxithromycin	J01FA06	05261X, 08016X	1
		01760P, 05260W	2
		08129W	6
clarithromycin	J01FA09	09192T	0.2
		05624B, 06152T	1
		05625C, 06151R, 08318T	2
azithromycin	J01FA10	05616N, 08201P	0.5
		04115N, 08200N, 08336R	0.6
clindamycin	J01FF01	03138E, 05057E	8
lincomycin	J01FF02	02530E	3
tobramycin	J01GB01	09480Y	0.48
		05442K	1
		01356J, 08872Y	3
		10066T	4
gentamicin	J01GB03	02824P	3
		01168L	4
		01068F	6
ciprofloxacin	J01MA02	01210Q	1.33
		01209P	2
		01208N, 01311B	4
norfloxacin	J01MA06	03010K	2
vancomycin	J01XA01	02269K, 02270L	2

		03130R, 03131T, 06767E, 06770H, 06837W, 06838X, 06839Y, 06842D	4
fusidate	J01XC01	02311P	0.33
		02312Q, 10782L	6
metronidazole	J01XD01	03341W	0.234375
		01630T	0.234575
		01638F, 01821W, 02277W, 05154G	3
		01621H, 01626N, 05155H, 05159M	3.75
		01642K	5
		01636D, 03339R	7.5
tinidazole	J01XD02	01465D	4
nitrofurantoin	J01XE01	01691B	0.2
		01693D	2
		01692C	4
methenamine hippurate	J01XX05	03124K	2
rifampicin	J04AB02	08025J	0.5
		01983J, 01984K	2
		01981G, 01982H	4
isoniazid	J04AC01	01554T	3

PBS: Pharmaceutical Benefits Scheme. **ATC:** Anatomical Therapeutic Chemical Classification System. **DDD:** Defined Daily Dose.

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