

Analysis Method Notice

Total antibacterial items per 1,000 STAR-PUs

This notice describes an Analysis Method that has been developed for use in the production of published national outcome indicators, performance measures and/or currencies, which are derived directly from NHS Wales data.

The Analysis Method has been reviewed by the Analysis Methodologies Group and its output submitted to the Welsh Information Standards Board (WISB) for potential accreditation.

*It should be noted that, where the data flow on which the analysis is being undertaken has not been reviewed by WISB (see 'Status of WISB Data Standards Assurance' below), accreditation of the analysis method **cannot** be interpreted as an approval of the underlying data standards or the quality of the data used.*

It is recognised that formal review and/or assurance of the data flow may have been undertaken by other bodies, where those data are being formally published; for example, as 'Official Statistics'. In such circumstances, users of this method are advised to contact the relevant organisations should they require further information on the underlying quality of the specified data source.

For further details about the group, including Terms of Reference and membership, please visit the following website:

<http://howis.wales.nhs.uk/sites3/page.cfm?orgid=742&pid=56696>

WISB Reference: ISRN 2018 / 002

Please address enquiries about this Analysis Method the NHS Wales Informatics Service Data Standards Team.

E-mail: data.standards@wales.nhs.uk / Tel: 029 2050 2539

| | |
|--|---|
| WISB Analysis Method Appraisal Assessment | Accredited This Analysis Method has been appraised by WISB and is felt to: <ul style="list-style-type: none"> • Meet the specified indicator requirement, in that it is suitable for its calculation / derivation; • Is reproducible by organisations, where appropriate. |
| WISB Analysis Method Appraisal Outcome(s) | |

| | |
|--|--|
| Status of Data Standards Assurance | WISB Reviewed The data used in this Analysis Method are based on data item standards that have been through the Information Standards Assurance Process. |
| WISB Decision | Approved |
| Data Standards Assurance Outcome(s) | |

Indicator

Total antibacterial items per 1,000 STAR-PUs

Target:

4 quarter reduction trend

Rationale / Context

The widespread and often excessive use of antimicrobials is one of the main factors contributing to the increasing emergence of antimicrobial resistance, resulting in many common and life threatening infections becoming difficult (or even impossible) to treat.

Data Source(s)

All Wales Therapeutic and Toxicology Centre
National Prescribing Indicators 2017-2018

Definitions:**Definitional Guidance:****Data Items:**

n/a

Terms:

n/a

Detailed Specification

Data derives from GP prescriptions (WP10s) that are dispensed in community pharmacies and by dispensing doctors and recoded on the NHS Shared Services Database – Comparative Analysis System for Prescribing Audit (CASPA). CASPA provides a record of all WP10 prescriptions (issued by GPs in Wales for patients receiving NHS treatment) forwarded to Prescribing Services, NWSSP, for processing and payment following dispensing.

Data is based on dispensing in the community for items prescribed in general practices only. Accurate prescribing data is currently only available for primary care. It is not currently possible to measure prescribing data in the same way for secondary care.

Data is presented on an all Wales and Health Board basis. It is also available at practice, cluster and unitary authority levels.

Data is collected based on the GP practice address for the prescription.

Comparative trends for antibiotic indicators should be interpreted with caution, with a particular respect to seasonal variation.

Numerator: Is purely the number of items dispensed, with no adjustment for age and sex of patient.

Denominator:

Specific Therapeutic Group Age-Sex Related Prescribing Units (STAR-PU)

This measures prescribing weighted for age and sex of patients. There are differences in the age and sex of patients for whom medicines in specific therapeutic groups are usually prescribed. STAR-PU has been developed based on costs of prescribing items within the therapeutic groups.

Further information on STAR-PU is available at the Health and Social Care Information Centre (HSCIC) website: <http://www.hscic.gov.uk/prescribing/measures>

STAR-PU IS used to benchmark with the Medicines Optimisation Key Therapeutic Topics comparators in England. Data is comparable with English CCGs.

STAR-PU calculations are available through NHS Wales Shared Services Partnership: Primary Care Services.

The full list of antibacterial items monitored for this measure is included in Additional Information.

Calculation:

Numerator

The number of calls to the DAN 24/7 helpline (drug and alcohol) by Welsh residents at health board area level

Denominator

Mid-year population estimate

Reporting Format / Frequency

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|------------------------------|--|
| Reporting Frequency | Quarterly |
| Time Delay of Reported Data? | 4 months (e.g. the report for Q3 is due April) |

Discussion Points / Areas for Future Development

This section details any areas the Analysis Methodologies Group felt needed further consideration / review by the 'owner' of the method.

Appendix A – Additional Information

Antibacterial items monitored for this measure

| BNF Code | Description |
|-----------------|---|
| 0501011 | Benzylpenicillin&phenoxymethylpenicillin |
| 0501011P0 | Phenoxymethylpenicillin (penicillin V) |
| 0501011J0 | Benzylpenicillin Sodium (penicillin G) |
| 0501011F0 | Benzathine Penicillin |
| 0501012 | Penicillinase-Resistant Penicillins |
| 0501012G0 | Flucloxacillin Sodium |
| 0501012H0 | Flucloxacillin Magnesium |
| 0501013 | Broad-Spectrum Penicillins |
| 0501013B0 | Amoxicillin |
| 0501013K0 | Co-Amoxiclav (amoxicillin/clavul Acid) |
| 0501013L0 | Co-Fluampicil(flucloxacillin/ampicillin) |
| 0501013E0 | Ampicillin |
| 0501013C0 | Amoxicillin Sodium |
| 0501014 | Antipseudomonal Penicillins |
| 0501014S0 | Piperacillin Sodium/tazobactam Sodium |
| 0501015 | Mecillinams |
| 0501015P0 | Pivmecillinam Hydrochloride |
| 0501015H0 | Mecillinam |
| 0501020 | Cephalosporins,cephamycins & Betalactams |
| 0501020R0 | Cefalexin |
| 0501020B0 | Cefaclor |
| 0501020W0 | Cefradine |
| 0501020Q0 | Cefuroxime Axetil |
| 0501020K0 | Ceftriaxone Sodium |
| 0501020I0 | Meropenem |
| 0501020L0 | Ceftazidime Pentahydrate |
| 0501020E0 | Cefixime |
| 0501020AB | Ertapenem Sodium |
| 0501020D0 | Cefadroxil |
| 0501020F0 | Cefotaxime Sodium |
| 0501020P0 | Cefuroxime Sodium |
| 0501020I0 | Cefpodoxime |
| 0501020X0 | Imipenem With Cilastatin |
| 0501021 | Cephalosporins |
| 0501021A0 | Cefaclor |
| 0501021L0 | Cefalexin |
| 0501021D0 | Cefotaxime Sodium |
| 0501022 | Carbanpenems |
| 0501022A0 | Meropenem |
| 0501023 | Other Beta-Lactam Antibiotics |
| 0501023A0 | Aztreonam |
| 0501030 | Tetracyclines |
| 0501030L0 | Lymecycline |

| BNF Code | Description |
|-----------------|---|
| 0501030I0 | Doxycycline Hyclate |
| 0501030T0 | Oxytetracycline |
| 0501030P0 | Minocycline Hydrochloride |
| 0501030F0 | Demeclocycline Hydrochloride |
| 0501030V0 | Tetracycline |
| 0501030Y0 | Tigecycline |
| 0501040 | Aminoglycosides |
| 0501040U0 | Tobramycin |
| 0501040H0 | Gentamicin Sulfate |
| 0501040N0 | Neomycin Sulfate |
| 0501040C0 | Amikacin |
| 0501040P0 | Paromomycin Sulphate |
| 0501050 | Macrolides |
| 0501050A0 | Azithromycin |
| 0501050B0 | Clarithromycin |
| 0501050C0 | Erythromycin |
| 0501050H0 | Erythromycin Ethylsuccinate |
| 0501050N0 | Erythromycin Stearate |
| 0501050T0 | Telithromycin |
| 0501050F0 | Erythromycin Estolate |
| 0501060 | Clindamycin And Lincomycin |
| 0501060D0 | Clindamycin Hydrochloride |
| 0501060E0 | Clindamycin Phosphate |
| 0501070 | Some Other Antibiotics |
| 0501070I0 | Colistimethate Sodium |
| 0501070X0 | Rifaximin |
| 0501070N0 | Sodium Fusidate |
| 0501070U0 | Vancomycin Hydrochloride |
| 0501070W0 | Linezolid |
| 0501070ACAA | Fidaxomicin |
| 0501070T0 | Teicoplanin |
| 0501070F0 | Chloramphenicol |
| 0501070M0 | Fusidic Acid |
| 0501070H0 | Colistin Sulphate |
| 0501080 | Sulphonamides And Trimethoprim |
| 0501080W0 | Trimethoprim |
| 0501080D0 | Co-Trimoxazole(trimethoprim/sulfamethox |
| 0501080V0 | Sulfapyridine |
| 0501080J0 | Sulfadiazine |
| 0501080T0 | Sulfamethoxyypyridazine |
| 0501090 | Antituberculous Drugs |
| 0501090R0 | Rifampicin |
| 0501090H0 | Ethambutol Hydrochloride |
| 0501090K0 | Isoniazid |
| 0501090N0 | Pyrazinamide |
| 0501090S0 | Rifampicin Combined Preparations |

| BNF Code | Description |
|-----------------|---|
| 0501090Q0 | Rifabutin |
| 0501090I0 | Ethionamide |
| 0501100 | Antileprotic Drugs |
| 0501100C0 | Clofazimine |
| 0501100H0 | Dapsone |
| 0501100J0 | Thalidomide (antileprotic) |
| 0501110 | Metronidazole, Tinidazole & Ornidazole |
| 0501110C0 | Metronidazole |
| 0501110G0 | Tinidazole |
| 0501120 | Quinolones |
| 0501120L0 | Ciprofloxacin |
| 0501120N0 | Nalidixic Acid |
| 0501120P0 | Ofloxacin |
| 0501120Q0 | Norfloxacin |
| 0501120X0 | Levofloxacin |
| 0501120Y0 | Moxifloxacin |
| 0501130 | Urinary-Tract Infections |
| 0501130D0 | Fosfomycin Trometamol |
| 0501130H0 | Methenamine Hippurate |
| 0501130R0 | Nitrofurantoin |
| 0501130S0 | Fosfomycin Calcium |

Appendix B – SQL Code (where applicable)

n/a