

## Analysis Method Notice

# Fluoroquinolone, Cephalosporin and Co-amoxiclav items as a percentage of total antibacterial items dispensed in the community

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.

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

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

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## Indicator

Fluoroquinolone, Cephalosporin and Co-amoxiclav items as a percentage of total antibacterial items dispensed in the community

### **Target:**

Quarter on quarter improvement

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## Rationale / Context

Public Health Wales guidance advises that prescribers should avoid broad-spectrum antibiotics as they increase the risk of MRSA, *C.difficile* and resistant urinary tract infections, and that simple generic antibiotics should be used where possible. The broad spectrum antibiotics to be avoided are co-amoxiclav, cephalosporins and fluoroquinolones.

- Co-amoxiclav: Associated with a moderate risk of *C.difficile* infection.
- Cephalosporins: Second and third generation cephalosporins are associated with a high risk of *C.difficile* infection. They are not listed as first-line treatments in the public health report 'Management of infection guidance for primary care for consultation and local adaption'.
- Fluoroquinolones: Increasing resistance to quinolone resistant *Neisseria gonorrhoeae*, *Escherichia coli* and other Enterobacteriaceae.

The Antimicrobial Resistance Programme in Wales promotes the prudent use of antimicrobials, with the overarching goal to slow the development and spread of AMR. The Public Health Wales report 'Antimicrobial Resistance and Usage in Wales (2005-2014)' outlines that there is considerable variability in the resistance rates between different areas in Wales, suggesting an opportunity to reduce antibiotic use in some areas.

*Information sourced from: All Wales Medicines Strategy Group, National Prescribing Indicators 2017-2018.*

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## Data Source(s)

All Wales Therapeutic and Toxicology Centre – National Prescribing Indicators Reports

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## Definitions:

### **Definitional Guidance:**

### **Data Items:**

n/a

### **Terms:**

n/a

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## Detailed Specification

Data derives from GP prescriptions (WP10) that are dispensed in community pharmacies and dispensing

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doctor practices and recorded 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. Data is collected based on the GP practice address for the prescription.

Accurate prescribing data is only available for primary care. It is not currently possible to measure prescribing data for secondary care.

The percentage of fluoroquinolone, cephalosporin and co-amoxiclav items should be viewed alongside total antibacterial usage. A high total antibacterial usage may mask high usage of a particular group of antibacterials.

Comparative trends should be interpreted with caution, with particular respect to seasonal variations.

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

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### Calculation:

#### ***Numerator***

The number of fluoroquinolone, cephalosporin and co-amoxiclav items dispensed in the community

#### ***Denominator***

The total number of antibacterials dispensed in the community

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### Reporting Format / Frequency

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

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### 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.*

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**Appendix A – Additional Information**

n/a

**Appendix B – SQL Code** (where applicable)

n/a