

## Duration of antibiotic treatment for common infections at Wollaton Park Medical Centre: Comparison with guidelines

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### Abstract

**Objective:** To evaluate the duration of antibiotic prescriptions, over a 4-week period, for the treatment of common infections at Wollaton Park Medical Centre compared to local guideline recommendations.

**Setting:** General Practice – Wollaton Park Medical Centre.

**Participants:** 144 consultation that resulted in an antibiotic prescription for one of several indications: acute otitis media, cellulitis, pharyngitis, lower respiratory tract infection, urinary tract infection, community acquired pneumonia.

**Main Outcome Measures:** The percentage of antibiotic prescriptions with a duration exceeding the guideline recommendation, and the total number of days beyond the recommended duration for each indication.

**Results:** The most common reasons for antibiotics being prescribed were for urinary tract infections (56, 38.9%), lower respiratory tract infections (29, 20.1%), tonsillitis (14, 9.7%) and cellulitis (14, 9.7%). Antibiotic treatment for respiratory tract indications and urinary tract infections accounted for more than half of the total prescriptions considered, and only 10.6% of these treatment course exceeded guidelines recommendations. 7.8% of prescriptions for cellulitis exceeded seven days. More than 28% of the antibiotic prescriptions were for durations other than 1st line guidelines recommended for tonsillitis. The percentage of antibiotic prescriptions exceeding the recommended duration was highest for otitis media, 85% and lower respiratory tract infection, 57.1%. For the 144 included consultations resulting in antibiotic prescriptions, approximately 79 days were beyond the durations recommended by guidelines.

**Conclusion:** For most common infections treated at Wollaton Park Medical Centre, a substantial proportion of antibiotic prescriptions met durations recommended in guidelines. Further reductions in antibiotic exposure can be accomplished by aligning antibiotic prescription durations with Nottinghamshire APC guidelines, notably for lower respiratory tract infections and otitis media.



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### Biography:

Raza Naqvi is currently Pharmacist & Post Grad Medic. He graduated from University of Nottingham. He completed his Postgraduate diploma, Pharmacy from Keele University and Master of Pharmacy from Liverpool School of Pharmacy. He worked as Pharmacist at Pharmaseekers Ltd and also as a pre-registration pharmacist at Well Pharmacy.

### Speaker Publications:

1. Cabana MD, Rand CS, Powe NR, et al; “Why don’t physicians follow clinical practice guidelines? A framework for improvement”; JAMA/ 1999;282:1458-65. doi:10.1001/jama.282.15.1458.
2. Francis NA, Gillespie D, Nuttall J, et al, GRACE Project Group; “Antibiotics for acute cough: an international observational study of patient adherence in primary care”; Br J Gen Pract/ 2012;62:e429-37. doi:10.3399/bjgp12X649124.
3. Pouwels Koen B, Hopkins Susan, Llewelyn Martin J, Walker Ann Sarah, McNulty Cliodna AM, Robotham Julie V et al.; “Duration of antibiotic treatment for common infections in English primary care: cross sectional analysis and comparison with guidelines”; BMJ 2019; 364:l440.

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