# Royal College of General Practitioners and Warwick Medical School Annual Education, Research and Innovation Symposium 18<sup>th</sup> May 2017 Abstract Submission Form

PRESENTER'S DETAILS			
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PRESENTATION DETAILS			
Authors W.G.Pradeep Gunawardhana K.H.D.Milroy K.Mohanna	Title of Study Clinical Prescribing of Cephalosporins and Quinolones at a General Practice Centre in July 2016.		

## What's the problem you are tackling?

**Introduction and objectives:** Antimicrobial resistance is an issue with global impact and studies show deficiencies in prescribing antibiotics in United Kingdom including in primary care. These deficiencies can ultimately adversely affect the whole health care system. To mitigate these adverse outcomes various authorities have developed antibiotic prescribing guidelines to suit their local needs. A survey was carried out to analyze the use of cephalosporins and quinolones at a general practice against both the local CCG guideline (CCGG) and the RCGP guideline (RCGPG).

### How did/will you do it?

**Methods:** Using the EMIS web clinical system, a retrospective search was carried using the list of 1784 patients who attended the practice during the period 1<sup>st</sup>-31<sup>st</sup> July 2016. This identified 356 patients who were diagnosed to have an infection and included to survey. Patients whose diagnosed infection not in guidelines, antibiotic prescription started before July and antibiotics prescribed by secondary care were excluded. These records were then hand searched back ward and forward from July to confirm the indications for prescribing. Allowing for allergies and other exceptions such as choice of group, type, dose, frequency, duration of antibiotics, it was anticipated that 90% of all steps in prescriptions of cephalosporins and quinolones would be in line with prescribing guidance. The survey results were presented to the practice team and the prescribing guidelines were discussed. A repeat survey will be carried out prospectively in January 2017 to complete the audit.

## What did you find?

**Results:** In the survey of 356 patients, 313 were prescribed antibiotics, 6 cephalosporins and 11 quinolones. According to CCGG 1 cephalosporins, 4 Quinolones, and according to RCGPG 1 cephalosporins, 6 quinolones were excluded due to indicated infections were not in guidelines and had been prescribed antibiotics at secondary care. According to CCGG 3 patients found to indicated for quinolones and had not been prescribed, and according to RCGPG only 1 found. According to CCGG 5 patients whom indicated for other antibiotics were prescribed cephalosporin and 2 with quinolones. According to RCGPG: 3 were prescribed cephalosporin and 2 with quinolones, where indicated others. 1 patient had been prescribed Ciprofloxacin, but both guidelines had indicated Ofloxacin. 1 patient was found with wrong dose of Ciprofloxacin according to CCGG.

Table 1: Infections where cephalosporins and quinolones prescribed.

Guideline	Antibiotic	Appropriate prescription	Inappropriate prescription	Total
CCGG	Cephalosporins	00	05	05
	Quinolones	03	07	10
RCGPG	Cephalosporins	00	05	05
	Quinolones	02	04	06

# Why does this matter?

**Conclusion:** According to both guidelines, all prescription of cephalosporins were inappropriate. For the quinolones, only 3 patients according to CCGG and 2 patients compared to RCGPG were found accurate. It is of note that the two guidelines we studied made different recommendations which was found to be confusing and might have added to the prescribing errors. At the team meeting, the guidelines were discussed and one version, the CCG was circulated as an aide memoire to prescribers. In our presentation, will share the impact of this simple educational intervention on the adherence to prescribing guidance.

#### References

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