**Title**

# A need for Action: Results from the Australian General Practice National Antimicrobial Prescribing Survey (GP NAPS)

**Author and affiliations**

Dr Jo-Anne Manski-Nankervis1, Ms Robyn Ingram2, Ms Ruby Biezen1, Dr Rodney James2, Prof Karin Thursky2, 3, A/Prof Kirsty Buising2, 3

1. Department of General Practice, University of Melbourne
2. National Centre for Antimicrobial Stewardship at The Royal Melbourne Hospital, Peter Doherty Institute
3. Department of Medicine, University of Melbourne

**Background**

Antibiotic use in the Australian community is much higher than most OECD countries and a systematic approach to drive improved prescribing is lacking.

**Aims**

To conduct a pilot audit of systemic antibiotic use in general practice and determine compliance with the nationally endorsed Therapeutic Guidelines (TG) and assess prescribing appropriateness.

**Method**

The well-established Hospital National Antimicrobial Prescribing Survey tool was adapted to conduct an audit of eleven primary practice clinics in four Australian states. Data collected included clinical indication, relevant progress notes and investigation results, antibiotic prescribed, dosage, quantity supplied, and number of repeat prescriptions. Data were descriptively analysed for compliance with TG and prescription appropriateness.

**Results**

A total of 572 antibiotic prescriptions from 550 patient encounters were audited.

Of the antibiotics prescribed, 20.8% complied with TG, 67.0% were deemed non-compliant, 3.3% were microbiologically directed therapy, 3.8% had no guidelines available and 5.1% were not assessable. Of all prescriptions, 57.0% were deemed appropriate, 38.1% were deemed inappropriate and 4.9% were not assessable. Respiratory tract infections had the highest percentage of inappropriate prescribing (20.3%).

Overall, 22.0% of prescriptions were assessed as not requiring antibiotic therapy. Where antibiotics were required, prescriptions were assessed as inappropriate because the duration was too long (16.8%), the wrong dosage was prescribed (16.4%) or the spectrum was too broad (14.5%). Amoxicillin-clavulanate had the highest rate of inappropriate prescribing (80.3%).

Of the 199 repeat prescriptions prescribed, the recommended treatment course would have been exceeded in 61.8% of cases, if the repeat prescription were dispensed.

**Conclusion**

This study demonstrates that there are many targets for improved prescribing of antibiotics in the general practice setting and the requirement for implementation of antimicrobial stewardship strategies. Improved access and encouraged adherence to the TG may be an effective initiative to improve antibiotic prescribing appropriateness.

**References** (If applicable)