

Antibiotic Stewardship

Introduction

Antibiotic stewardship is defined as 'an organisational or healthcare system-wide approach to promoting and monitoring judicious use of antimicrobials to preserve their future effectiveness'.¹ It is not about restricting the use of antibiotics in patients but about using the right antibiotics, for the right length of time for the right people.

*Our mission is not to prescribe as few antibiotics as possible, but to identify the small group of patients who really need antimicrobial treatment and to explain, reassure, and educate the large group of patients who don't.*²

Over 80% of human antibiotic use is within primary care. Inappropriate antibiotic prescribing increases antimicrobial resistance, reinforces patients' belief in antibiotics being necessary, and can increase the likelihood of repeat consultations.³⁻⁵ It may undermine colleagues who have previously chosen not to prescribe and it can expose patients to harm.

Appropriate antibiotic prescribing is a considerable challenge for primary care clinicians. It is important to consider whether an antibiotic is warranted and what the most appropriate antibiotic may be, and to recognise the potential for harm from antibiotics, including the development of resistance. Busy primary care clinicians must deal with patients' expectations of care which may include the prescription of an antibiotic.

Harm can include side effects from medication. For example, 1 in 14 patients prescribed an antibiotic for otitis media will suffer an adverse effect as will 1 in 8 prescribed an antibiotic for rhino-sinusitis.^{6,7} Antibiotics are one of the few medications that we can give to one patient that can affect another (through transfer of resistant organisms). Other side effects include gastrointestinal upset, rash, allergic reaction, tendon problems (fluoroquinolones) and QT prolongation (clarithromycin). They may cause *Clostridium difficile* infections of which 29% of cases arose in the community in 2015.³

This module aims to enable primary care clinicians to:

- Communicate effectively the risks and benefits of antibiotics to patients
- Prescribe antibiotics for community-acquired infections in a manner that reduces the potential for antibiotic resistance.
- Understand the potential for resistant organisms as a cause of community-acquired infection