




Rational Antibiotic Prescribing

Antimicrobial resistance is a serious and imminent threat to global public health and is closely linked to the over-prescription of antibiotics. Australian GPs prescribe more than 30 million antibiotic prescriptions each year, and in 2015, nearly 45 per cent of the population received a prescription for at least one antibiotic. There is evidence that antibiotics are frequently prescribed in conditions for which there is very little benefit e.g. acute bronchitis. Over-prescription of antibiotics is a core theme of the [Choosing Wisely Australia](#) campaign. GP supervisors play a critical role in supporting registrars to prescribe antibiotics appropriately, by targeted teaching and feedback, as well as role-modelling best practice. See also [GPSA guide on Rational Prescribing](#)

TEACHING AND LEARNING AREAS 	<ul style="list-style-type: none"> • Classes of antimicrobials • Adverse effects of antibiotics • Common areas of antibiotic use, and over-prescription • Drivers to inappropriate antibiotic prescription, including those for registrars • Strategies for reduced antibiotic prescribing, including - shared decision making, delayed prescribing, safety netting 						
PRE- SESSION ACTIVITIES	<ul style="list-style-type: none"> • Read the 2016 RACGP Good Practice article Antimicrobials – Challenging Resistance 						
TEACHING TIPS AND TRAPS 	<ul style="list-style-type: none"> • GPs generate 90% of antibiotic prescriptions in Australia • Antibiotics can lead to patient-level bacterial resistance, not just community resistance • Differentiating 'viral' from 'bacterial' RTIs is both difficult and unhelpful – a syndromic aetiological approach is more useful i.e. treating the sore throat • The default approach to managing non-pneumonia RTIs is not to prescribe antibiotics • The science of treating RTIs like URTI and acute bronchitis is straightforward (antibiotics are seldom indicated) but the art of managing patient perceptions and expectations can be complex • Serious infective sequelae of not prescribing antibiotics to children with RTIs are extremely rare in developed countries • Delayed prescribing is an effective strategy for reducing antibiotic use • Supervisor prescribing practice influences registrar prescribing practice 						
RESOURCES 	<table border="1"> <tbody> <tr> <td data-bbox="331 1697 434 1832">Read</td> <td data-bbox="434 1697 1498 1832"> <ul style="list-style-type: none"> • Antibiotic Therapeutic Guidelines chapter • The Conversation - Why GPs prescribe too many antibiotics and why it's time to set targets • National Antimicrobial Strategy </td> </tr> <tr> <td data-bbox="331 1832 434 1935">Listen</td> <td data-bbox="434 1832 1498 1935"> <ul style="list-style-type: none"> • ABC The World Today 2017 - Over-prescribing Antibiotics • Shared decision making - 2012 NEJM interview </td> </tr> <tr> <td data-bbox="331 1935 434 1998">Watch</td> <td data-bbox="434 1935 1498 1998"> <ul style="list-style-type: none"> • ‘The Pick Up’ and other short films on antibiotic resistance </td> </tr> </tbody> </table>	Read	<ul style="list-style-type: none"> • Antibiotic Therapeutic Guidelines chapter • The Conversation - Why GPs prescribe too many antibiotics and why it's time to set targets • National Antimicrobial Strategy 	Listen	<ul style="list-style-type: none"> • ABC The World Today 2017 - Over-prescribing Antibiotics • Shared decision making - 2012 NEJM interview 	Watch	<ul style="list-style-type: none"> • ‘The Pick Up’ and other short films on antibiotic resistance
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FOLLOW UP & EXTENSION ACTIVITIES	<ul style="list-style-type: none"> • Registrar to discuss implementation of the Choosing Wisely recommendations (overleaf) with the supervisor • Registrar to document the specific indication, justification and duration for each antibiotic prescription in the medical record (for a period of 2-4 weeks), and supervisor and registrar to then discuss 						



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Choosing Wisely Australia Recommendations for Antibiotic Prescription

- Do not routinely prescribe antibiotics to children with fever without an identified bacterial infection
- Don't prescribe oral antibiotics for uncomplicated acute discharge from grommets
- Don't treat otitis media with antibiotics, in non-Indigenous children aged 2-12 years, where reassessment is a reasonable option
- Monotherapy for acne with either topical or systemic antibiotics should be avoided
- Don't prescribe oral antibiotics for uncomplicated acute otitis externa
- Avoid prescribing antibiotics for URTI
- Do not routinely prescribe antibiotics for inflamed epidermoid cysts (sebaceous cysts) of the skin
- Do not use antibiotics in asymptomatic bacteriuria
- Do not use antibiotics for the management of a leg ulcer without clinical infection
- Don't initiate an antibiotic without an identified indication and a predetermined length of treatment or review date

Evidence for all recommendations found at [Choosing Wisely Australia](#)