






# 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% 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 no benefit e.g. URTI. 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.

<b>TEACHING AND LEARNING AREAS</b> 	<ul style="list-style-type: none"> <li>• Classes of antimicrobials</li> <li>• Adverse effects of antibiotics</li> <li>• Common areas of antibiotic use, and over-prescription</li> <li>• Drivers to inappropriate antibiotic prescription, including those for <a href="#">registrars</a></li> <li>• Strategies for reduced antibiotic prescribing, including <a href="#">shared decision making</a>, <a href="#">delayed prescribing</a>, <a href="#">safety netting</a></li> </ul>						
<b>PRE-SESSION ACTIVITIES</b> 	<ul style="list-style-type: none"> <li>• Read the 2016 RACGP Good Practice article <a href="#">Antimicrobials – Challenging Resistance</a></li> </ul>						
<b>TEACHING TIPS AND TRAPS</b> 	<ul style="list-style-type: none"> <li>• GPs generate 90% of antibiotic prescriptions in Australia</li> <li>• Antibiotics can lead to patient-level bacterial resistance, not just community resistance</li> <li>• Differentiating 'viral' from 'bacterial' RTIs is both difficult and unhelpful – a syndromic approach is more useful i.e. sore throat</li> <li>• Serious infective sequelae of not prescribing antibiotics to children with RTIs are extremely rare in developed countries</li> <li>• <a href="#">Delayed prescribing</a> is an effective strategy for reducing antibiotic use</li> <li>• Supervisor prescribing practice influences registrar prescribing practice</li> <li>• Use supporting material in discussing the limited role of antibiotics e.g. <a href="#">Cates plots</a>, <a href="#">handouts</a></li> </ul>						
<b>RESOURCES</b> 	<table border="1"> <tbody> <tr> <td data-bbox="325 1603 434 1771"><b>Read</b></td> <td data-bbox="434 1603 1498 1771"> <ul style="list-style-type: none"> <li>• Antibiotic Therapeutic Guidelines</li> <li>• The Conversation 2017 - <a href="#">Why GPs prescribe too many antibiotics and why it's time to set targets</a></li> <li>• <a href="#">National Antimicrobial Strategy</a></li> </ul> </td> </tr> <tr> <td data-bbox="325 1771 434 1872"><b>Listen</b></td> <td data-bbox="434 1771 1498 1872"> <ul style="list-style-type: none"> <li>• <a href="#">ABC The World Today 2017 - Over-prescribing Antibiotics</a></li> <li>• <a href="#">Shared decision making - 2012 NEJM interview</a></li> </ul> </td> </tr> <tr> <td data-bbox="325 1872 434 1933"><b>Watch</b></td> <td data-bbox="434 1872 1498 1933"> <ul style="list-style-type: none"> <li>• <a href="#">‘The Pick Up’ and other short films on antibiotic resistance</a></li> </ul> </td> </tr> </tbody> </table>	<b>Read</b>	<ul style="list-style-type: none"> <li>• Antibiotic Therapeutic Guidelines</li> <li>• The Conversation 2017 - <a href="#">Why GPs prescribe too many antibiotics and why it's time to set targets</a></li> <li>• <a href="#">National Antimicrobial Strategy</a></li> </ul>	<b>Listen</b>	<ul style="list-style-type: none"> <li>• <a href="#">ABC The World Today 2017 - Over-prescribing Antibiotics</a></li> <li>• <a href="#">Shared decision making - 2012 NEJM interview</a></li> </ul>	<b>Watch</b>	<ul style="list-style-type: none"> <li>• <a href="#">‘The Pick Up’ and other short films on antibiotic resistance</a></li> </ul>
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<b>FOLLOW UP &amp; EXTENSION ACTIVITIES</b> 	<ul style="list-style-type: none"> <li>• Registrar to discuss implementation of the Choosing Wisely recommendations (overleaf) with the supervisor</li> <li>• 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</li> </ul>						



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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](#)