

## Clinician-targeted interventions can reduce antibiotic prescribing for ARIs

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<b>Clinical Question</b>	Compared to usual care, how effective are interventions aimed at influencing clinician antibiotic prescribing behaviour for acute respiratory infections (ARIs) in primary care?
<b>Bottom Line</b>	<p>Moderate-quality evidence suggested that the following interventions are likely to have an important effect on reducing antibiotic prescribing:</p> <ul style="list-style-type: none"><li>• C-reactive protein point-of-care testing in general practice (with no differences in symptom duration, patient satisfaction, or reconsultation)</li><li>• shared decision making in general practice (whilst maintaining patient satisfaction and without increasing likelihood of reconsultation)</li><li>• procalcitonin-guided management in general practice and emergency departments (without affecting health-related quality of life and whilst avoiding treatment failure).</li></ul> <p>The quality of the evidence for strategies aimed to educate doctors about antibiotic prescribing, that provide decision aids for doctors to help them change their prescribing, and for the use of rapid viral diagnostics in emergency departments was either low or very low, meaning that it was not possible to draw firm conclusions about the effects of these strategies</p>
<b>Caveat</b>	Most of this research was undertaken in high-income countries, and it might not generalise to other settings. No information on management costs was reported, and therefore no conclusions could be made about cost-effectiveness of interventions.
<b>Context</b>	Antibiotic resistance is a worldwide health threat. Interventions that reduce antibiotic prescribing by clinicians are expected to reduce antibiotic resistance. Disparate interventions to change antibiotic

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prescribing behaviour for ARIs have been trialled and meta-analysed, but not yet synthesised in an overview.

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**Cochrane Systematic Review**

[Tonkin-Crine SKG et al. Clinician-targeted interventions to influence antibiotic prescribing behaviour for acute respiratory infections in primary care: an overview of systematic reviews. Cochrane Reviews, 2017, Issue 9. Art. No.: CD012252.DOI: 10.1002/14651858. CD012252.pub2.](#) This overview contains eight reviews involving five Cochrane Reviews (33 trials) and three non-Cochrane reviews (11 trials).

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