

## Variety of interventions improve safety and effectiveness of medicines use

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**Clinical Question**

Which interventions improve the safety and effectiveness of medicines use?

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**Bottom Line**

Strategies that appeared to improve medicines use included medicines self-monitoring and self-management programmes, while simplified dosing regimens and directly involving pharmacists in medicines management (e.g. medicines reviews) appeared promising. Other strategies, such as delayed antibiotic prescriptions; practical management tools (e.g. reminders, packaging); education or information combined with other strategies (e.g. self-management skills training, counselling); and financial incentives, might also have had some positive effects, but their effects were less consistent. Some strategies, such as directly observed therapy, might have been ineffective. Other strategies, such as providing information or education alone had variable effects, being ineffective to change some outcomes (e.g. medicines adherence) but improving others, such as knowledge, which is key for informed medicines choices.

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**Caveat**

No single strategy improved all medicines use outcomes across all diseases, populations or settings. Reviews often had methodological limitations - at study level, review level, or both.

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**Context**

Medicines are a cornerstone of treatment for many health problems. Many strategies exist to help people to use medicines safely and effectively, but research in the area is poorly organised across diseases, populations and settings.

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**Cochrane Systematic Review**

Ryan R et al. Interventions to improve safe and effective medicines use by consumers: an overview of systematic reviews. Cochrane Reviews. 2014, Issue 4. Art. No.: CD007768.DOI: 10.1002/14651858.CD007768.pub3. This review contains 75 systematic reviews.

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## STATEMENTS/DISCLAIMERS

PEARLS summarise Cochrane reviews that are relevant to primary care. They contain the minimal information required for a clinician to either use an effective treatment or stop using an ineffective treatment. Where available they will contain numbers needed to treat and to harm.

PEARLS are created to assist with the dissemination of Cochrane reviews.

PEARLS are developed for trained health professionals in primary care. They are educational only and not meant to advise on specific clinical treatment.