

Interventions to improve antimicrobial prescribing of doctors in training (IMPACT): a realist review

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Plain English summary

Improving antimicrobial prescribing of doctors in training

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Plain English summary

Antimicrobial medicines (e.g. antibiotics) need to be used against infections caused by bacteria. However, the cause of infection is often difficult to understand, which means that much antibiotic use is unnecessary. As doctors in training (i.e. those who have graduated from medical school but are still undergoing postgraduate clinical training to become specialists or general practitioners) carry out a lot of prescribing, it is important to address their specific needs to be able to reduce inappropriate prescriptions.

A number of academic publications discuss how doctors in training learn to prescribe in hospitals and in the community. Our project was funded to bring this literature together and to make sense of what other researchers have identified as challenges for doctors in training. To combine this literature in a novel way, we followed a method called realist review. This method allowed us to analyse a wide range of relevant information to better understand how and why doctors in training seem to be making certain prescribing decisions and what solutions can be more effective in different situations.

For example, we found that doctors in training are significantly influenced by their supervisors. Sometimes, this means that they will choose to ask other health professionals for advice, or to look up information, only if they think that their seniors would do so in similar situations. Doctors in training are keen to avoid criticism and to present themselves as knowledgeable and competent prescribers.

Throughout the review we worked closely with an advisory group including both patient representatives and health professionals. This group allowed us to understand whether findings from the analysis of the literature were similar to or different from what is happening currently in practice. They also helped us translate the review findings into materials for distribution (i.e. visual illustration and animation video) to doctors in training, senior practitioners and educators, intervention designers and policy-makers.

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