

Table 3. Key evidence from systematic reviews for a selection of improvement approaches.

<i>Approach</i>	<i>Key findings</i>	<i>More likely to be useful when...</i>	<i>Less likely to be useful when...</i>
Printed educational materials - Distribution of published or printed recommendations for clinical care, including clinical practice guidelines, audio-visual materials and electronic publications. ¹⁰	When used alone and compared to no intervention, printed educational materials may have a small beneficial effect on professional practice. Effect on patient outcomes not known.	Limited resources available Large target audience Using persuasive communication methods to make content, language and presentation more engaging	Recommending challenging or complex changes in clinical behaviour
Continuing education meetings and workshops - Participation of healthcare providers in conferences, lectures, workshops or traineeships. ¹¹	Educational meetings alone or combined with other interventions, can improve professional practice and patient outcomes. Effects most likely to be small and similar to other approaches, such as audit and feedback, and educational outreach visits.	Using strategies to increase attendance at educational meetings Using mixed interactive and didactic formats Focusing on outcomes that are likely to be perceived as serious	Used alone to change complex behaviours
Educational outreach visits - Use of a trained person who meets with providers in their practice settings to give information with the intent of changing the providers' practice. The information given may have included feedback on the performance of the provider(s). ¹² Also known as academic detailing.	Used alone or when combined with other approaches, effects on prescribing are relatively consistent and small, but potentially important Effects on other types of clinical practice vary from small to modest improvements		
Local opinion leaders - Use of providers nominated by their colleagues as educationally	Opinion leaders alone or in combination with other interventions may successfully	Existence of intact and relatively stable social networks	

influential. ¹³	<p>promote evidence-based practice, but effects can vary a lot.</p> <p>Roles of the opinion leader seldom clearly described in most studies. It is therefore not possible to say what the best way is to optimise their effects.</p>	Condition-specific opinion leaders available	
Audit and feedback - Any summary of clinical performance of healthcare over a specified period of time. ¹⁴	Generally leads to small but potentially important improvements in professional practice	<p>Resources available for data collection and analysis</p> <p>Meaningful routine data available for feedback</p> <p>Baseline performance is low, source a supervisor or colleague, provided more than once, delivered in both verbal and written formats, and includes both explicit targets and an action plan – more effective</p>	
Computerised reminders - On screen point of care computer reminders designed or intended to prompt a health professional to recall information. ¹⁵	<p>Generally achieve small to modest improvements in clinical practice</p> <p>Most studies examined the effects of relatively simple reminders</p>	<p>Computerised decision support systems providing advice for patients in addition to clinicians – three times more likely to succeed¹⁶</p> <p>If requiring clinicians to supply a reason for over-riding advice – over 11 times more likely to succeed</p>	More complex decision support less successful, especially for chronic disease management
Financial incentives – Changes in the level or method of payment to improve the quality	Mixed effects although evidence has serious methodological limitations and needs judged	Improving processes of care, referrals and admissions, and prescribing cost outcomes –	<p>Improving compliance with guidelines – generally ineffective</p> <p>For improving patient outcomes -</p>

of care. ¹⁷	with caution.	generally effective	no evidence of effects
Patient-mediated approaches - Aimed at changing the performance of healthcare professionals through interactions with patients, or through information provided by or to patients ¹⁸	Mixed effects on clinical practice with variable quality of evidence.	For patient-reported health information (e.g. information obtained from patients about patients' own health, concerns or needs before a clinical encounter) and patient education (e.g. increasing patients' knowledge about their condition and treatment options) - probably small to modest effects on clinicians' adherence to recommended practice For patient information (e.g. informing or reminding patients to attend recommended care) - may also improve clinical practice	For patient decision aids providing patients with information about treatment options including risks and benefits - may make little or no difference to clinical practice
Reducing medication errors in primary care ¹⁹ - Professional approaches (e.g. computerised decision support) and organisational (e.g. medication reviews by pharmacists)	Based on moderate- and low-certainty evidence, approaches in primary care for reducing preventable medication errors probably make little or no difference to the number of people admitted to hospital or the number of hospitalisations, emergency department visits, or mortality.		