

Editorial

Organisational interventions in primary care

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Organisational changes are endemic in primary care, but they are often made for pragmatic or political reasons and without plans for formal evaluation. An organisational intervention can be defined as an attempt to improve the quality or cost-effectiveness of care by changing who delivers care, how care is organised, or where care is provided.¹ In practice, most interventions include more than one of these components, and may also include educational or financial elements; for example a package to improve diabetes care may include additional specialist nurses, guideline dissemination with computer support, and financial incentives.

Although the complexity of these interventions makes their evaluation difficult, there is a growing evidence base about what organisational interventions are more or less likely to lead to improved quality of care. These will be considered under two of the main tasks of primary care: management of chronic disease, and the assessment and management of acute conditions.

Chronic disease management

The strongest evidence for what organisational change can deliver is in chronic disease management. Decades ago, Julian Tudor Hart demonstrated that case finding and active recall, combined with nurse-led clinics, led to significant improvements in ascertainment and control of blood pressure and diabetes, and may have been responsible for the lower mortality seen in his practice area compared to similar localities where primary care continued to be demand led.²

Subsequent trials have examined the contribution of organisational components of this package of care. These include redefinition of professional roles, structured care and follow-up, and information systems to provide decision support.³

The intervention that appears most consistently to improve quality of care is additional nurse support, combined with structured care and follow-up. In a review of nurse-led secondary prevention clinics for coronary heart disease, Campbell concluded that these

clinics can reduce mortality and improve quality of life.⁴ These differences are clinically important, and exceed the benefit derived from many pharmaceutical interventions; for example a trial of secondary prevention clinics in Scotland showed a 5-year mortality of 14.9% in those who had access to the intervention, compared to 19.1% in the control group.⁵ Similarly, a trial of a nurse-led disease-management programme for coronary heart disease and heart failure, recruiting patients from within primary care, showed significant improvements in the process of care and intermediate outcomes,⁶ and a gain in quality-adjusted life years at an acceptable cost.⁷

There is also systematic review evidence that specialist nurse care improves the quality of primary care for diabetes.⁸ For example, the introduction of nurse case management for diabetes within a health maintenance organisation has been found to improve glycaemic control (haemoglobin (Hb)_{A1c} decrease of 1.7% in intervention group, versus 0.6% in controls) and health status.⁹

Additional monitoring and support of patients by nurses and other professionals is also effective in the management of depression in primary care.¹⁰ Positive results were found not only for high-intensity interventions such as a nurse conducting regular face-to-face reviews and monitoring treatment response, but also in studies with more modest interventions such as telephone support. The review suggests that in the management of depression in primary care, organisational interventions may be more effective than education and guideline dissemination alone; for example the Hampshire Depression project found education alone improved neither the recognition nor the management of depression.¹¹

Another organisational intervention noted by Wensing as likely to improve both professional performance and patient outcomes is knowledge management through information technology.¹ For example, computerised prompting has been shown to improve adherence to guidelines in chronic disease such as diabetes,¹² and clinical decision support systems are effective in reducing medication errors.

Trials that are sufficiently powered to be confident of a negative finding have also demonstrated organisational interventions that are not effective in the management of chronic disease. For example the SHIP (Southampton Heart Integrated Care Project) trial introduced a liaison nurse to work with practices to support patients recently diagnosed with ischaemic heart disease.¹³ The lack of effect on health outcomes was felt by the authors to be due to the intervention being aimed at mobilising rather than augmenting resources for the targeted group of patients. Similarly, simply reallocating tasks in chronic disease management between doctors and nurses in primary care has been shown in several studies to make no appreciable difference to the costs or quality of care.¹⁴

Unfortunately there are several types of organisational intervention to improve chronic disease management for which the evidence is unclear or inconsistent. Most notable is quality management approaches, including total quality management and continuous quality improvement, whose effects on professional performance and patient outcomes remain uncertain despite numerous evaluations.¹ There is also conflicting evidence about the effectiveness of intensive surveillance of high-risk patients to prevent admission,¹⁵ and a number of current initiatives, such as intermediate care clinics for diabetes.¹⁶

Assessment and management of acute conditions

Several organisational interventions have been introduced to improve access for patients with acute conditions and to improve the efficiency of their management. Broadly, these include role substitution within existing primary care, such as nurse triage, or the introduction of new services to primary care provision.

Evaluation of these initiatives poses several challenges. Most importantly, the majority of conditions will be self-limiting, and so assessing the quality of care for rare conditions such as meningitis needing urgent treatment would be beyond the scope of a conventionally powered trial to detect. A Cochrane review included five studies comparing doctors and nurses having first-contact care of patients seeking urgent or same-day appointments.¹⁴ Overall health outcomes were no different, although satisfaction was higher with nurses and their consultations were longer and more likely to include investigation or follow-up. Because of these features, costs were broadly equivalent, although, as the authors state, whether or not such an initiative is cost beneficial or not will be very context specific. The evidence is even less clear for new

services such as NHS Direct or walk in centres, which have not been evaluated in a trial. The evidence to date suggests they provide safe and accessible care that is valued by their users, but do not reduce demand on existing primary care services.^{17,18}

Conclusion

There is a growing evidence base for which organisational interventions can lead to improved quality of primary care, and just as importantly, those that are likely not to. The evidence is stronger for chronic than acute care. Gaining more evidence is difficult and expensive, but not as expensive as failing to do so.

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PEER REVIEW

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CONFLICTS OF INTEREST

None.

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