Review: organisational change and patient involvement may increase the use of prevention cancer screening services


QUESTION: What approaches are most effective in increasing use of adult immunisation and cancer screening services?

Data sources
Studies were identified by searching (through February 1999) the Cochrane Effective Practice and Organization of Care Special Register (which includes searches of MEDLINE [from 1966], EMBASE/Excerpta Medica [from 1980], HealthSTAR [from 1975], and the Cochrane Controlled Trials Register [from 1996]), previous systematic reviews, and the Health Care Quality Improvement Projects database.

Study selection
Controlled clinical trials that assessed interventions to increase the use of immunisations for influenza and pneumococcal pneumonia, and use of screening for colon, breast, and cervical cancer in adults were selected for review.

Data extraction
Data were extracted on specific intervention components, study characteristics, and outcomes. Intervention components were classified as reminders to patients or providers, feedback to providers on performance of prevention activities, education of patients or providers, financial incentives to patients or providers, regulatory and legislative actions, organisational change, or mass media campaigns.

Main results
108 studies on immunisations (29 studies), mammography (33 studies), cervical cytology (27 studies), and colon cancer screening (19 studies) met the inclusion criteria. Of these, 95 were randomised controlled trials (RCTs) and 13 were controlled clinical trials. 81 studies included a control group and were eligible for meta-regression analysis. 25 of these targeted providers, organisations, or communities (22 of the 25 were randomised controlled trials). The table displays the effectiveness of intervention components on increasing the use of immunisation and screening services. Organisational change interventions, such as use of separate clinics aimed at screening and prevention services, use of a planned care visit for prevention, use of continuous quality improvement techniques, or designation of non-physician staff to do specific prevention activities, appeared most effective. Involving patients through patient financial incentives, reminders, education, and feedback also appeared to be effective.

Conclusion
Health care organisational change interventions and interventions involving patients through financial incentives, reminders, education, and feedback may be effective for increasing the use of adult immunisation and cancer screening services.

COMMENTARY
The value of preventive health care is well known. Delivering preventive health care, however, can be challenging, and physicians frequently underuse these services. This methodologically sound meta-analysis by Stone et al makes a compelling case for physicians to lead the way in changing how healthcare services are delivered. Stone et al found that patient-oriented and organisational approaches are most likely to be effective. Evidence exists that physicians, when provided with reminders, can be encouraged to provide preventive services more often.1

New models of care delivery, such as the Idealised Design of Clinical Office Practices (IDCOP) initiative,2 have shown increased effectiveness in the management of chronic illness. The IDCOP model emphasises the use of information technology to enhance patient access, develop patient registries to manage populations as well as individual patients, and incorporate new knowledge into practice. Practising physicians in small groups could have difficulty implementing some aspects of the model because of financial constraints and expertise in information technology. However, 2 relatively simple changes that physicians can make can include designating a non-physician to implement preventive health care protocols and scheduling preventive health care visits.

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