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


**Question**
What approaches are most effective in increasing use of adult immunization 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 immunizations 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, organizational change, or mass media campaigns.

**Main Results**
108 studies on immunizations (29 studies), mammography (33 studies), cervical cytology (27 studies), and colon cancer screening (19 studies) met the inclusion criteria. Of these, 95 were randomized 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, organizations, or communities (22 of the 25 were RCTs). The effectiveness of intervention components on increasing the use of immunization and screening services are displayed in the Table. Organizational 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 nonphysician 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 organizational change interventions and interventions involving patients through financial incentives, reminders, education, and feedback may be effective for increasing the use of adult immunization and cancer screening services.

**References**