

Effectiveness of One-On-One Education (Tailored or Non-tailored) Interventions to Promote Breast, Cervical and Colorectal Cancer Screening in Communities and Health Care Systems

Mammography screening every 1 or 2 years is recommended for women age 40 and older. The benefits of regular mammography increase with age, whereas the possibility of harms from screening diminish from ages 40 to 70. So, the balance of benefits and harms grows more favorable as women age. The benefits of Papanicolaou (Pap) smear testing for women over 21 from screening for cervical cancer are also clear. The incidence of cervical cancer has decreased significantly during the last 40 years, in large part because of early detection. Periodic screening for colorectal cancer for men and women age 50 years and older is strongly recommended. Benefits from screening substantially outweigh potential harms. Several effective screening tests are available, including fecal occult blood testing, sigmoidoscopy, and colonoscopy. However, despite the existence of these tests, utilization rates are below recommended levels according to Healthy People 2010 objectives, especially among individuals in some minority groups and among low income individuals who may not have regular medical care. The question is then, what are effective strategies to promote increased use of breast, cervical and colorectal cancer screening?

Systematic reviews of published studies, conducted on behalf of the Task Force on Community Preventive Services by a team of experts, found insufficient evidence to determine the effectiveness of one-on-one interventions in increasing screening for breast, cervical and colorectal cancer and therefore recommended for further research. It is important to remember that **this finding does NOT mean this intervention does not work**, but rather indicates that additional research is needed to determine the effectiveness of these interventions.

Background on one-on-one education (tailored or non-tailored) interventions to promote breast, cervical and colorectal cancer screening

- One-on-one educational interventions include counseling by health care providers or health educators via telephone or in office/clinic settings.
- One-on-one counseling by lay health workers may be done in homes or in other settings such as hair salons.
- One-on-one educational interventions may be supplemented through the use of brochures, informational letters, reminders, or other material.
- Interventions for one-on-one can be either tailored or non-tailored. Tailored interventions use information about individuals, collected from them or about them. Non-tailored interventions are not designed for individual members of a population.

Findings from the systematic review

Search results:

- 127 articles reviewed
- 97 studies included in one of the 6 intervention reviews conducted by the Task Force
- 19 qualifying studies
- Twenty studies were identified by the Task Force and one study was found to have limited quality and was therefore excluded from the review.
- 15 studies identified by the Task Force were found to be insufficient to promote screening for breast cancer by mammography because the results were inconsistent across studies and the overall effect size was modest.
- There were four studies of cervical cancer screening by Pap test that were found to be insufficient because of the small number of studies.
- There were two studies of colorectal cancer screening in the best evidence subset that provided insufficient evidence to determine its effectiveness because of the small number of studies and their inconsistent results.
- One-on-one interventions were found to be effective in both medical and non-medical settings.
- There was sparse cost effectiveness information available.
- Directions for future research:
 - What are the minimum and maximum requirements for the duration and intensity of one-on-one educational interventions?
 - Do one-on-one educational interventions for screening increase or decrease the delivery of preventive services?

What you can do with this finding

- Use this finding and suggestions for improvement in research components along with information from [Cancer Control PLANET](#) to find local contacts and research tested programs that support implementation of recommended interventions or further research to address gaps in the evidence.

Publications:

- **MMWR/Recommendations and Reports** – Winter 2003.

The Guide to Community Preventive Services (Community Guide) provides recommendations on population-based interventions to promote health and to prevent disease, injury, disability, and premature death, appropriate for use by communities and healthcare systems. For more information about the Community Guide (including links to publications and a variety of resources) see www.thecommunityguide.org and for more information about Task Force findings on skin cancer prevention see

www.thecommunityguide.org/cancer/

This information is in the public domain. Copying and disseminating freely is encouraged. However, citation to source is appreciated.

Updated – September 15, 2003