Effectiveness of Client Incentive Combined with Reminders 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 Papanicolau (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 that client incentives combined with reminders were effective in increasing screening for breast cancer. Based on these reviews, the Task Force issued recommendations to implement these efforts. On the other hand, insufficient evidence was found to address the role of client incentives combined with reminders in increasing cervical cancer screening and therefore recommended for further research. There were no studies found to address the role of client incentives combined with reminders in increasing colorectal cancer screening. The evidence was, therefore, considered insufficient to promote client incentives combined with reminders in colorectal cancer prevention 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 client incentive combined with reminders interventions to promote breast, cervical and colorectal cancer screening

- Client incentives are rewards to motivate people to seek cancer screening for themselves or others (e.g., family or friends). These incentives might be small amounts of money (ranging from $5-$15), coupons, or other small gifts. Their value should not be so large as to be viewed as coercive.
- Incentives may be distributed in connection with reminder letters or postcards.

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
- 4 qualifying studies

- A total of four studies were reviewed for client incentives with reminders for cancer screening. Three studies for breast cancer screening were identified by the Task Force to be of the highest quality and were therefore the basis for the Task Force’s recommendation.
- One study was identified by the Task Force for cervical cancer screening. Evidence was found to be insufficient to assess the effectiveness because there was only one study with limitations in its execution.
- There were no studies found on the effectiveness of incentives in promoting colorectal cancer screening.
- There was insufficient evidence to assess the effectiveness of incentives directed at clients for recruiting friends because of the small number of studies and the limitations in the execution of the available studies.
- There was insufficient evidence to assess the effectiveness of incentives alone to increase any cancer screening because there were no studies.
- Studies were found to be effective in urban and suburban settings.
- Studies that utilized coupons found an increase of 22% improvement in the intervention group relative to the control for appointments made and a 20% improvement for appointments kept.
• Directions for future research:
  - Do incentives increase colorectal cancer screening?
  - Does the effectiveness of incentives vary by type of screening test within cancer?
  - Does incentive effectiveness vary by type of cancer screening test (fecal occult blood test vs. sigmoidoscopy vs. colonoscopy)?

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:

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 17, 2003