
Methods for Conducting Systematic Reviews of Evidence on Effectiveness and Economic Efficiency of Interventions to Increase Screening for Breast, Cervical, and Colorectal Cancers

Roy C. Baron, MD, MPH, Barbara K. Rimer, DrPH, Ralph J. Coates, PhD, Jon Kerner, PhD, Patricia Dolan Mullen, DrPH, Sajal Chattopadhyay, PhD, Peter A. Briss, MD, MPH, and the Task Force on Community Preventive Services

Introduction

The Task Force on Community Preventive Services (Task Force) chose to include prevention of breast, cervical, and colorectal cancer through interventions to increase screening as a topic in the *Guide to Community Preventive Services* (*Community Guide*) for several reasons. First, these cancers impose a large health burden on the U.S. population^{1,2}; second, there are effective screening tests that can reduce this burden^{3–6}; and third, large segments of the population still are not screened for colorectal cancers and, despite much progress, many groups have not benefited from the general rates of improvement in breast and cervical cancer screening.^{7,8} Through systematic review of the literature, the Task Force sought evidence to determine effectiveness of a variety of interventions which are being applied to increase screening for these cancers.

Community Guide methods for conducting systematic reviews and for linking evidence to recommendations have been described elsewhere.^{2,9,10} In brief, for each *Community Guide* topic, an interdisciplinary team (the systematic review development team), representing a range of relevant backgrounds, skills, and experiences, conducts a review by:

- developing a conceptual framework to organize, group, and select appropriate interventions for health issues under consideration;
- choosing outcomes to define effectiveness (success) of each intervention;
- systematically searching for and retrieving evidence;
- assessing quality of individual studies and summarizing strength of evidence;
- summarizing other evidence, including applicability over a range of populations and settings, other positive or negative effects, barriers to implementation, and economic efficiency of effective interventions;
- identifying and summarizing research gaps; and
- presenting findings to the Task Force for recommendation.

This report summarizes the general methodologic approach used by the *Community Guide* and adopted by the systematic review development team for conducting systematic reviews of interventions to promote screening for breast, cervical, and colorectal cancers. Any further modification to adapt these methods to a specific cancer screening intervention review will be described in the methods section of the respective review.

Systematic Review Development Team

The systematic review development team included three subgroups:

- The coordination team, which drafted the conceptual framework for reviews; managed the data collection and review process; and drafted evidence tables, summaries of evidence, and reports.
- The consultation team, which reviewed and commented on materials developed by the coordination team, and set priorities for reviews.
- The abstraction team, which collected and recorded data from studies for possible inclusion in systematic reviews.

From the Community Guide Branch, National Center for Health Marketing (Baron, Chattopadhyay, Briss) and Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion (Coates), CDC, Atlanta, Georgia; University of North Carolina School of Public Health (Rimer), Chapel Hill, North Carolina; National Cancer Institute, National Institutes of Health (Kerner), Bethesda, Maryland; and University of Texas School of Public Health (Mullen), Houston, Texas.

Author affiliations are shown at the time the research was conducted.

The names and affiliations of the Task Force members are listed at the front of this supplement and at www.thecommunityguide.org.

Address correspondence to Roy C. Baron, MD, MPH, Community Guide Branch, CDC, 1600 Clifton Road NE, MS E-69, Atlanta GA 30333. E-mail: rbaron@cdc.gov.

Address reprint requests to Shawna L. Mercer, MSc, PhD, The Guide to Community Preventive Services, CDC, 1600 Clifton Road NE, MS E-69, Atlanta GA 30333. E-mail: SMercer@cdc.gov.

Unless otherwise noted, subsequent use of the term “team” will refer to the coordination team.

Conceptual Approach

Convincing evidence shows that screening using recommended techniques improves health outcomes for breast, cervical, and colorectal cancers.^{3–6} Many interventions have been applied in community and healthcare system settings to increase screening rates in populations of age-eligible individuals who have

never been screened or are not screened at recommended intervals.

In developing the approach to these reviews, the team:

- identified modifiable barriers and facilitators to changing screening behavior (determinants, such as knowledge, attitudes, intentions, access, and provider-client interactions);
- conceptualized three primary strategies under which related interventions to improve screening are grouped: (1) increasing community demand for

Table 1. Interventions, to date, selected for *Community Guide* systematic review of evidence of effectiveness in increasing breast, cervical, and colorectal cancer screening. Six interventions are intended to increase client demand for screening services, three to enhance access to services, and three to improve provider and healthcare system performance in delivering screening services

Intervention	Definition
Increasing community demand for screening (client-directed)	
Mass media (education)	Informational or motivational messages delivered to large audiences through broadcast and print media (television, radio, billboards, magazines, and newspapers).
Small media (education)	Informational or motivational messages delivered to individuals through brochures, leaflets (pamphlets or flyers), newsletters, informational letters, flip-charts, or videos.
Group (education)	Informational or motivational messages delivered to an assembled group in lecture or interactive format by trained laypeople or health professionals.
One-on-one (education)	Informational or motivational messages delivered by one individual to another, either in person or by telephone. May be supported by small media or client reminders.
Client reminders and recall	Printed (letter or postcard) or telephone messages advising people they are due (reminder) or late (recall) for cancer screening. Messages may include a scheduled appointment or an offer to assist in scheduling.
Client incentives	Small, noncoercive gifts or financial rewards to motivate people to seek cancer screening for themselves or others.
Increasing community access to screening (client-directed)	
Reducing client out-of-pocket costs	Reduces client cost through reimbursement, voucher distribution, or increased third party payment for cancer screening.
Reducing structural barriers	Reduces or eliminates barriers such as location, distance, inconvenient hours of operation, or language barriers (e.g., alternative screening sites, provide transportation, expand hours of operation, assist in appointment scheduling). These interventions may be supported by reminders, educational messages, or reduced out-of-pocket client costs.
Laws to increase screening	State or federally mandated screening or insurance coverage of screening.
Increasing provider delivery or promotion of screening (provider-directed)	
Provider reminders and recall	Electronic or manual chart notations or checklists to inform or remind healthcare providers when clients are due (reminder) or overdue (recall) for screening.
Provider assessment and feedback	Evaluates provider performance in delivering a screening service (assessment) and gives the information back to providers, individually or as a group (feedback).
Provider incentives	Direct or indirect rewards (monetary or nonmonetary) to motivate providers to deliver screening services or to make appropriate referrals.

Download English Version:

<https://daneshyari.com/en/article/4194110>

Download Persian Version:

<https://daneshyari.com/article/4194110>

[Daneshyari.com](https://daneshyari.com)