



Evidence-Based Provider Approaches for Improving Breast, Cervical and Colorectal Cancer Screening

Session Overview



- What are Evidence-Based Approaches?
- ‘The Community Guide’ - Provider & Client Recommended Strategies to Increase Cancer Screening Rates
- Screening Toolkit & Other related Best-Practice Tools
- Summary- Positive Clinic Screening Approaches
- Discussion

Evidence-Based Approaches

An evidence-based approach has been:

- Implemented (with a group)
- Evaluated
- Found to be effective

There is a continuum of evidence:

- Systematic review of multiple research studies
- Single research study, Program evaluation, Professional experience

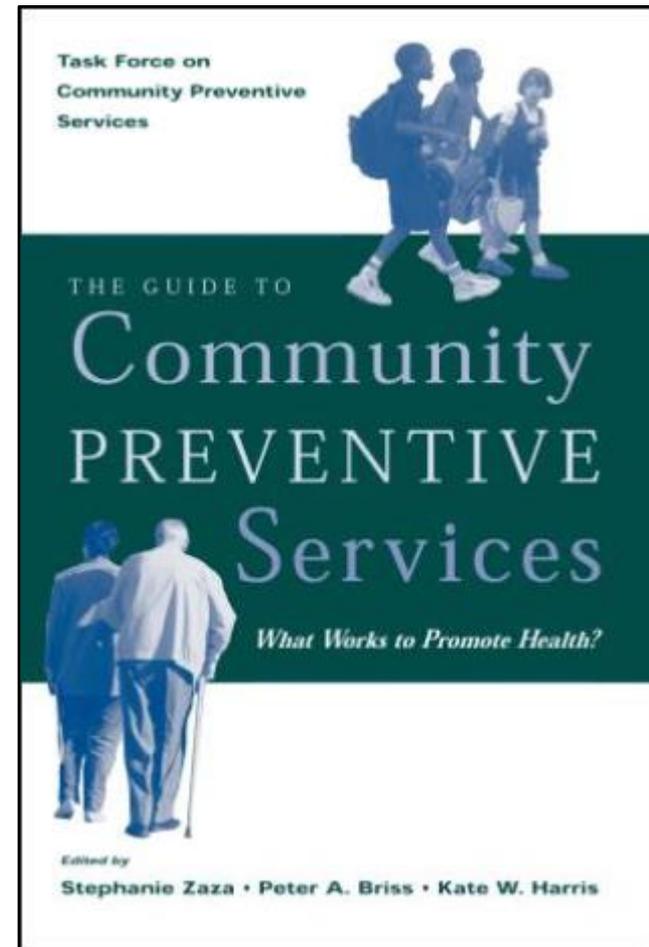
Does this relate to cancer screening?

- Several resources in the public health and healthcare world review evidence and make recommendations around increasing cancer screening rates

The Community Guide

The Guide to Community Preventive Services – What Works to Improve Health

www.thecommunityguide.org



Community Guide Overview

- Supported by Centers for Disease Control and Prevention
- Led by Independent **Task Force on Community Preventive Services**
- Conducts systematic reviews of health-related intervention strategies
- Provides information about intervention strategies (best practices) for promoting primary and secondary prevention

Intervention to Increase Recommendation and Delivery of Screening for Breast, Cervical, and Colorectal Cancers by Healthcare Providers

A Systematic Review of Provider Reminders

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Abstract: Most major medical organizations recommend routine screening for breast, cervical, and colorectal cancers. Screening can lead to early detection of these cancers, resulting in reduced mortality. Yet, not all people who should be screened are screened regularly or, in some cases, ever. This report presents results of systematic reviews of effectiveness, applicability, economic efficiency, barriers to implementation, and other harms or benefits of provider reminder/recall interventions to increase screening for breast, cervical, and colorectal cancers. These interventions involve using systems to inform healthcare providers when individual clients are due (reminder) or overdue (recall) for specific cancer screening tests. Evidence in this review of studies published from 1986 through 2004 indicates that reminder/recall systems can effectively increase screening with mammography, Pap, fecal occult blood tests, and flexible sigmoidoscopy. Additional research is needed to determine if provider reminder/recall systems are effective in increasing colorectal cancer screening by colonoscopy. Specific areas for further research are also suggested.

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Introduction

Cancer is the second leading cause of death in the U.S.,¹ and breast and colorectal cancers are among the leading causes of cancer deaths.² For breast, colorectal, and cervical cancers, effective screening tests can reduce cancer-related mortality.^{3–6} Furthermore, some screening tests (e.g., Pap, flexible sigmoidos-

copy, colonoscopy) may lead to a reduction in incidence via detection of pre-neoplastic lesions, which can be removed or treated.³ The U.S. Preventive Services Task Force (USPSTF) recommends breast cancer screening with mammography,⁶ cervical cancer screening with Pap,⁵ and colorectal cancer screening with fecal occult blood tests (FOBTs), flexible sigmoidoscopy, or colonoscopy.⁴

Each year, an estimated 4475 deaths from breast cancer, 3644 deaths from cervical cancer, and 9632 deaths from colorectal cancer could be prevented if all eligible Americans received appropriate cancer screening services.⁷ Yet, the 2005 National Health Interview Survey of U.S. adults⁸ showed that only 67% of women aged ≥40 years reported mammograms within the previous 2 years, and only 78% of women aged ≥18 years reported having a Pap within the previous 3 years. Among adults aged ≥50 years, only 50% reported ever having colorectal

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Effectiveness of Interventions to Increase Screening for Breast, Cervical, and Colorectal Cancers

Nine Updated Systematic Reviews for the Guide to Community Preventive Services

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Context: Screening reduces mortality from breast, cervical, and colorectal cancers. The *Guide to Community Preventive Services* previously conducted systematic reviews on the effectiveness of 11 interventions to increase screening for these cancers. This article presents results of updated systematic reviews for nine of these interventions.

Evidence acquisition: Five databases were searched for studies published during January 2004–October 2008. Studies had to (1) be a primary investigation of one or more intervention category, (2) be conducted in a country with a high-income economy, (3) provide information on at least one cancer screening outcome of interest, and (4) include screening use prior to intervention implementation or a concurrent group unexposed to the intervention category of interest. Forty-five studies were included in the reviews.

Evidence synthesis: Recommendations were added for one-on-one education to increase screening with fecal occult blood testing (FOBT) and group education to increase mammography screening. Strength of evidence for client reminder interventions to increase FOBT screening was upgraded from sufficient to strong. Previous findings and recommendations for reducing out-of-pocket costs (breast cancer screening), provider assessment and feedback (breast, cervical, and FOBT screening), one-on-one education and client reminders (breast and cervical cancer screening), and reducing structural barriers (breast cancer and FOBT screening) were reaffirmed or unchanged. Evidence remains insufficient to determine effectiveness for the remaining screening tests and intervention categories.

Conclusions: Findings indicate new and reaffirmed interventions effective in promoting recommended cancer screening, including colorectal cancer screening. Findings can be used in community and healthcare settings to promote recommended care. Important research gaps also are described.

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School of Medicine; the Department of Behavioral Health Sciences (Kerner), School of Nursing, the University of Pennsylvania, Philadelphia, Pennsylvania; Harbor Discovery as an independent contractor in Charlottesville, Virginia. Dr. Wilson was affiliated with the Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC, and Dr. Melvin was affiliated with The University of North Carolina at Chapel Hill when this research was completed.

Notes and affiliations of Task Force members are available at www.thecommunityguide.org/about/task_force_members.html. Address correspondence to: Susan A. Sabatino, MD, MPH, Division of Cancer Prevention and Control, CDC, 4770 Buford Highway (E-35), Atlanta GA 30351. E-mail: ssabatino@cdc.gov
0749-3997/12/0109-00
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What Interventions were Reviewed?

- Interventions designed to alter client behavior (client-oriented)
- Interventions to increase screening through
 - ▣ Community access
 - ▣ Community demand
- Interventions designed to increase provider delivery of screening services (provider-oriented)

Community Guide Categories

Recommended

- Strong or sufficient evidence that the intervention is effective

Recommended against

- Strong or sufficient evidence that the intervention is harmful or not effective

Insufficient evidence

- Available studies do not provide sufficient evidence to determine if the intervention is, or is not, effective (additional research is needed)

Provider Strategy Recommendations

Intervention	Breast, Cervical and Colorectal Cancer Screening	Description	Year
 Provider assessment and feedback	Recommended <i>*(CRC for FOBT only)</i>	Evaluate providers' performance in delivering screening and present them with information about their performance (often compared with a goal/standard)	2009
 Provider reminder and recall systems	Recommended* <i>*(CRC for FOBT & Sigmoidoscopy only)</i>	Inform providers when patients are due or overdue for screening (e.g. via electronic charts, paper charts, and e-mails)	2006
Provider incentives	Insufficient evidence	Provide monetary or non-monetary (e.g. continuing education credit) rewards to motivate screening by providers	2009

Patient Strategy Recommendation Categories

Intervention	Breast Cancer Screening	Cervical Cancer Screening	Colorectal Cancer Screening	Year
Client reminders	Recommended	Recommended	Recommended <i>(FOBT only)</i>	2010
Small media	Recommended	Recommended	Recommended <i>(FOBT only)</i>	2005
One-on-one education	Recommended	Recommended	Recommended <i>(FOBT only)</i>	2010
Group education	Recommended	Insufficient evidence	Insufficient Evidence	2009
Reducing structural barriers	Recommended	Insufficient evidence	Recommended <i>(FOBT only)</i>	2010
Reducing out-of-pocket expenses	Recommended	Insufficient evidence	Insufficient Evidence	2009

Cancer Screening Patient Strategies Description

Reminders	Written materials (e.g. letters, postcards, and emails) or telephone messages (including automated messages) advising people they are due for screening
Small media	Printed materials (e.g., pamphlets, fact sheets) or videos that provide information or motivational messages about screening
One-on-one education	Information/motivational screening messages delivered in person/by telephone to individuals (by healthcare or trained lay people)
Group education	Information or encouragement about screening delivered to a group (by health care professionals or trained lay people)
Reducing structural barriers	Strategies to reduce non-economic barriers to screening (e.g. extended service hours, appointment scheduling assistance, child care assistance, and interpreter services)
 out-of-pocket expenses	Programs to lower screening test costs (e.g. through vouchers or co-pay reductions)

Reducing Structural Barriers (*breast & colorectal*)

Reduce non-economic barriers to screening

- Mammography: 8 studies, median increase of 18%
- Colorectal cancer (FOBT): 12 studies, median increase of 37%
- Pap screening: **insufficient evidence**: median increase of 14%,
 - ▣ Results were in the favorable direction but studies had limitations.

Strategies:

- Modifying hours of service to meet client needs
- Offering services in alternative or non-clinical settings
- Eliminating/simplifying administrative procedures & other obstacles
 - ▣ (e.g., scheduling assistance, patient navigators, transportation, dependent care, translation services, limiting the # of clinic visits)

Provider Assessment & Feedback

Evaluate providers' performance in delivering screening

- 9 studies reviewed
- Screening for breast, cervical or colorectal cancer: median increase of 13.0 %

Strategies Used:

- Evaluated performance in delivering or offering screening
- Supply Providers with their performance information
 - ▣ Either as a group of providers (i.e. a practice) or an individual provider
- Compare group or individual provider with a goal or standard (I.E. HEDIS 90th percentile)

Provider Reminder & Recall Systems

Inform providers when patients are due (reminder) or overdue (recall) for screening.

- 25 studies qualified for the review - mammography, pap test, and FOBT/sigmoidoscopy screening: median increase of 8.8 %

Strategies Used:

- Cards, reminders or 'cues' placed in records of eligible patients (hard copy charts or EMRs)-Brightly colored/otherwise noticeable
- Age-specific checklists attached to medical chart covers
- Lists of patients not receiving tests provided regularly to PCPs
- Regular chart reviews by office staff - reminders placed in front when procedures not done

Client Reminders

Written (letter, postcard, email) or telephone messages (including automated messages) advising people they are due for screening.

Enhanced Client Reminders: written or telephone reminder **and**:

- Follow-up printed or telephone reminders **+ / or**
- Additional text or discussion with information about indications for, benefits of, and ways to overcome barriers to screening **+ / or**
- Assistance in scheduling appointments

Results:

- 44 Studies Reviewed (22 breast, 17 cervical, 7 colorectal)
- Median increase of 14.0 %, breast, 10.2 % for cervical and 11.5% for FOBT colorectal cancer screening
- ***Enhanced and telephone reminders showed a greater increase than written reminders alone***

Sample Provider Reminder Letter 1

(Date) _____

(Name) _____

(Address) _____

(City, State, Zip) _____

Dear Ms. _____ :

I am writing to remind you to CALL TODAY for an appointment to get your next mammogram and have your clinical breast exam. A mammogram is an x-ray that helps to look for early signs of breast cancer.

Did you know that the chance of getting breast cancer increases with age? It does! Or, that many women do not have any symptoms when they are first diagnosed with breast cancer? That is true too. An abnormal growth in your breast has to grow to at least the size of a pea before your doctor can feel it when you are examined.

The good news is that a mammogram can help your doctor to find the cancer early — often 1-1/2 to 2 years before a lump is big enough to be felt. This is why it is so important for women 50 and older to get a mammogram every year. By getting mammograms regularly, breast cancer can be found and treated early when the chances for a cure are good.

It is important to take care of your own health. If you have not had a mammogram in the past year and do not have an appointment to get one, CALL US TODAY.



Mammography Appointment

To schedule an appointment, CALL US TODAY at _____ (phone number)
between _____ (time) on _____ (days).

We look forward to seeing you soon!

Sincerely,

(Doctor)



Colorectal Cancer Screening Saves Lives



Colorectal cancer is the 2nd leading cancer killer in the U.S. But it can be prevented. Screening helps find precancerous polyps so they can be removed before they turn into cancer. Screening can also find colorectal cancer early, when treatment is most effective.

If you're 50 or older—don't wait. Talk to your doctor and get screened.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

A Primary Care Clinician's Toolkit:

How to Increase Colorectal Cancer Screening Rates in Practice:

A Primary Care Clinician's* Evidence-Based
Toolbox and Guide
2008

**Including Family Physicians, General Internists, Obstetrician-Gynecologists,
Nurse Practitioners, Physician Assistants, and their Office Managers*

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<http://www.cancer.org/acs/groups/content/documents/document/acspc-024588.pdf>

A Primary Care Clinician's Toolkit Overview

- ✓ **Highlights essential elements to improve CRC screening:**
 - ▣ Provider recommendation to patient
 - ▣ An Office Policy on screening
 - Includes assessment of individual risk levels
 - Based on local medical resources and insurance coverage
 - ▣ Office reminder system – [For Patients & Providers](#)
 - ▣ Effective communication system
 - Providers/Staff trained with communication techniques demonstrated to be effective

- ✓ **Contains tools to help Practices implement strategies**
 - ▣ Sample phone scripts, reminder letters, postcards
 - ▣ Audit & tracking sheets

Other Resources

- **Cochrane Library**
 - Maintains Cochrane Database of Systematic Reviews
www.thecochranecollaboration.com
 - International effort to summarize information about evidence-based health care
- **Pubmed:** National Library of Medicine service.
 - Includes systematic reviews of interventions (e.g. to promote cancer screening)
www.ncbi.nlm.nih.gov/pubmed
- **Cancer Control Planet:** Maintained by National Cancer Institute.
 - Conducts expert panel reviews of specific research-tested intervention programs (RTIPS)
 - Provides detailed information about each intervention program
 - Allows organizations to preview, download, and order intervention protocols, training manuals, and educational materials
<http://cancercontrolplanet.cancer.gov>

SUMMARY: Positive Clinic Screening Using Evidence-Based Approaches

- Practice has a system to routinely notify all age-eligible patients when due for cancer screening (phone, mail or email) **Client Reminders** *(use EMR system to find patients eligible for screening if applicable)*
- Electronic or patient charts provide information about patients' current cancer screening status (e.g. as part of an integrated summary or preventive care flow sheet) **Provider Reminders**
- Charts of patients who are due for cancer screening are routinely flagged before or at time of clinic visits **Provider Reminders**
- During office visits, Providers recommend & make referrals for cancer screening for patients that are due for cancer screening
- Provide scheduling assistance for screening appts (i.e., mammograms) and patient navigator type services **(Reduce Structural Barriers)**
- Cancer educational materials are provided in multiple clinic areas (e.g. waiting and exam rooms) **Small Media**
- System in place to review practice/provider level screening rates **Provider audit & feedback**



Questions?

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