Using Community Guide Strategies to Adapt Interventions

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National Comprehensive Cancer Control Program
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What we will cover

- Definitions used in this presentation
- Evidence-based strategies and interventions to address your program’s priorities
- Components of the systematic review that are important to intervention adaptation
- Elements that can and cannot be changed when using an intervention
- Influencers of choice for evidence-based strategies and interventions
Definitions We are Using Today

- **Evidence**
  - “The available body of facts or information indicating whether a belief is true or valid.”

- **Adaptation**
  - Changes or modifications that fit priority population and local conditions.

- **Fidelity**
  - The degree to which program components are implemented as intended by program developers.

- **Core elements**
  - Essential program components that are believed to make an evidence-based program effective and that should be kept intact to maintain intervention effectiveness.
Definitions for Task Force Findings

- Recommend
- Recommend against
- Insufficient evidence to recommend for or against
What Does Insufficient Evidence Mean?

- This does NOT mean the intervention does not work.

- Insufficient evidence means that additional research is needed to determine whether or not the intervention is effective.
  - No evidence, not enough studies to draw firm conclusions
  - Studies are not high enough quality
  - Available studies have inconsistent findings
If “Insufficient Evidence,” then what?

- **If your program is currently using one of these interventions**
  - Are there any associated harms?
  - Are there better documented alternatives that can reach the same goals?
  - Are we collecting sufficient data so our experience can contribute to the evidence base?

- **If your program is considering using one**
  - Carefully weigh the benefits and harms
  - Be mindful of the limitations if you adopt
    - Clearly cite the Guide finding in your work plan
    - Plan to collect evaluation data
Cancer Prevention & Control

- Cancer is the second leading cause of death in the United States, killing more than 553,000 Americans each year (CDC).
- In 2006, the cost of medical care for cancer was an estimated $104.1 billion in the United States (National Cancer Institute).
- More systematic efforts to expand use of established screening tests, reduce tobacco use and obesity, and improve diet and physical activity could prevent much of the suffering and death from cancer (ACS).
- From 2004 – 2006, approximately half of colorectal and cervical cancer cases and one third of breast cancer cases were diagnosed at a late stage of disease; this could be partially explained by screening use differences (CDC).

Community Guide Systematic Reviews

The Community Guide includes systematic reviews of interventions in the following areas:

**Increasing Breast, Cervical, & Colorectal Cancer Screening**
- Client-Oriented Interventions (e.g., group education, reducing out-of-pocket costs)
- Provider-Oriented Interventions (e.g., reminders, incentives)

**Preventing Skin Cancer**
- Education and Policy Approaches (e.g., primary schools, worksites)
- Interventions Targeting Children’s Parents and Caregivers
- Community-Wide Interventions (e.g., mass media campaigns, community-wide programs)

Promoting Informed Decision Making for Cancer Screening
Cancer Prevention & Control:
Client-Oriented Interventions to Increase Breast, Cervical, and Colorectal Cancer Screening

Interventions for clients either provide education to increase cancer screening or make it easier for clients to be screened. Results are reported separately for breast, cervical, and colorectal cancer screening because routine screening recommendations differ by age and sex.

Task Force Recommendations & Findings

This table lists interventions reviewed by the Community Guide, with Task Force findings for each (definitions of findings). Click on an underlined intervention title for a summary of the review, and where available, Research-tested Intervention Programs (RTIPs).

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Recommended Breast Cancer</th>
<th>Cervical Cancer</th>
<th>Colorectal Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Reminders</td>
<td>Recommended July 2010</td>
<td>Recommended July 2010</td>
<td>Recommended July 2010</td>
</tr>
<tr>
<td>Client Incentives</td>
<td>Insufficient Evidence July 2010</td>
<td>Insufficient Evidence July 2010</td>
<td>Insufficient Evidence July 2010</td>
</tr>
<tr>
<td>Small Media</td>
<td>Recommended December 2005</td>
<td>Recommended December 2005</td>
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</tbody>
</table>
Client-Oriented Interventions to Increase Screening

<table>
<thead>
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<th>Intervention</th>
<th>October 2009</th>
<th>October 2009</th>
<th>October 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group Education</strong></td>
<td><strong>Recommended October 2009</strong></td>
<td>Insufficient Evidence October 2009</td>
<td>Insufficient Evidence October 2009</td>
</tr>
<tr>
<td><strong>One-on-One Education</strong></td>
<td><strong>Recommended March 2010</strong></td>
<td>Recommended March 2010</td>
<td>Recommended March 2010</td>
</tr>
<tr>
<td><strong>Reducing Structural Barriers</strong></td>
<td><strong>Recommended March 2010</strong></td>
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</tr>
<tr>
<td><strong>Reducing Client Out-of-Pocket Costs</strong></td>
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**Presentations & Promotional Materials**

**Community Guide In Action: Stories from the Field**
- Black Corals: A Gem of a Cancer Screening Program in South Carolina [PDF - 577KB]
- Screening New Yorkers to Save Lives [PDF - 454KB]

**Webinars**
- Developed by the National Cancer Institute in collaboration with The Community Guide

**For More On This Topic**

- American Cancer Society
- CDC, Cancer Prevention and Control
- CDC, National Center for Health Statistics
- Healthy People 2020

**Archived Reviews**

Access summaries, supporting materials, and publications from previous reviews.

**Related Topics**
Reducing Structural Barriers for Clients: Intervention Definition

Increasing Cancer Screening: Reducing Structural Barriers for Clients

Structural barriers are non-economic burdens or obstacles that make it difficult for people to access cancer screening. Interventions designed to reduce these barriers may facilitate access to cancer screening services by:

- Reducing time or distance between service delivery settings and target populations
- Modifying hours of service to meet client needs
- Offering services in alternative or non-clinical settings (e.g., mobile mammography vans at worksites or in residential communities)
- Eliminating or simplifying administrative procedures and other obstacles (e.g., scheduling assistance, patient navigators, transportation, dependent care, translation services, limiting the number of clinic visits)

Such interventions often include one or more secondary supporting measures, such as:

- Printed or telephone reminders
- Education about cancer screening
- Information about screening availability (e.g., group education, pamphlets, or brochures)
- Measures to reduce out-of-pocket costs to the client (though interventions principally designed to reduce client costs are considered to be a separate class of approaches)

Summary of Task Force Recommendations & Findings

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The Community Preventive Services Task Force recommends interventions to reduce structural barriers to increase screening for breast and colorectal cancers (by mammography and FOBT, respectively) on the basis of strong evidence of effectiveness. Evidence is insufficient, however, to determine whether reducing structural barriers is effective in increasing colorectal cancer screening by flexible sigmoidoscopy or colonoscopy because only one study using these screening procedures were identified. Evidence is also insufficient to determine the effectiveness of the intervention in increasing screening for cervical cancer because only three relevant studies were identified, and these had some methodological limitations.

Task Force Finding & Rationale Statement

Results from the Systematic Reviews

The Task Force findings are based on evidence from a previously completed review (search period 1966-2004) and an updated review (search period 2004-2008). Updates of reviews are conducted to incorporate more recent evidence.

Read a summary of findings from the previous review or visit the Cancer Prevention and Control section of our publications page to access the complete articles.

Breast Cancer

Results of the Original Review

The original breast cancer screening review included seven studies.

- Mammography screening: median increase of 17.7 percentage points (interquartile interval [IQI]: 11.5 to 30.5 percentage points).

Results of the Updated Review

One additional study qualified for the updated review.

- Mammography screening: increase of 18 percentage points.
POLL QUESTION #1
Reducing Structural Barriers for Clients: Task Force Finding and Results of the Review

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What to Do with a Recommendation

“Even if it is evidence-based, it is not certainty.”

McGinnis and Foege

- Not a cookbook or a one-size-fits-all solution.
- Users must combine scientific information (e.g., effectiveness, cost) with other information (e.g., needs, values, capacities, resources).
From Strategies to Programs

The Community Guide is a source of evidence-based strategies.

<table>
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http://rtips.cancer.gov/

http://cancercontrol.cancer.gov/use_what_works/start.htm

www.centertrt.org
POLL QUESTION #2
Adapting Interventions to Fit Your Community or Organization
Adaptation is...

…making

- Changes
- Additions
- Deletions
- Substitutions

to an evidence-based strategy to make it more suitable for a particular population or an organization’s capacity.
Adaptation Dilemma

- During the adaptation process, planners often choose pieces of interventions that are the most appealing or that seem the most feasible, usually there is not much input from the community.

- Little or no process for determining what in an intervention needs to change and what must stay the same.

- This can lead to interventions that are incomplete with little chance of maintaining impact.
The Adaptation Dilemma (cont’d)

- Some authors suggest that when developmental issues and program targets are appropriate, adaptation is seldom or never needed (Elliot and Mihalic, 2004).

- Others point out that the formative work to support adaptation is seldom done (Lau, 2006).

- Nevertheless, in practice...

  Adaptation Happens.

Fidelity:
Core Elements & Key Process Steps

- **Core elements** are the required components which
  - Represent theory and internal logic of the intervention.
  - Most likely produce the intervention’s effectiveness.

- **Key process steps** are the required activities for implementation or intervention delivery.

Green, Yellow, & Red Light Adaptations

Provides guidance on whether a particular adaptation is...

...safe (green).

...should be made cautiously (yellow).

...should be avoided (red)

*To maintain fidelity on core components.*

Fidelity-Adaptation Continuum

LOW FIDELITY

HIGH FIDELITY

GREATEST NEED FOR EVALUATION

MAJOR ADAPTATION

MINOR ADAPTATION
Adaptation Guidance Tool

In choosing an evidence-based program, policy, or strategy you may have to make changes to increase fit or compatibility with your audience and/or community. Here is general guidance in terms of things that can and cannot be changed from the original program, practice, or policy. Remember to refer to any adaptation suggestions from the original developer(s) in making these adaptation decisions.

<table>
<thead>
<tr>
<th>Adaptation Guidance</th>
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### Green

**Things that can be changed:**
- Names of health care centers or systems
- Pictures of people and places and quotes
- Hard-to-read words that affect reading level
- Wording to be appropriate to audience
- Cultural indicators based on population
- Ways to reach and recruit your audience
- Incentives for participation
- Timeline (based on adaptation guidelines in protocol)

### Yellow

**Things that can be changed with caution:**
- Substituting activities and/or adding new activities
- Changing the order of the curriculum or steps (sequence)
- Altering the length of program activities
- Shifting or expanding the primary audience
- Varying delivery format/process (e.g., online, in-person)
- Modifying who delivers the program
- Adding activities to address other risk factors or behaviors

### Red

**Things that cannot be changed:**
- The health communication model or theory
- The health topic/behavior
- Deleting core components or whole sections of the program
- Reduction of program
  - Timeline (beyond adaptation guidelines in protocol)
  - Dosage (e.g., activities, time/session)
- Putting in more strategies that detract from the core components
ADAPTATION SCENARIO
Adaptation Scenario

Rural Community Works Together to Combat Obesity

The Burden of Overweight and Obesity in Alaska

- Students living in rural Alaska are significantly more likely to be obese compared to those in all other regions of the state.

- 45% of the student population reported to be overweight or obese.

- The Parent Teacher Student Association wanted to address the issue by increasing physical activity.
Adaptation Scenario: From Strategy to Program

The Community Guide is a source of evidence-based strategies.

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Important Review Components

Environmental and Policy Approaches to Increase Physical Activity: Point-of-Decision Prompts to Encourage Use of Stairs

Point-of-decision prompts are motivational signs placed in or near stairwells or at the base of elevators and escalators to encourage individuals to increase stair use. These signs:

- Inform people about health or weight loss benefits from taking the stairs, and/or
- Remind people already predisposed to becoming more active, for health or other reasons, about an opportunity at hand to do so.

Interventions evaluated in this category involved prompts used alone or in combination with stairwell enhancements (e.g., music in stairwells) to increase stair use.

Summary of Task Force Recommendations and Findings:

The Community Preventive Services Task Force recommends point-of-decision prompts on the basis of strong evidence of effectiveness in increasing the percentage of people choosing to take the stairs rather than an elevator or escalator. There were not enough studies to determine if stair or stairwell enhancements (e.g., paint, carpet, art, signs, and music) increased the effectiveness of these interventions.

Task Force Finding

Results from the Systematic Review

Eleven studies qualified for the review of point-of-decision prompts when used alone.

- In 10 of the 11 studies reviewed more people used the stairs when point-of-decision prompts were posted.
- Stair use during the intervention period in these study arms ranged from 40.0% to 41.9% of potential users.
- Stair use increased by a median 2.4%, a relative increase of 50% (Interquartile Interval: 0.83% to 0.7%); 21 study arms.
- Findings from several of the studies suggest that tailoring the prompts to describe specific benefits or to appeal to specific populations may increase the intervention’s effectiveness.
- This intervention was shown to be effective in a range of settings, including shopping malls, train, subway, and bus stations, airports, banks, office buildings, and university libraries, and in a variety of population subgroups, including men and women, younger, older, obese and non-obese adults, and among various racial/ethnic subgroups.
Adaptation Example: StairWELL to Better Health

Walking up stairs burns almost 5 times more calories than riding an elevator.
To access stories from the field, visit:
www.thecommunityguide.org/CG-in-Action/index
Key Points for Adaptation

- Base changes on your community assessment results
- Identify the core elements and keep them intact in adaptation
- Work with your community to get their feedback as you make changes
- Get advice from experts in making yellow and green light adaptations
- The more you adapt, the more you need to evaluate
Coming Soon to The Community Guide

- New reviews in The Community Guide
- Information for users on using Insufficient Evidence Findings
- More Community Guide in Action Stories
- The Community Guide – Public Health Accreditation Board Crosswalk 1.5
- Decision and Implementation Support System (DaISS)
Questions & Discussion
THANK YOU!

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