Selecting Evidence-based Interventions (EBIs) for Impact

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Objectives

- Describe resources for locating evidence-based interventions
- Describe a process to implement or adapt evidence-based interventions
- Increase grantees’ ability to select high impact interventions with available budgets
Defining Reach and Impact

**What Is Reach?** Reach is the extent to which a program attracts its intended audience.

**What is Effect?** The level of ability of an intervention to change behavior (i.e., brochures (small media) vs. provider reminders).

**What is Impact?** The effect that interventions have on people, organizations, or systems to impact health.
Considerations for Impact

1. Define your goal(s) for change

2. Identify EBIs or strategies that have high reach (patients, providers)
   - Ex., Identify those that have high geographic access to extend reach

3. Consider higher levels of socio-ecological model
   - Ex., Change systems (health plans) instead of just 1 organization
HPV State Teams Planning - Impact

- Use of evidence-based interventions

- Work with multiple stakeholders (i.e., parent campaign, education, providers)

- Collaborate with systems (health systems)

- Policy approaches
Focus on Health Equity

- Equal access is not equity; Interventions should be tailored to needs of specific population

- Requires the twin approach
  - Population level strategies
  - Targeted and culturally tailored interventions designed to address subpopulations with the highest disease rates
Strategies for Health Equity

- **Examine your data for populations of interest** (i.e., rarely/never screened, lower access, stratify by race/ethnicity, language, income)

- **Take actions that will support social determinants of health** (i.e., assessing needs/assets, barrier specific screening-patient navigation)

- **Partner with community organizations** (e.g., gatekeeper, leveraging resources, extending reach)

- **Collaborate with existing intact groups** (e.g., cancer coalitions, HPV/CRC roundtables, professional associations, population-specific serving organizations)
Resources for Evidence-Based Interventions

The Community Guide

Cancer Control PLANET
Plan, Link, Act, Network with Evidence-based Tools

NIH NATIONAL CANCER INSTITUTE

County Health Rankings & Roadmaps
Building a Culture of Health, County by County

What Works for Health

U.S. Preventive Services TASK FORCE

CDC Home
Centers for Disease Control and Prevention

Healthy Communities Program
Sponsor: Taskforce for Preventive Services, CDC
Health topics: Multiple
Resources available: Strategies (Recommendations from systematic reviews)

http://www.thecommunityguide.org/
Your online guide of what works to promote healthy communities.

YouthAlert! Uses Teamwork and Education to Prevent Youth Violence
A Kentucky-based youth violence prevention program, YouthAlert!, used evidence-based approaches recommended by the Community Preventive Services Task Force as the foundation of their campaign. Read the full story.

New York Makes Cancer a Public Health Priority

Community Health Workers Help Prevent Diabetes

Explore Popular Features of The Community Guide

The Community Guide in Action: Stories from the Field

Listen to the Experts
Community Guide audio clips feature

PHAB (Public Health Accreditation Board) Crosswalk
Our Methodology

Categories of Task Force Recommendations and Findings

The Task Force uses the terms below to describe its findings.

Recommended

The systematic review of available studies provides strong or sufficient evidence that the intervention is effective.

The categories of "strong" and "sufficient" evidence reflect the Task Force's degree of confidence that an intervention has beneficial effects. They do not directly relate to the expected magnitude of benefits. The categorization is based on several factors, such as study design, number of studies, and consistency of the effect across studies.

Recommended Against

The systematic review of available studies provides strong or sufficient evidence that the intervention is harmful or not effective.

Insufficient Evidence

The available studies do not provide sufficient evidence to determine if the intervention is, or is not, effective. This does NOT mean that the intervention does not work. It means that additional research is needed to determine whether or not the intervention is effective.

Task Force findings may include a rationale statement that explains why they made a recommendation or arrived at other conclusions.

How are costs and economic benefits evaluated?

If an intervention is found to be effective, the Community Guide evaluates its economic efficiency. This approach is used because the Task Force makes recommendations based on whether or not an intervention is shown to improve health, regardless of its cost and/or economic benefits.
CPSTF Findings for Cancer Prevention and Control

The following tables include alphabetized lists of intervention approaches reviewed by the Community Preventive Services Task Force with summaries of the CPSTF finding for each (definitions of findings). Click a linked review title to read a summary of the evidence, access supporting materials, and where available, link to Research-tested Intervention Programs (RTIPs). This table does not include inactive or archived reviews. Findings are divided into the following categories:

**Increasing Cancer Screening**
- Client-Oriented Interventions
- Provider-Oriented Interventions
- Informed Decision Making

**Preventing Skin Cancer**
- Community-Wide Interventions
- Education and Policy Approaches
- Interventions Targeting Parents and Caregivers
Cancer Screening: Client Reminders – Colorectal Cancer

Analytic Framework

Analytic Framework [PDF – 230 kB] – see Figure 1 on page 100

Summary Evidence Table

Summary Evidence Table - Effectiveness Review, Screenings by FOBT [PDF – 118 kB]

Summary Evidence Table - Effectiveness Review, Screenings by flexible sigmoidoscopy, colonoscopy, or barium enema [PDF – 103 kB]
<table>
<thead>
<tr>
<th>Intervention</th>
<th>Breast Cancer</th>
<th>Cervical Cancer</th>
<th>Colorectal Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multicomponent</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td><strong>Client-oriented</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small media</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>One on one education</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Group education</td>
<td>★</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reducing Structural Barriers</td>
<td>★</td>
<td></td>
<td>★</td>
</tr>
<tr>
<td><strong>Provider-oriented</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider reminder/recall systems</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>Provider assessment and feedback</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
</tbody>
</table>

★ = Recommended
http://rtips.cancer.gov/rtips

Sponsor: National Cancer Institute
Health topics: Multiple
Resources available: Programs
Research-tested Intervention Programs (RTIPs)

Moving Science into Programs for People

Use the link below to select a number of criteria, and see a list that contains evidence-based programs from several topics.

**Select from 179 Evidence-Based Intervention Programs**

RTIPs is a searchable database of evidence-based cancer control interventions and program materials and is designed to provide program planners and public health practitioners easy and immediate access to research-tested materials.

Register your program now and be part of the RTIPs Community.

For more information on how to participate in a RTIPs review, read the RTIPs Submission and Review Process: A Guide for Program Developers

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**New programs on RTIPs:**

- **Breast Cancer Screening**
  - Kukui Ahi (Light the Way): Patient Navigation (Post date: April, 2017)

- **Sun Safety**
  - Sun Protection Strategies for Kidney Transplant Recipients (Post date: March, 2017)

- **HPV Vaccination**
  - DOSE HPV: Development of Systems and Education for HPV Vaccination (Post date: February, 2017)

*New evidence-based programs are released periodically. Please check for updates.*

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**News and Announcements About RTIPs**

- **RTIPs highlighted in the University of Kentucky News**
## Research-tested Intervention Programs (RTIPs)

Moving Science into Programs for People

### Search

Select program attributes (if you like) and then click the button at the bottom of the page to get a list of relevant programs. Multiple selections within a category expand your criteria; selections in different categories narrow them.

### Topics
- Breast Cancer Screening
- Cervical Cancer Screening
- Colorectal Cancer Screening
- Diet/Nutrition
- HPV Vaccination
- Informed Decision Making
- Obesity
- Physical Activity
- Public Health Genomics
- Sun Safety
- Survivorship/Supportive Care
- Tobacco Control

### Setting
- Community
- Religious establishments
- Rural
- Suburban
- Urban/Inner City
- School-based
- Clinical
- Workplace
- Home-based
- Day care / Preschool

### Materials
- Available on RTIPs
- Partially available on RTIPs
- Available from third party only

### Origination
- Australia
- Canada
- United Kingdom
- United States

### Race/Ethnicity
- [ ] Any % of the study population
- Alaskan Native
- American Indian
- Asian
- Black, not of Hispanic or Latino origin
- Hispanic or Latino
- Pacific Islander
- White, not of Hispanic or Latino origin

### Age
- Children (0-10 years)
- Adolescents (11-18 years)
- Young Adults (19-30 years)
- Adults (40-65 years)
- Older Adults (65+ years)

### Gender
- Male
- Female

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**Search**

[Search] [Clear]
R.T.I.P.S. Catalog

- Breast Cancer: 24 Programs
- Cervical Cancer: 13 Programs
- Colorectal Cancer: 19 Programs
- HPV Vaccination: 6 Programs
- Survivorship: 19 Programs
## Intervention Programs

**Search Criteria Used:** Adults (40-65 years), Colorectal Cancer Screening

**Refine Your Search**

<table>
<thead>
<tr>
<th>Program Title &amp; Description (16 programs alphabetically listed)</th>
<th>Program Focus</th>
<th>Population Focus</th>
</tr>
</thead>
</table>
| **1. Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing**  
Designed to increase colorectal cancer screening among adults. (2010)  
NCI (Grant number: R01CA132709)  
**Criteria Matched:** Adults (40-65 years), Colorectal Cancer Screening | Awareness building and Behavior Modification | Adults |
| **2. Colorectal Cancer Screening in Chinese Americans Project**  
Designed to help increase colorectal cancer screening among low-income, less-acculturated Chinese Americans. (2006)  
NCI (Grant number: CA92432)  
**Criteria Matched:** Adults (40-65 years), Colorectal Cancer Screening | Awareness building and Behavior Modification | Medically Underserved |
| **3. Colorectal Cancer Screening Intervention Program (CCSIP)**  
Designed to increase colorectal cancer screening among African American adults. (2010)  
CDC (Grant number: U57/CCU42068), CDC (Grant number: 548DP000049), NCI (Grant number: U01CA1146520), NCI (Grant number: U54CA118638), NCRR (Grant number: UL1RR025008)  
**Criteria Matched:** Adults (40-65 years), Colorectal Cancer Screening | Awareness building and Behavior Modification | Un- and/or Underscreened Individuals |
Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing

Program Title: Automated Telephone Calls Improve Completion of Fecal Occult Blood Testing

Purpose: Designed to increase colorectal cancer screening among adults. (2010)

Program Focus: Awareness building and Behavior Modification

Population Focus: Adults
- Topic: Colorectal Cancer Screening
- Age: Adults (40-65 years), Older Adults (65+ years)
- Gender: Female, Male

Race/Ethnicity: Alaskan Native, American Indian, Asian, Black, not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White, not of Hispanic or Latino origin

Setting: Clinical

Origination: United States

Funded by: NCI (Grant number(s): R01CA132709)

User Reviews: (Be the first to write a review for this program)

RTIPs Scores:
- Research Integrity: 4.6
- Intervention Impact: 2.0
- Dissemination Capability: 5.0

RE-AIM Scores:
- Reach: 80.0%
- Effectiveness: 66.7%
- Adoption: 100.0%
- Implementation: 57.1%
Implementation Guide:

- Steps and Players/Implementer for each intervention
- Detailed steps can go into your action plan for each cancer area
Selecting and Adapting EBIs
Steps for Selecting

1. **Obtain** information about EBIs that address your aims and objectives

2. **Assess fit:** Compare candidate EBI with assessment findings

3. **Select** based on fit and strength of evidence
1. Obtain

Find information about EBIs that address your aims/objectives

- Websites that are disseminating information about EBIs
- Journal articles or other literature about relevant EBIs
1. Obtain

Locate EBIs that address the contributing factors identified in your assessment.

Factors by Levels

**Individual**: Not screened
(Knowledge, Beliefs, Attitude, Confidence)

**Provider**: Does not recommend
(Awareness, Knowledge)

**Organization**: Lacks accessible hours; no transportation

**Community**: GI not available to do diagnostic tests

Problem

Low CRC Screening Rates
Assess EBIs Fit

Fit Criteria
- Health problem
- Aims/Objectives
- Priority population
- Setting
- Other factors
  - Patient
  - Provider
  - Organization
  - Community
- Resources

Compare
2. Assess fit

Consider Both Types of EBIs

<table>
<thead>
<tr>
<th>Programs (e.g. from Cancer Control Planet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Community Cancer Screening Program (CCSP)</td>
</tr>
<tr>
<td>☑ Family CARE (Colorectal Cancer Awareness and Risk Education) Project</td>
</tr>
<tr>
<td>☑ Flu-FIT and Flu-FOBT Program</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategies (e.g. from the Community Guide)</th>
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</thead>
<tbody>
<tr>
<td>☑ One-on-one education</td>
</tr>
<tr>
<td>☑ Client reminders</td>
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<tr>
<td>☑ Provider reminders</td>
</tr>
</tbody>
</table>
2. Assess fit

**Comparison Tool for Selecting an EBI**

<table>
<thead>
<tr>
<th>Fit Criteria</th>
<th>Assessment/Finding Priorities</th>
<th>EBI 1</th>
<th>Does this fit your audience?</th>
<th>EBI 2</th>
<th>Does this fit your audience?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>Some</td>
<td>No</td>
</tr>
<tr>
<td>Health Problem</td>
<td></td>
<td></td>
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<tr>
<td>Objectives</td>
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<td>Priority population</td>
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<tr>
<td>Setting</td>
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<tr>
<td>Multi-level contributing factors</td>
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<tr>
<td>Resources</td>
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</table>
Steps for Adaptation

1. Assess fit to consider adaptation
2. Decide what to adapt
3. Make the adaptations
4. Pretest the adaptations
5. Pilot test the EBI
1. Assess Fit

<table>
<thead>
<tr>
<th>Fit Criteria</th>
<th>Assessment Findings</th>
<th>EBI</th>
<th>Does This Fit Your Audience?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Goal/Problem</td>
<td></td>
<td></td>
<td>NO</td>
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<tr>
<td>Objectives</td>
<td></td>
<td></td>
<td>MAYBE</td>
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<tr>
<td>Priority population</td>
<td></td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Setting</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other multi-level contributing factors</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Capacity and Resources</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Decide What to Adapt

<table>
<thead>
<tr>
<th>Fit Criteria</th>
<th>Assessment Findings</th>
<th>EBI</th>
<th>Areas of Misalignment</th>
<th>Specific Aspects of the EBI to be Adapted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Goal/Problem</td>
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Guidelines for Adapting Programs (i.e., RTIPs)

Red should be avoided to maintain fidelity on core components

Yellow should be made cautiously

Green is safe

Green Light Adaptations
Elements that can probably be modified

Minor adaptations to increase reach, receptivity, and participation

- Update and/or customize statistics and guidelines
- Customize program materials to fit the priority population such as changing names, pictures, wording, logos, etc.
- Change ways to recruit and/or engage priority population
Yellow Light Adaptations
Elements that can probably be changed with caution

**Content or methods**
- Alter the length of program activities
- Change the order of sessions or sequence of activities
- Add activities to address other risk factors or behaviors
- Apply EBI to a different population

**Delivery mechanisms**
- Change delivery format/process
- Modify who delivers the program
- Change setting of delivery
- Substitute activities and/or materials
Red Light Adaptations
Elements that probably cannot be modified

Methods used
- Change theoretical underpinning; mechanisms of change

Content
- Change health topic/behavior addressed
- Add activities that contradict or detract from the original program goals
- Delete whole sections or major activities
- Reduce duration and dose
Thank You!

Cancer Prevention and Control Research Network Evidence-based Practices Training Materials

http://cpcrn.org/pub/evidence-in-action/