USING SYSTEMATIC ADAPTATION TO IMPROVE FIT OF EVIDENCE-BASED PROGRAMS

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2017 Dissemination & Implementation Short Course: Navigating the Steps
Topics

- The basics of adaptation
- Adaptation Frameworks
- Systematic Adaptation using Intervention Mapping
- Examples
Types of Evidence-Based Approaches

- Packaged programs:
  - Interventions that include instructions and specify materials needed to implement with success

- Policies:
  - Rules, laws, or regulation set by government or local authorities

- Strategies:
  - Broader recommendation for public health intervention based on systematic review of multiple studies (e.g., patient reminders)
Help with EBAs is Needed

• One reason why EBAs are underused – lack the knowledge and skills needed to put evidence in action

• Problems in knowing how to:
  • Find EBAs
  • Assess strength of evidence supporting an EBAs
  • Assess EBAs fit with their population or setting
  • Assess organizational capacity to implement EBAs
  • Adapt EBAs to population or setting
  • Implement with quality

Escoffery, Hannon, Maxwell, Vu, Leeman et al. 2015
Adaptation

Definitions

- “The degree to which an innovation is changed or modified by a user in the process of its adoption and implementation” (Rogers, 1995)

- “Deliberate or accidental modification of a program” (Center for Substance Abuse Prevention [CSAP], 2002).
Fit and Fidelity

**Adaptation** is a balance between:

**Achieving FIT** – Make an EBA compatible with your community

**Maintaining FIDELITY** – Optimize implementation of an EBA as it is prescribed in the original protocol.*

A Natural Process

Adaptation is Inevitable...
Program drift: the expected effect of an intervention is presumed to decrease over time as practitioners adapt the delivery of the intervention (A).

Voltage drop: the effect of an intervention is presumed to decrease as testing moves from Efficacy to Effectiveness to D&I research stages (B).

Chambers et al. Implementation Science 2013, 8:117
Problems with Adaptation

- During the adaptation process, planners often choose pieces of programs 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 a program needs to change and what must stay the same.
  - This can lead to programs that are incomplete with little chance of maintaining impact.
Common Adaptations

- Deletions or additions (enhancements) of program components;
- Modifications in the nature of the components that are included;
- Changes in the manner or intensity of administration of program components called for in the program manual, curriculum, or core components analysis;
- Cultural and other modifications required by local circumstances. (CSAP, 2002; McKleroy, 2006)

- Recent Taxonomy of Adaptations (Stirman et al., 2013)
Types of Adaptation

• Surface structure comprises the superficial but still important characteristics of a cultural group such as familiar people, language, music, clothing, and so on.

• Deep structure refers to the factors that influence the health behavior in the intervention’s proposed recipients.

• Aspects of culture may influence what behaviors, environmental conditions, performance objectives, and determinants become an adaptation’s focus, and whether a surface or deep structure adaptation is needed.

Resnicow et al - 1999
Core Elements:

Core Elements: required components that represent the logic mechanisms of change and key delivery steps of an EBA which most likely produce the EBA’s effectiveness.

• Core elements include*:
  1. Content
  2. Delivery mechanisms
  3. Methods

Planned Adaptation

- Systematic planning models such as Intervention Mapping can guide planned adaptation that can help ensure that:
  - Important differences between the original program population and setting are addressed with new program objectives, methods, and practical applications
  - Essential elements of programs are maintained
A Scoping Study of Program Adaptation Frameworks for Evidence-Based Interventions

Cam Escoffery, PhD; Erin Lebow-Skelley, MPH; Hallie Udelson; Elaine Böing; Maria Fernandez, PhD; Richard Wood, MHA; Patricia Dolan Mullen, DrPH
This scoping study identified and summarized these adaptation frameworks

Key research questions were:

1) What are adaptation frameworks used in research and practice?

2) What are the common adaptation steps across the adaptation frameworks?
We followed the six recommended steps of a scoping study (Arksey & O’Malley, 2005):

- We identified frameworks by:
  1) searching Google Scholar,
  2) searching PubMed, PsycINFO, PsycNET and CINAHL databases for an associated systematic review, and
  3) reviewing reference lists of framework articles.

- Researchers coded the frameworks and their steps into Excel and grouped common steps.

- Research team reviewed and created the suggested names and descriptions for the final adaptation steps.

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- Researchers coded the frameworks and their steps into Excel and grouped common steps.

- Research team reviewed and created the suggested names and descriptions for the final adaptation steps.
Findings: Summary of program adaptation steps by the 12 Adaptation Frameworks

- Twelve adaptation frameworks were found, including three from the grey literature and nine from the published literature.

### Grey Literature

- CSAP’s Guidelines for Balancing Program Fidelity/Adaptation
- Research Tested Intervention Programs (RTIPs) Adaptation Guidelines
- Intervention Mapping (IM) ADAPT

### Published Literature

- Map of Adaptation Process (MAP)
- Research-based Program Adaptation
- Adapting Evidence-Based Programs to New Contexts
- ADAPT-ITT
- Cultural Adaptation Process
- Planned Adaptation
- Step Framework
- Method for Program Adaptation through Community Engagement (M-PACE)
- General Adaptation Guidance: A Guide to Adapting Evidence-Based Sexual Health Curricula
Findings: Key ADAPTATION Steps

- Eleven program adaptation steps were identified and grouped into categories.

- Eight of these steps were recommended by more than five frameworks: #1-3, #6-7, and #9-11

Adaptation Steps

1. Assess community
2. Understand the intervention
3. Select intervention
4. Consult with experts
5. Consult with stakeholders
6. Decide what needs adaptation
7. Adapt the original program
8. Train staff
9. Test the adapted materials
10. Implement
11. Evaluate
### Summary of steps and definitions

<table>
<thead>
<tr>
<th>Step name</th>
<th>Step description</th>
</tr>
</thead>
</table>
| **1) Assess community**   | • Identify behavioral determinants and risk behaviors of the new target population using focus groups, interviews, needs assessments, and logic models  
• Assess organizational capacity to implement the program                                                                                                                                 |
| **2) Understand the EBI(s)** | • Identify and review relevant EBIs and their program materials  
• Understand the theory behind the programs and their core elements                                                                                                                                                   |
| **3) Select intervention** | • Select the program that best matches the new population and context                                                                                                                                              |
| **4) Consult with experts** | • Consult content experts, including original program developers, as needed  
• Incorporate expert advice into program                                                                                                                                                                           |
<table>
<thead>
<tr>
<th>Step name</th>
<th>Step description</th>
</tr>
</thead>
</table>
| **5) Consult with stakeholders** | • Seek input from advisory boards and community planning groups where program implementation takes place  
• Identify stakeholder partners who can champion program adoption in new setting and ensure program fidelity |
| **6) Decide on needed adaptations** | • Decide whether to adapt or implement original program  
• Determine how original and new target population differ in terms of developmental processes and risk and protective factors  
• Identify areas where EBI needs to be adapted and include possible changes in program structure, content, provider, or delivery methods  
• Retain fidelity to core elements  
• Systematically reduce mismatches between the program and the new context |
| **7) Adapt the original EBI**   | • Select and train staff to ensure quality implementation  
• Develop adaptation plan  
• Adapt the original program contents through collaborative efforts  
• Make cultural adaptations continuously through pilot testing  
• Core components responsible for change should not be modified |
<table>
<thead>
<tr>
<th>Step name</th>
<th>Step description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8) Train staff</td>
<td>• Select and train staff to ensure quality implementation</td>
</tr>
</tbody>
</table>
| 9) Test the adapted       | • Pretest adapted materials with stakeholder groups  
• Conduct readability tests  
• Pilot test adapted EBP in new target population  
• Modify EBP further if necessary |
| EBI                       | 10) Implement the adapted EBI  
• Develop implementation plan based on results generated in previous steps  
• Identify implementers, behaviors, and outcomes  
• Develop scope, sequence, and instructions  
• Execute adapted EBP |
| 11) Evaluate              | • Document the adaptation process and evaluate the process and outcomes of the adapted intervention as implemented  
• Write evaluation questions; choose indicators, measures, and the evaluation design; plan data collection, analysis, and reporting  
• Employ empowerment evaluation approach framework to improve program implementation |
Our search strategies (bibliographic database, google search and reference lists) may have failed to identify all relevant adaptation frameworks or models. However, we incorporated grey and published literature in addition to different methodologies of databases searches, compilation of frameworks mentioned in published adapted public health interventions, and reference list searches to locate relevant frameworks.

We also limited our searches to public health interventions or community settings and did not focus on health care, clinical care, or interventions from other disciplines.
Implications for D&I Research

- This study is the first to identify common adaptation frameworks or models for implementing evidence-based interventions (EBIs)
- It contributes to the literature by consolidating key steps in the approach to program adaptation of EBIs and describing the associated tasks in each step
- It highlights sentinel events that led to adaptation frameworks
- We also identify research gaps in understanding how to perform adaptations and contributions of these frameworks to the science of translation of EBIs

Acknowledgements:

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part of Prevention Research Centers
REFERENCES


Guidelines for Choosing and Adapting Programs (Research-tested Intervention Programs) [http://rtips.cancer.gov/rtips/reference/adaptation_guidelines.pdf.]


Guidelines for Choosing and Adapting Programs (Research-tested Intervention Programs)


Three ways to use IM for D&I

1. Designing programs in ways that enhance its potential for being adopted, implemented, and sustained

2. Designing dissemination interventions (strategies) to influence adoption, implementation and continuation

3. Using IM processes to adapt existing evidence-based interventions

Adaptation Activities using IM

- Adaptation of an existing EBP developed for Mexican Americans for use in Puerto Rico
  - Cultivando la Salud (CDC funded intervention program - National Center for Farmworker Health)

- Adaptation of a lay health worker delivered breast and cervical cancer screening intervention originally developed for Hispanic farmworkers in the LRGV
  - CPRIT funded intervention trial to increase screening Houston

- Adaptation of an HPV vaccination intervention for parents of boys
Step 1 – Needs Assessment and Logic Model of the Problem

- **Adaptation Product:** Description of discrepancy between original program logic model of the problem and the model in the new setting (including priority population characteristics).

- **Adaptation Questions:**
  1. What is the logic model and priority population of the problem from the original needs assessment?
  2. What is the logic model and priority population for the adopting site?
  3. Do they match? How are they different?
Step 2 – Logic Model of Change and Matrices of Change Objectives

- **Adaptation Product**: Matrix of change objectives that should be added to the original program to improve validity the of the change model.

- **Adaptation Questions**:
  1. What behavior and environmental conditions (and their determinants) did the original program target for change?
  2. What should the adopting site seek to change in behavior and environment (and their determinants) that is different from the original program?
Step 3 – Program Theoretical Methods and Practical Applications

- **Adaptation Product:**
  1. Description of theoretical methods or practical applications that should be added to address new change objectives or to make the original methods apply to a different population/context.
  2. Description of essential program elements that must be retained.

- **Adaptation Questions:**
  1. What theoretical methods and practical applications to promote change did the original program include?
  2. What methods and practical applications must be added to match new change objectives or modified to fit the new population?
Step 4 – Program

- **Adaptation Product:** Description of recommended changes in the program components and/or delivery.

- **Adaptation Questions:**
  1. How well did the program components and delivery implement the theoretical methods and practical applications?
  2. How well does the program delivery match preferences the new population and context?
  3. What changes in scope and sequence or materials are necessary to deliver new methods and practical applications?
Step 5 – Program Adoption and Implementation

- **Adaptation Product:** Description of how program implementation should be changed

- **Adaptation Questions:**
  1. How well was the original program delivered (completeness, fidelity, dose)?
  2. How comprehensive and feasible is the implementation protocol?
  3. What are the implementation performance objectives in the new setting?
  4. Will implementation require additional elements in the new setting?
Step 6 – Program Evaluation

- **Adaptation Product**: Evaluation questions including effectiveness and acceptability of new program elements

- **Adaptation Questions**:
  1. What program outcomes and change objectives was the adapted program effective in meeting? And how does effectiveness compare to the original program?
  2. What was the reach, fidelity and completeness of the adapted program? And how does the process evaluation compare to the original program?
Breast & Cervical Cancer Prevention Research: Targeting the Growing Urban Hispanic Community

PD: Lara S. Savas, PhD
Co-PD: Maria E. Fernandez, PhD
Co-PD: L. Kay Bartholomew, EdD, MPH
Project Coordinator: Semilla Rivera, MS
President & Founder of ProSalud, Peggy Goetz, MD

A Cancer Prevention Research Institute of Texas (CPRIT) Funded Project

Adaptation & Dissemination Research

UTHealth School of Public Health
Overall Goals:

- To increase breast and cervical cancer screening among low-income Hispanic women in the Gulfton area through adaptation of the evidence-based CLS breast & cervical cancer screening program.
CLS Houston Adaptation Study: Objectives

1) Adapt the CLS original program for Hispanic women in Houston

2) Train lay health professionals (promotoras) to deliver the CLS program and offer navigation services to women

3) Deliver the CLS program to Hispanic women in Houston

4) Evaluate the process and effectiveness of the adapted program on increasing mammography and cervical cancer screening.

Program Goal - to increase breast and cervical cancer screening among Hispanic women in Houston
Used a step-by-step systematic IM process to adapt the original program to new environment & new population

Core Steps in IM:

1. Assess target community needs
2. Identify target behaviors, determinants, and then change objectives
3. Identify methods and strategies
4. Adapt program materials
5. Adapt implementation protocol
6. Evaluation
<table>
<thead>
<tr>
<th>Original</th>
<th>Houston Adapted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target population</strong></td>
<td><strong>Target population</strong></td>
</tr>
<tr>
<td>- Mexican American women, 50 yrs +</td>
<td>- Hispanic women</td>
</tr>
<tr>
<td>- Not adherent to mammography or Pap test screening guidelines</td>
<td>- Not adherent to Pap test screening guidelines (21+)</td>
</tr>
<tr>
<td>- Residing on the US-Mexico border*</td>
<td>- Not adherent to mammography screening guidelines (40+)</td>
</tr>
<tr>
<td>- Low-income</td>
<td>- Residing in Houston †</td>
</tr>
<tr>
<td></td>
<td>- Low-income</td>
</tr>
</tbody>
</table>

* New Mexico, Texas and California
† Initially based in Gulfton community: 80% of Hispanic
Identify Screening Challenges in Houston for Hispanic Women

- Behavioral Level
  - Health Literacy lacking
  - Lack of trust in established services

- Environmental Level
  - Great need for primary care
  - Uninsured/ No regular source of care
Adaptation focus on Environmental Factors & Matrices for Environmental Conditions in Houston

- Through the needs assessment we identified challenges related to access issues faced by low-income Hispanic women in Houston.

- Identify what women need to do to obtain a screening exam - specific to the Hispanic population in Houston (e.g., qualifying for Gold Card)

- Develop new performance objectives, methods, and practical applications related to accessing free/low cost providers
Comparison of Houston CLS to Original CLS Matrices & Program Components

- To identify behavior and environmental conditions (and determinants) that were different between the original and CLS Program
- Reviewed how original education materials match the change objectives of adapted program matrices

- **Adapted Training Program**
  - To identify areas for new promotora training modules
  - Compared Houston CLS Training Performance Objectives to Original CLS Program’s
Adaptation

Adapted an evidence-based intervention developed for Mexican American farmworkers for culturally diverse Hispanics in Houston

**Behavioral Determinants of screening**: similar to original target pop

Program *modified to address environment-level access barriers*:
- CHWs deliver program  
  - Same
- Recruitment Protocols  
  - Modified
- Education Component  
  - Modified
- Screening Referrals  
  - New
- Intensive Community Telephone Navigation Component  
  - New
  - Focused on overcoming structural/logistic barriers to accessing services
Adaptation: For New Context

- Developed new guidelines for group education (vs. individuals)
- Developed a network of community partners to support the project
  - Recruited women in public settings vs. door-to-door
  - Community organizations provided opportunities for recruitment & space for group education
- Created a telephone-based “coaching” navigation program to facilitate access to services
  - Developed a computer-based participant tracking system to guide & monitor navigation support
Comparison of CLS Program Components

**Original CLS Program**
- Recruited individuals
- Used CHW Model
- Education Program with Flipchart and DVD (primarily 1-on-1)
- Promotora-delivered screening referrals to women

**Houston Adapted CLS Program**
- Recruit individuals & community partners to identify participants
- Use CHW Model
- Education Program with Flipchart as reference and DVD (primarily small groups)
- Promotora-delivered referrals to women
- Intensive community-based navigation services offered until screening completed
Systematic planning models such as Intervention Mapping can guide planned adaptation that can help ensure that

- important differences between the original program population and setting are addressed with new program objectives, methods, and practical applications
- essential elements of programs are maintained
Por Nuestros Hijos
(For Our Children)
An educational program to increase HPV vaccination

Maria Fernandez, PhD
Professor of Health Promotion and Behavioral Sciences
Director, Center for Health Promotion and Prevention Research
We followed Intervention Mapping (IM), a systematic framework for designing evidence- and theory-based interventions, to develop two educational interventions for Hispanic parents: a tailored interactive multimedia intervention (TIMI) delivered on an iPad and a print fotonovella.
For Our Children

- Adapt the For Our Daughters program for parents of boys
- Assess the effectiveness of the adapted TIMI for parents of boys on increasing HPV vaccination
- Develop and assess effectiveness of parental text message reminders on increasing HPV vaccine series initiation and completion among boys and girls
Program Adaptation

- **IM Step 1:** Reviewed the literature and conducted focus groups with Hispanic parents of boys to determine if psychosocial factors influencing vaccination decision-making for boys differed from factors influencing vaccination decision-making for girls
  - Revealed a need to increase knowledge that the vaccine was available for boys as well as for girls
  - Few concerns regarding sex and the vaccine discussed when focusing on boys versus when discussing the vaccine and girls
- **IM Step 2:** Developed matrices of change based on updated determinants; overall outcome and performance objectives remained the same as those in the interventions targeting parents of girls
Program Adaptation

**IM Step 3:** Updated theory- and evidence-based change methods for new determinants

- Added a video vignette of mothers discussing the vaccine availability for both adolescent girls and boys
- Removed practical applications that were not relevant to parents of boys including a video vignette of a mother discussing her concerns that the vaccine would make her daughter feel that the vaccine permitted her to have sex at a young age
Program Adaptation

- **IM Step 4:** Adapted scripts, flowcharts, and animations to produce a new TIMI and fotonovella for Hispanic parents of boys

![Video production](image1)

![Video production](image2)

![adapted fotonovella scene](image3)

![adapted fotonovella scene](image4)
Boys Script

SBB: Mom and doctor – initiating doses

Doctor and Isabel and David are already in the middle of their appointment. Music at beginning of scene and doctor and Isabel talking. Music fades out and scene starts on Isabel’s line.

Isabel: Dr. Gomez, I’ve been thinking about the HPV vaccine. I talked to a friend who vaccinated her daughter and son. But, I wanted to find out more about it for David. I wrote down some questions that I have about the vaccine. Can I ask them now?

Doctor: Of course! It is good that you wrote them down.

Isabel: (Smiles, relieved. She looks down at her questions and begins.) First, is the vaccine safe for David?

Doctor: Yes. The HPV vaccine is as safe as all the other vaccines that children David’s age receive. The most common side effect is a little bit of pain on the arm at the injection site.

Isabel: And why is the vaccine recommended at such a young age?

Doctor: Well, the HPV vaccine produces a higher immune response in younger adolescents so it is best to have your child vaccinated at 11 or 12 years old. Also, the types of HPV that cause cancer and genital warts are transmitted by sexual contact. The HPV vaccine can help protect against HPV, but ideally, if the boy or girl is vaccinated before becoming sexually active.

Isabel: Okay, I see. My last question is about the doses. Why does David need more than one dose of the vaccine?

Doctor: Boys and girls need to complete the HPV vaccine series to have the best protection against the types of HPV that can cause cancer and genital warts.

Isabel: [Nods.] Thank you, Dr. Gomez. After talking to you, I think that getting David vaccinated is the best thing for him.

Doctor: Excellent! We can go ahead and give him the first dose today. Don’t forget to make his next appointment before you leave. If by any chance you miss the appointment, don’t worry. Just give us a call and we’ll make him a new appointment.

Isabel: [Smiles] Thank you. I’ll write it down in my calendar at home.
How did you talk to your doctor about the vaccine? David’s doctor hasn’t mentioned it.

Teresa and Mario’s doctor hadn’t talked to me about the HPV vaccine either. I started the conversation.
A TOOL FOR PROGRAM ADAPTATION USING INTERVENTION MAPPING

Fernandez ME, Mullen PD, Hartman MA, Wood RJ, Escoffery CT, Bartholomew Eldredge LK
Helps planners:

1) Document their community needs and expected logic of change
2) Search for EBA and determine potential fit
3) Characterize the EBA to identify the core elements and keep them intact during adaptation
4) Base changes on your community assessment results
5) Develop/adapt and implementation and evaluation plan.
Step 1
Document Needs & Build Logic Model
- Describe needs and goals
- Describe personal determinants and individuals in the environment
- Create logic model of change

Step 2
Search for EBIs
- Find EBIs
- Review EBIs for basic fit
- Select EBIs for further review

Step 3
Assess Fit & Plan Adaptations
- Describe EBI materials and activities, content, design and delivery
- Compare EBI with logic model
- Make adaptation decisions

Step 4
Make Adaptations
- Link adaptation decisions with specific EBI materials and activities
- Pre-test
- Implementation plan for the adapted EBI
- Scope & Sequence

Step 5
Test Your Progress
- List process evaluation questions
- List outcome evaluation questions
1.1 - Needs

1. Describe your population of interest (i.e. the group that is at risk for the health problem, risk behavior, or negative environmental condition).
   - e.g. African American women over 50
   - low Income Hispanic women

2. Describe the setting you will be focusing on.
   - e.g. schools, churches, clinics
   - Houston, particularly Gulfton area

3. Select or write the priority health problem(s) you will be focusing on.
   - Anal Cancer
   - Colorectal cancer
   - Esophageal cancer
   - Cancer recurrence
   - Hepatitis Infection

Guide

This worksheet helps you document the health problem, and risk behaviors and negative environmental conditions associated with the problem. Select or write the health problems, risk behaviors, and negative environmental conditions that impact the health and quality of life of the at-risk population.

You will also document the setting you will be focusing on. You may not know all the details, but you should have an idea.

Select or enter each item in its own text box.
3. Now you will begin creating your Logic Model of Change. Select the primary focus of your intervention.

<table>
<thead>
<tr>
<th>Environmental Condition</th>
<th>Behavior</th>
<th>Health Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide Training</td>
<td>Mammography</td>
<td>Breast Cancer</td>
</tr>
<tr>
<td>Extend Clinic Hours</td>
<td>Mammography</td>
<td>Breast Cancer</td>
</tr>
</tbody>
</table>
1. Think about why an individual would perform a behavior. These personal factors (i.e., determinants) influence how individuals think about behaviors. Select the determinants that influence Mammography.

Mammography
- Schedule Appointment
- Attend Appointment

---

### Knowledge
Knowing about something/ a fact

### Overcoming Barriers
The level of confidence a person has about the difficulty of performing the behavior

### Risk Perception
Perception of the risk or the chances of contracting a health disease or condition, or how serious a behavior/condition and its consequences are.

### Self Efficacy
A person's perception of the degree of which they are capable of, or have control over, performing a given behavior

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**Overview**
Now, think about why an individual in your population would do each behavior you listed. These personal factors (i.e., determinants) influence how individuals think about a behaviour, or their capacity to change it. Determinants can include an individual’s knowledge about the behavior, attitude towards the behavior, confidence in their ability to do the behavior, etc.

It may help to start with a question (e.g., Why would low income African American women want to attend their mammogram appointments?).

**Instructions**
Think about a specific behavior that you identified. Then, read the definition for each determinant and click on the determinants that influence the behavior you have in mind.
1.7 - Summary

Review and edit your logic model of change.

**Determinants**
- Knowledge
- Risk Perception
- Skills

**Behavior**
(At Risk Group)
- Mammography

**Conditions**
Env. Agents / Tasks
- Provide Training
- Extend Clinic Hours

**Health Outcomes**
- Breast Cancer
## 2.1 - Search & Document EBIs

1. Select from the websites below to help you find evidence-based interventions (EBIs).

### EBIs (*packaged EBIs*)

<table>
<thead>
<tr>
<th>Website</th>
<th>Topics</th>
<th>Learn more</th>
<th>Visit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHRQ Healthcare Innovations Exchange</td>
<td>Various health topics.</td>
<td>Learn more</td>
<td>Visit?</td>
</tr>
<tr>
<td>National Registry of Evidence-based Programs and Practices</td>
<td>Mental health or substance use related topics.</td>
<td>Learn more</td>
<td>Visit?</td>
</tr>
<tr>
<td>Research-tested Intervention Programs (RTIPs)</td>
<td>Cancer related topics.</td>
<td>Learn more</td>
<td>Visit?</td>
</tr>
<tr>
<td>Canadian Best Practices Portal</td>
<td>Various health topics.</td>
<td>Learn more</td>
<td>Visit?</td>
</tr>
<tr>
<td>AHRQ Evidence-based Practice Center Reports</td>
<td>Various health topics.</td>
<td>Learn more</td>
<td>Visit?</td>
</tr>
<tr>
<td>Center for Training &amp; Research Translation</td>
<td>Nutrition, physical activity, and obesity prevention related topics.</td>
<td>Learn more</td>
<td>Visit?</td>
</tr>
</tbody>
</table>

**Guide**

### Overview

In this worksheet, you’ll search websites to find evidence-based interventions (EBIs). Look at the website profiles below and search those that address your topic of interest and provide access to resources. Some websites have a range of EBIs that address many topics. Others are more specific (e.g., the CDC’s Smoking & Tobacco Use).

The websites below provide 3 different types of resources:

1. **Packaged EBIs** with guaranteed access to materials.
2. **EBIs** that may or may not have materials guaranteed.
3. **General strategies** based on a systematic review of a group of EBIs.

To save time, start your search with websites offering packaged EBIs. The other websites offer more options, but finding materials may be more challenging.

You might also want to do a quick search and create a broad list of candidate EBIs by clicking “Record my EBI.” Later you can edit entries and look deeper into each EBI to add more information (e.g., description, materials, level of evidence), and create a basic fit profile. This will help you narrow down your choices.

Individual EBIs might not be a perfect match for every characteristic (i.e., health outcome, behavior, population, etc.), but you should work through the whole fit...
2.2 - Select the Short List

Review the EBIs you found. Then, select the EBI(s) you believe fit best. You will further examine the EBI(s) in Step 3.

<table>
<thead>
<tr>
<th>Name</th>
<th>Example EBI 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection Status</td>
<td>○ Select ○ Don't Select</td>
</tr>
<tr>
<td>Description</td>
<td>This is an example EBI that matches closely</td>
</tr>
<tr>
<td>Note</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>EBI</td>
</tr>
<tr>
<td>Level of Evidence</td>
<td>Strong</td>
</tr>
<tr>
<td>Materials</td>
<td>Can Get</td>
</tr>
<tr>
<td>Basic Fit Summary Score</td>
<td>52.00% 92.50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Outcomes</th>
<th>Moderate match</th>
<th>Complete match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Promoting Behaviours</td>
<td>Complete match</td>
<td>Important</td>
</tr>
<tr>
<td>Environmental Conditions</td>
<td>Good match</td>
<td>Very Important</td>
</tr>
<tr>
<td>Delivery Method</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Risk Populations</td>
<td>Complete match</td>
<td>Very Important</td>
</tr>
<tr>
<td>Setting</td>
<td>Complete match</td>
<td>Very Important</td>
</tr>
</tbody>
</table>

Guide

Overview

Your EBI search results are documented here. The information you entered for each EBI provides a record of where you looked, what you found, and which EBIs you keep for your short-list.

You will also see that IM-Adapts calculates an overall fit score from the attributes you recorded for each EBI. Use these scores to help you compare EBIs, but also consider the level of evidence and availability of materials.

If you're not satisfied with any EBI, keep looking for a better match or look for EBIs that have related characteristics (i.e., health outcomes, behaviors, environmental conditions, populations, etc.) by clicking "Return to Search".

Click "Edit this EBI" if you want to add more information or edit your entries.

You don't have to have a perfect fit to move forward. You will examine the EBI(s) you select more closely in Step 3, and start to make decisions about what needs to change. You can examine more than one EBI in Step 2, but you'll do it one at a time.

Remember:

1. Make sure you select an EBI that is a strategy, before you move on to Step 3.
2. Make sure you have the materials, or can get the materials for the EBI(s) you select before you move on to Step 3.

Instructions

Compare the EBIs on your short-list and click "Select" if you want to use an EBI moving forward.

Click "Return to Search" if you want to keep searching websites and looking for EBIs.

Click "Edit this EBI" to edit the information or fit assessment.

Scroll to the right in the main worksheet area to see more EBIs.
Now it's time to make decisions about what needs to change in the EBI to better fit your needs. IM-Adapt displays the information from your logic model of change that you developed in Step 1 and the elements of the EBI you just described. These are displayed side by side to help you compare them. Ask yourself, "Does the EBI need any changes in the population, setting, health outcomes, behaviors, determinants, or methods to fit my situation better?"

Click on the tabs for each category to compare the EBI to the needs in your population and setting. Elements you noted in the logic model of change but are missing in the EBI will need to be added to the adapted EBI. Elements in the EBI that are not in your logic model may need to be deleted. There may also be elements in the EBI that coincide with your logic model but will need to be modified in some way. When you determine what needs to be changed and how (added, modified, or deleted), drag it down to the appropriate box.

If you make a deletion (e.g., a behavior), you'll get a message asking whether you want to delete all or the related elements (e.g., sub-behaviors, determinants, methods).

Warning: It's best to make as few changes to an EBI as possible because:
- changes require resources
- an EBI can lose effectiveness when its core elements are affected by changes

- low income Hispanic women
### 3.8.1 - Summary + Selection

Review needed adaptations and select the EBI that you will bring forward to Step 4

#### Filters
- Population
- Health problem
- Behavior
- Determinants
- Method

<table>
<thead>
<tr>
<th>Example EBI 1</th>
<th>Unnamed EBI</th>
<th>Unnamed EBI</th>
<th>Unnamed EBI</th>
<th>EBI 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selection</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Select</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Don't Select</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I may want to use parts in my adapted intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Example EBI 1**

<table>
<thead>
<tr>
<th>Behaviors</th>
<th>Add</th>
<th>Modify</th>
<th>Delete</th>
<th>Keep</th>
<th>Determinants</th>
<th>Add</th>
<th>Modify</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Guide**

**Overview**

This worksheet helps you review your list of needed adaptations for the EBI and decide if you want to move forward with the EBI to Step 4: Acasting. If you have gone through Step 3 with more than one EBI, you can compare needed adaptations for each one and choose which one you want. If you looked at only one, the worksheet can help you make sure that it is feasible to make the adaptations you have outlined. If you aren’t satisfied with the EBI(s), you may look for more by going back to Step 2.

Needed adaptations are organized by category: population, health problem, methods. Click on the different buttons to select what you want to see. You can select categories of adaptations in specific areas.

You can write a note that lists advantages and disadvantages of each EBI in the notes function.

After reviewing everything about the EBI you want to use at the top of the page, if you think you may want to use some parts of an EBI in combination with another, click on the button that says “I may want to use parts in my adapted EBI.”

**Warning:** It’s best to make as few changes to an EBI as possible because:
- changes require resources
- an EBI can lose effectiveness when its core elements are affected by changes

**Instructions**

Use the buttons to select what categories of adaptations you want to see. Review the EBI(s) you worked on in Step 2. Then, scroll back to the top and select the EBI you wish to use in Step 4.
1. Drag and drop your changes to link them with specific EBI materials and activities delivered to the at-risk population.

<table>
<thead>
<tr>
<th>Adaptations</th>
<th>add a new material</th>
<th>Save</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population of Interest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting Focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Outcome</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Guide

Overview

In this worksheet, you'll link your adaptation decisions to the specific EBI materials and activities for the at-risk population. You can drag "adaptations" to as many materials/activities you want. You can also create new materials/activities and drag "adaptations" from your list over to the new material/activity.

Any adaptation that you drag and drop to a material or activity will show a checkmark with a number indicating how many times that change has been incorporated. If something in the adaptation is dragged to only one material, the number will show '1'. If it is dragged to more than one, it would have the number of times it was dragged.

- If you need help deciding on adaptations, you can click on Guidelines for choosing and...
Worksheet 4.1

3. Enter your ideas for adapting the design features for materials and activities delivered to the at-risk population.

Guide

Overview

Now, think about the design of the EBI's materials and activities for the at-risk population. Do any of the design features need to be altered?

- If you need help deciding on design features, you can click the link to the IM-Adapt list of Resources for Adaptation (e.g., stock images and health-related graphics, assessing and creating materials for special populations, and website usability).

Instructions

Click on each tab (i.e., look and feel, cultural elements, language, literacy, and numbers and statistics) to enter your adaptation ideas for the design features.
4.4

Describe who will implement the adapted intervention, their tasks, and the materials they need.

### Implementation of Adapted Intervention

<table>
<thead>
<tr>
<th>Implementer</th>
<th>Tasks</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>write your own implementer</td>
<td></td>
<td>Save/Add</td>
</tr>
</tbody>
</table>

### Original Implementation of Ebi -

<table>
<thead>
<tr>
<th>Implementers</th>
<th>Tasks</th>
<th>Resources</th>
<th>Adaptation Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Guide

**Overview**

In this worksheet, you will plan how the adapted EBI will be implemented.

Think about what it takes to implement the adapted EBI. Think about who has to do what and what training materials or activities they may need to deliver the intervention. You should look at the way the original EBI was implemented - see the table at the bottom of the page and any ideas you had about how you might change it.

Here you'll identify training materials, scripts and other materials to support delivery.

**Instructions**

Each implementer is listed, including implementers from the original EBI that you previously identified. You can also add a new
Adaptation often occurs whether it is planned or not. Planning helps improve fit yet keeps core components in place. Several adaptation frameworks exist with several common steps. Intervention Mapping can be used to make decisions about adaptation.
Questions?