

Putting Public Health Evidence in Action: Identify and Adapt Implementation Strategies

ACS CCC Cancer Planning Learning Community

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Disclosures

I have no personal financial interests or business affiliations that pose a conflict of interest or perceptions thereof to disclose.

Agenda

- CPCRN Acknowledgement
- Module Highlights
 - Data and Evidence-Based Intervention (EBI) Selection
 - Find and Select EBIs
 - Adapt EBIs

Visit cpcrn.org/training for full curriculum

SEARCH 



Data and EBI selection

Highlights from the PPHEIA Curriculum

Why is data important?

5k ft. level data can help you see where there are gaps that your EBI can address. Such as high cervical cancer rates or low vaccination rates.

1k ft. level data can help you select an EBI that is appropriate for your population and setting

On the Ground (opportunity)-level data can be used to identify community partner priorities, resources, barriers, etc. that are important to consider when selecting an EBI.



If you can't find existing data...
collect new data!

Interviews

Public
Meetings/Forums

Focus Groups

Direct
Observation

Surveys

Important Considerations

- Resources needed
- Number of participants
- Audience

CPCRN



Cancer Prevention and Control Research Network

Use data to establish goals and priorities

- Which demographic has the lowest HPV vaccination rate?
- What factors are contributing to current HPV vaccination rates?
- Which of those contributing factors are most important and most changeable?
- What resources are available to address the problem?
- Which factors are a priority for your community partners?

Prioritizing identified factors (example)

Factor identified by searching existing data

- No HPV vaccination requirement in schools

Factors identified by engaging clinic partners

- Poor knowledge about cervical cancer and HPV
- Negative attitude toward HPV vaccine

Prioritizing Factors

Factor	Feasibility	Need
No school vaccination requirement	?	?
Poor knowledge of cervical cancer and HPV	?	?
Negative attitude toward HPV vaccine	?	?

Prioritizing Factors

Factor	Feasibility	Need
No school vaccination requirement	Medium – requires policy changes	High – policy-level changes are often highly effective at influencing behavior change
Poor knowledge of cervical cancer and HPV	High – education, outreach, improved communication; interventions exist	High – directly impacts parents' decision to vaccination children, partner identified priority
Negative attitude toward HPV vaccine	High – education, outreach, improved communication; interventions exist	High – directly impacts parents' decision to vaccination children, partner identified priority

Find and Select EBIs

Highlights from the PPHEIA Curriculum

EBIs are disseminated in three formats

- Systematic review recommendations
- Packaged interventions
- Journal articles reporting on intervention studies

Systematic review recommendations

Broad recommendations for intervention approaches that are effective

Policy Menu – Broad evidence-based approaches

HPV Vaccination Policy Menu	
Big P	Little P
<ul style="list-style-type: none">⇒ HPV Vaccination school-entry policies⇒ Increase reimbursement rates for vaccines (including HPV)⇒ Expand vaccine access points for the Vaccines for Children (VFC) Program⇒ Improve immunization information and surveillance systems (mandatory reporting)	<ul style="list-style-type: none">⇒ Standing orders for HPV vaccination within healthcare systems⇒ Client reminder and recall systems withing healthcare systems⇒ Vaccination Standard Operating Procedures (SOPs) within healthcare systems, including:<ul style="list-style-type: none">⇒ Provider Recommendations⇒ Screening Questions⇒ Reminder and Recall Systems

Systematic review recommendations



Strengths

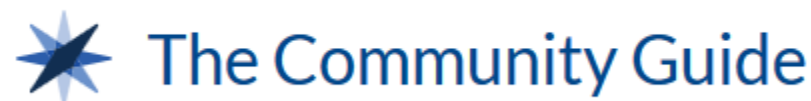
- Strongest source of EBI effectiveness, because they synthesize findings from multiple research studies



Limitations

- Provide evidence in support of broad EBI approaches (e.g., reminder systems) but offer little guidance on how to deliver and implement a specific intervention in practice

Where to find systematic review recommendations



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

What Works for Health



Packaged interventions

Specific interventions with materials, protocols, and other resources to support implementation and delivery

Packed EBIs that use one or more of the policy menu approaches

Packaged EBIs

DOSE HPV

Give
Teens
Vaccines

Making Effective
Vaccine
Recommendations

Policy Menu

Client
reminder and
recall
systems

Vaccination
SOPs

Improve
immunization
surveillance
systems

Packaged interventions



Strengths

- Provide detailed guidance and materials to support the implementation and delivery of a specific EBI



Limitations

- Only a subset of interventions have been packaged and guidance and materials may be designed for a specific setting or population

Where to find packaged interventions



Evidence-Based Cancer Control Programs


HPVIQ.org




Substance Abuse and Mental Health
Services Administration

Three steps to finding EBIs

Step 1: Search **systematic reviews** to identify broad EBIs



Step 2: Search websites for **packaged EBIs**



Step 3: Search **peer-reviewed literature** to update and fill gaps

As you find EBIs, assess

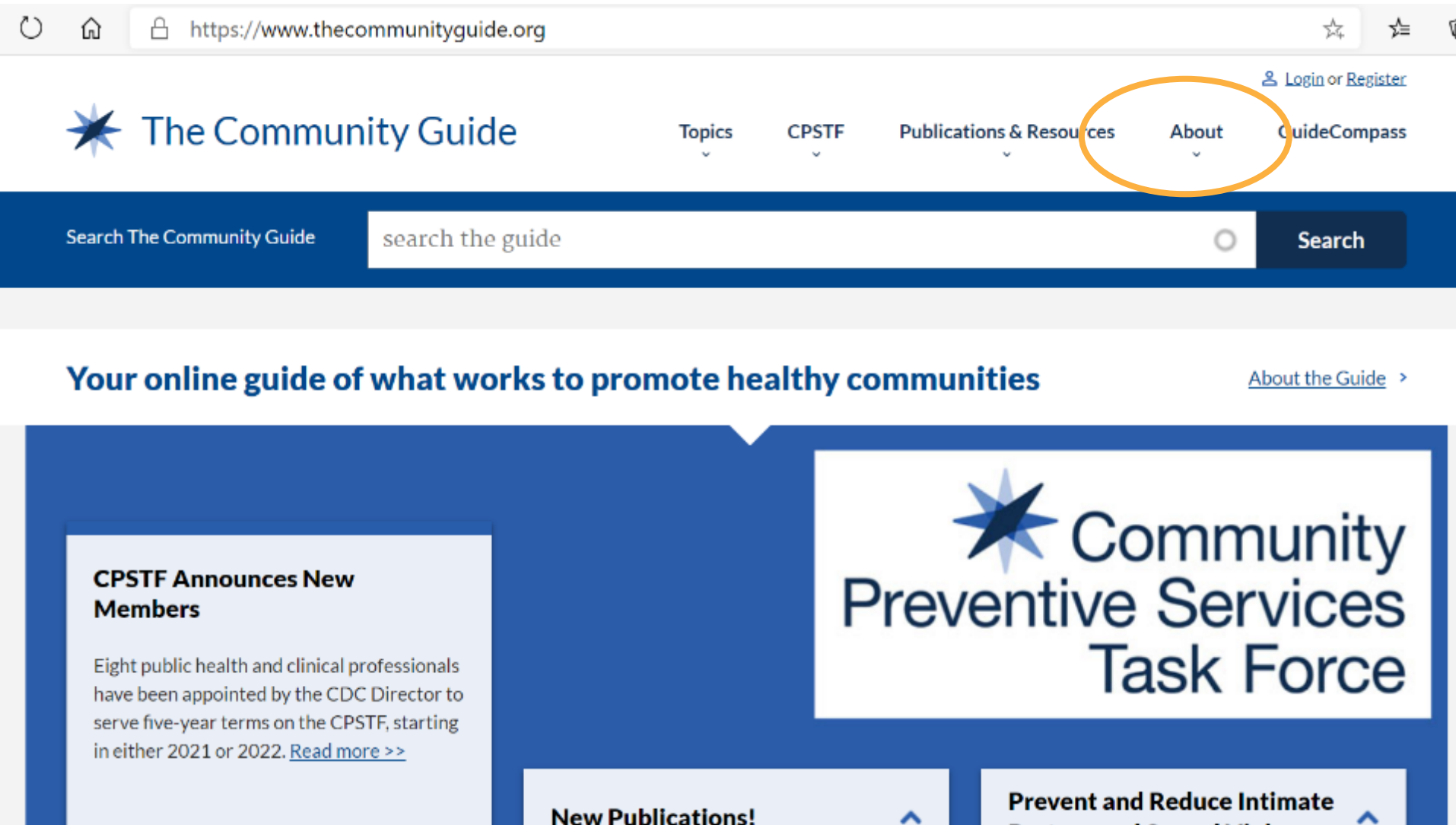
- A. How strong is the evidence for EBI effectiveness at improving the targeted problem?
- B. What is the potential for implementation in real-world practice?
- C. How well does the EBI fit with your population and setting?

A. Criteria for assessing effectiveness

- **Methods** used to test interventions and/or to review intervention studies
- **Number of studies** testing intervention and consistency of findings across studies
- **Magnitude of effects**
- Effectiveness across **subpopulations**
- Degree to which findings are **current**


Applying effectiveness criteria

(<https://www.thecommunityguide.org/>)



The screenshot shows the homepage of The Community Guide website. At the top, there is a navigation bar with the site's logo and name, "The Community Guide", followed by links for "Topics", "CPSTF", "Publications & Resources", "About", and "GuideCompass". The "About" link is circled in orange. To the right of the navigation bar, there are links for "Login or Register". Below the navigation bar is a search bar with the placeholder text "search the guide" and a "Search" button. The main content area features a large blue banner with the text "Your online guide of what works to promote healthy communities" and a link to "About the Guide". Below the banner, there are several featured articles and sections. On the left, there is an article titled "CPSTF Announces New Members" with a brief description and a "Read more >>" link. On the right, there is a large white box with the "Community Preventive Services Task Force" logo and name. At the bottom, there are two more sections: "New Publications!" and "Prevent and Reduce Intimate".

https://www.thecommunityguide.org

 The Community Guide

Topics CPSTF Publications & Resources **About** GuideCompass


Search The Community Guide search the guide Search

[Login or Register](#)

Your online guide of what works to promote healthy communities [About the Guide >](#)

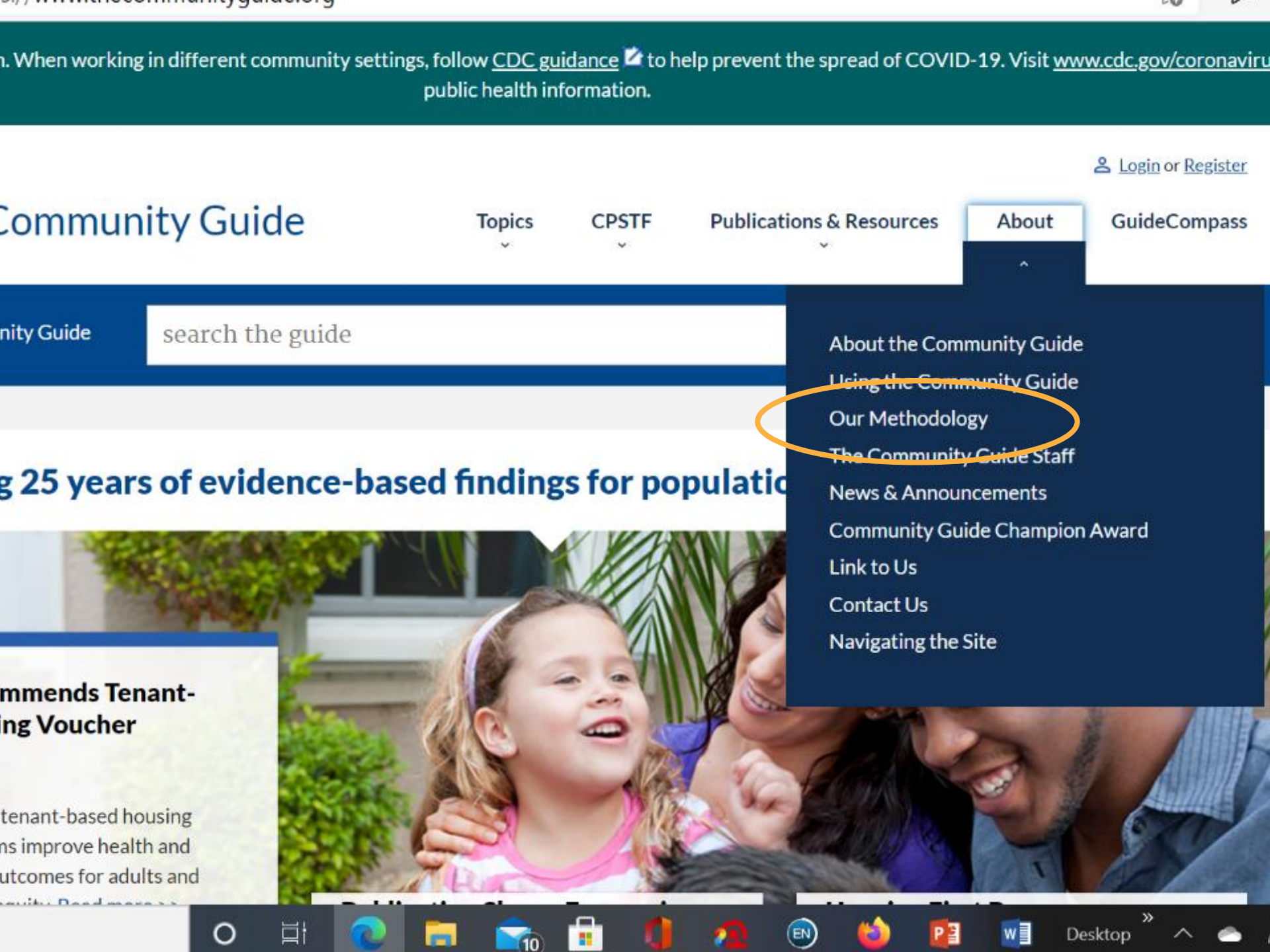
CPSTF Announces New Members

Eight public health and clinical professionals have been appointed by the CDC Director to serve five-year terms on the CPSTF, starting in either 2021 or 2022. [Read more >>](#)

 Community Preventive Services Task Force

New Publications!

Prevent and Reduce Intimate



When working in different community settings, follow [CDC guidance](#) to help prevent the spread of COVID-19. Visit www.cdc.gov/coronavirus for public health information.

[Login](#) or [Register](#)

Community Guide

Topics

CPSTF

Publications & Resources

About

GuideCompass

Community Guide

search the guide

g 25 years of evidence-based findings for population

mmends Tenant-ing Voucher

tenant-based housing
ns improve health and
outcomes for adults and
equity. Read more...

About the Community Guide

Using the Community Guide

Our Methodology

The Community Guide Staff

News & Announcements

Community Guide Champion Award

Link to Us

Contact Us

Navigating the Site

Systematic Review

Recommended
(strong evidence)
February 2006

Recommended (strong evidence)
February 2006

Audience

Adults
Healthcare Providers
Older Adults
Women

Setting

Clinical/Health Systems
Rural
Urban

Cancer Screening: Provider Reminder and Recall Systems Cervical Cancer

[Print](#)

Snapshot

What the CPSTF Found

[Supporting Materials](#)

[Considerations for Implementation](#)

Summary of CPSTF Finding

The [Community Preventive Services Task Force \(CPSTF\)](#) [recommends](#) provider reminder systems based on strong evidence of their effectiveness in increasing cervical cancer screening by Pap test.


The CPSTF has related findings for provider reminder and recall systems specific to the following:

- [Breast cancer](#) (recommended)
- [Colorectal cancer](#) (recommended)

Intervention

Reminders inform health care providers it is time for a client's cancer screening test (called a "reminder") or that the client is overdue for screening (called a "recall"). The reminders can be provided in different ways, such as in client charts or by e-mail.

Summary of Results

Detailed results from the systematic review are available in the [CPSTF finding](#) .

Twenty-six studies qualified for the review of provider reminders to increase breast, cervical, or colorectal cancer screening.

- Completed screenings increased by a median of 7.2% (interquartile interval [IQI]: 2.4% to 19.7%; 34 study arms).
- Recommended or ordered screenings increased by a median of 7.9% (IQI: 6% to 12%; 14 study arms).
- Effect estimates did not vary substantially by method of generating the reminder (electronic versus manual), delivery, content, format (client-specific vs generic), or by training status of provider.
- For all screening modalities, the absolute effect of provider reminders on completed screenings appeared to diminish over time.

Intervention effects on cervical cancer screening:

- Completed Pap tests increased by a median of 4.6% (IQI: 2.4% to 9.2%; 14 study arms).
- Recommended or ordered screening by PAP ranged from 3% to 23% (5 studies).



B. As you find EBIs, assess potential for implementation

- A. How strong is the evidence for EBI effectiveness at improving the targeted problem?
- B. What is the potential for implementation in real-world practice?
- C. How well does the EBI fit with intended population and setting?

Interventions need to be effective, and they need to:

- Reach intended patients and populations
- Be adopted by providers and practice settings
- Be implemented with fidelity (i.e., as designed)
- And be maintained over time

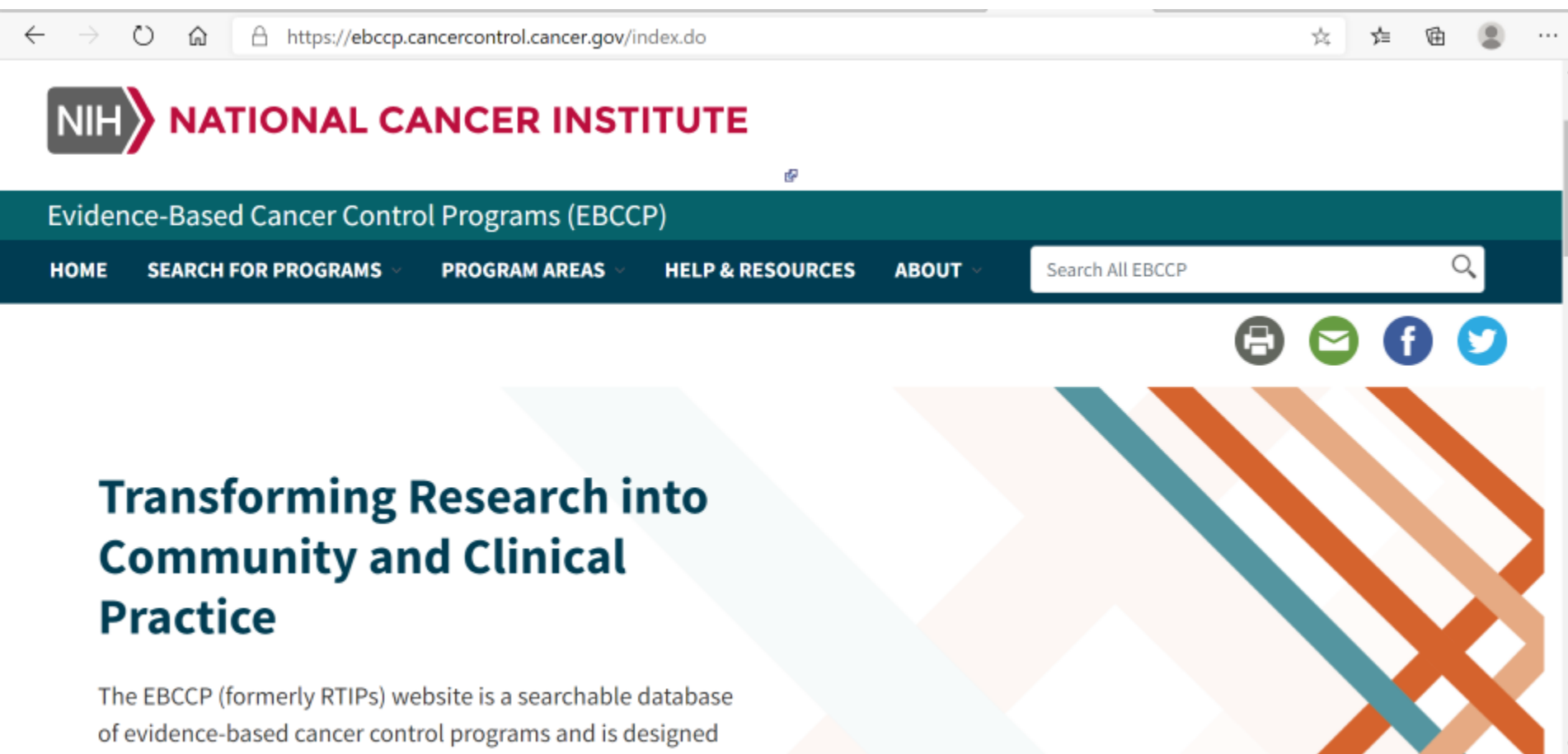
(re-aim.org)

To assess potential for implementation ask

- Do prior studies of the EBI provide evidence that it can be implemented as intended (with fidelity) in real world settings?
- Are intervention materials and implementation protocols available in ready-to-use formats?
- Do community partners view implementation as feasible in intended organizations or settings?

Applying effectiveness and implementation criteria

<https://ebccp.cancercontrol.cancer.gov/index.do>



The screenshot shows the homepage of the Evidence-Based Cancer Control Programs (EBCCP) website. At the top, the NIH logo is followed by the text "NATIONAL CANCER INSTITUTE". Below this, a teal banner reads "Evidence-Based Cancer Control Programs (EBCCP)". A dark blue navigation bar contains links for "HOME", "SEARCH FOR PROGRAMS", "PROGRAM AREAS", "HELP & RESOURCES", and "ABOUT", along with a search bar labeled "Search All EBCCP". To the right of the navigation bar are icons for printing, email, Facebook, and Twitter. The main content area features a large graphic with overlapping geometric shapes in light blue, orange, and teal. The text "Transforming Research into Community and Clinical Practice" is prominently displayed. Below this, a paragraph states: "The EBCCP (formerly RTIPs) website is a searchable database of evidence-based cancer control programs and is designed".

NIH NATIONAL CANCER INSTITUTE

Evidence-Based Cancer Control Programs (EBCCP)

HOME SEARCH FOR PROGRAMS PROGRAM AREAS HELP & RESOURCES ABOUT Search All EBCCP

Transforming Research into Community and Clinical Practice

The EBCCP (formerly RTIPs) website is a searchable database of evidence-based cancer control programs and is designed

HPV Vaccination Evidence-Based Programs Listing

Showing 1 to 6 of 6 programs

Filters Active - 0

Clear All

Population Focus

?

Clinicians

School Children

Delivery Location

?

Clinical

Home

Other Settings

School (K-College)

Community Type

?

Age

?

	Program Title & Description	Population Focus
+	1-2-3 Pap: Easy Steps to Prevent Cervical Cancer	
+	DOSE HPV: Development of Systems and Education for HPV Vaccination	School Children
+	Give Teens Vaccines	School Children
+	HPV Vaccine Decision Narratives: Encouraging Informed HPV Vaccine Decision-making	
+	Making Effective HPV Vaccine Recommendations	Clinicians
+	Promoting HPV Vaccination Among American Indian Girls	School Children

Making Effective HPV Vaccine Recommendations

<https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=26926144>

PROGRAM SYNOPSIS

Designed to increase HPV vaccination, this intervention is a 1-hour scripted training delivered by physician educators that helps providers more effectively recommend HPV vaccination to their patients' parents using the "announcement" strategy (i.e., the provider assumes parents want their children to receive the recommended vaccinations during that day's office visit). The study showed an increase in HPV vaccine initiation.

PROGRAM HIGHLIGHTS

Purpose: Designed to promote HPV vaccination. (2016)

Age: 11-18 years (Adolescents)

Sex: Female, Male

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

Program Focus: Awareness Building for Healthcare Providers and Behavioral Modification for Healthcare Providers

Population Focus: Clinicians

Program Area: HPV Vaccination

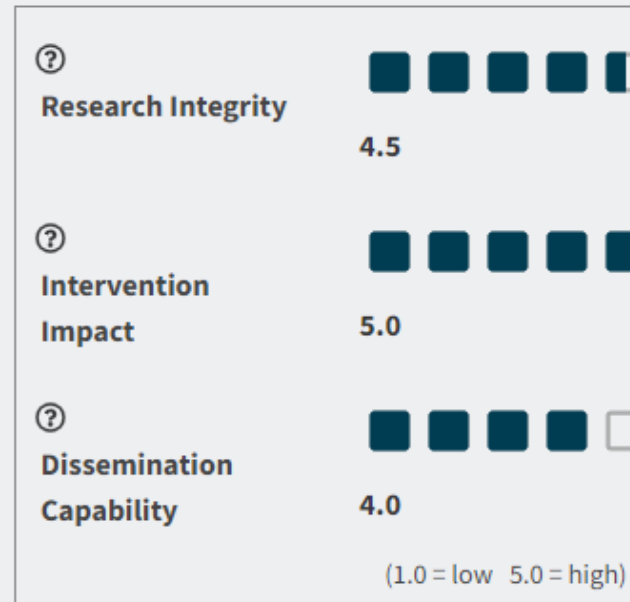
Delivery Location: Clinical

Community Type: *This information has not been reported.*

Making Effective HPV Vaccine Recommendations

PROGRAM SCORES

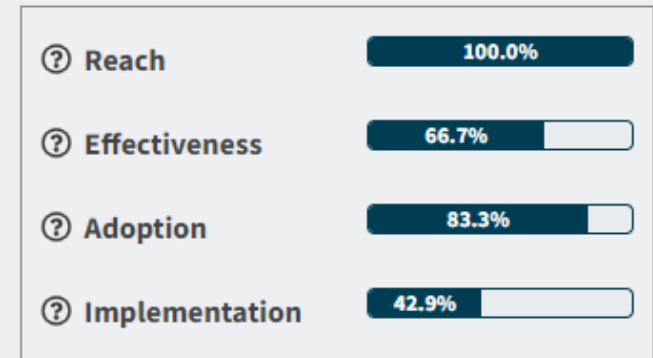
EBCCP Scores



This program has been rated by external peer reviewers.

[Learn more about the ratings](#)

RE-AIM Scores








This program has been evaluated on criteria from the RE-AIM [framework](#), which helps translate research into action.

[Learn more about the ratings](#)

<https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=26926144>

Making Effective HPV Vaccine Recommendations

Program Materials  Preview and order the materials from the developer View	Implementation Guide  Download Implementation Guide Download	Program Developer  Contact Program Developer Contact
Featured Profile  Learn more about this program and the developer who created it Learn More	Insights from the Cancer Control Field  See how implementers have used this program in the field View	

<https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=26926144>

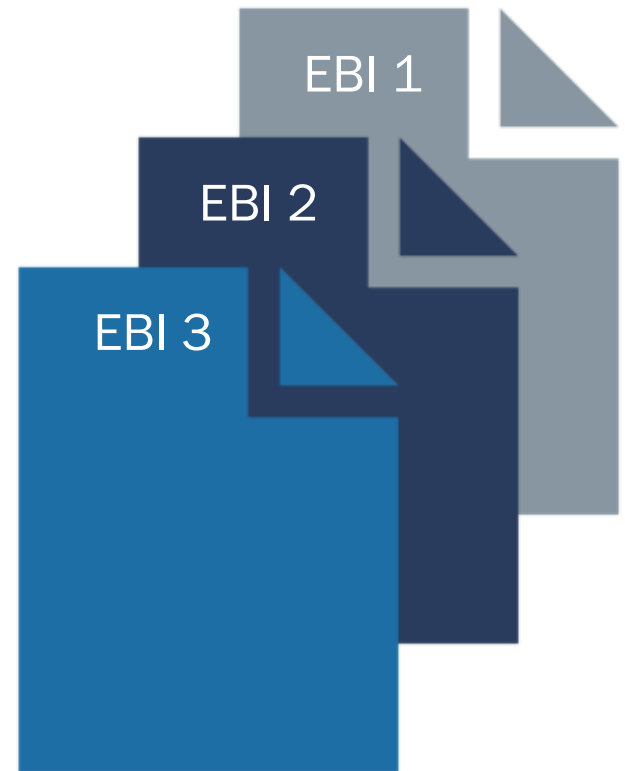
As you find EBIs, assess fit

- A. How strong is the evidence for EBI effectiveness at improving the targeted problem?
- B. What is the potential for implementation in real-world practice?
- C. How well does the EBI fit the intended population and setting?

C. Assess EBI Fit

Fit Criteria

- Goal for improvement
- Priority population
- Setting
- Other factors
 - Patient
 - Provider
 - Organization
 - Community
- Resources



2. Assess fit Comparison Tool for Selecting an EBI

Fit Criteria	Assessment/ Finding Priorities	EBI 1	Does this fit your audience?			EBI 2	Does this fit your audience?		
			Yes	Some	No		Yes	Some	No
Health Problem									
Objectives									
Priority population									
Setting									
Multi-level contributing factors									
Resources									

Selecting EBIs: Balance Strength of Evidence with Fit

- How much evidence is there to support the effectiveness of the EBI?
- How much evidence is there to support the EBIs potential to be implemented in real world settings?
- How well does the EBI fit our problem, population and setting?

Adapt EBIs

Highlights from the PPHEIA Curriculum

Adaptation

- Making changes or modifications to fit priority populations and local conditions
- Helps address health equity in bringing evidence-based (EB) programs and policy, systems, and environmental changes (PSEs) to different minority and disadvantaged communities

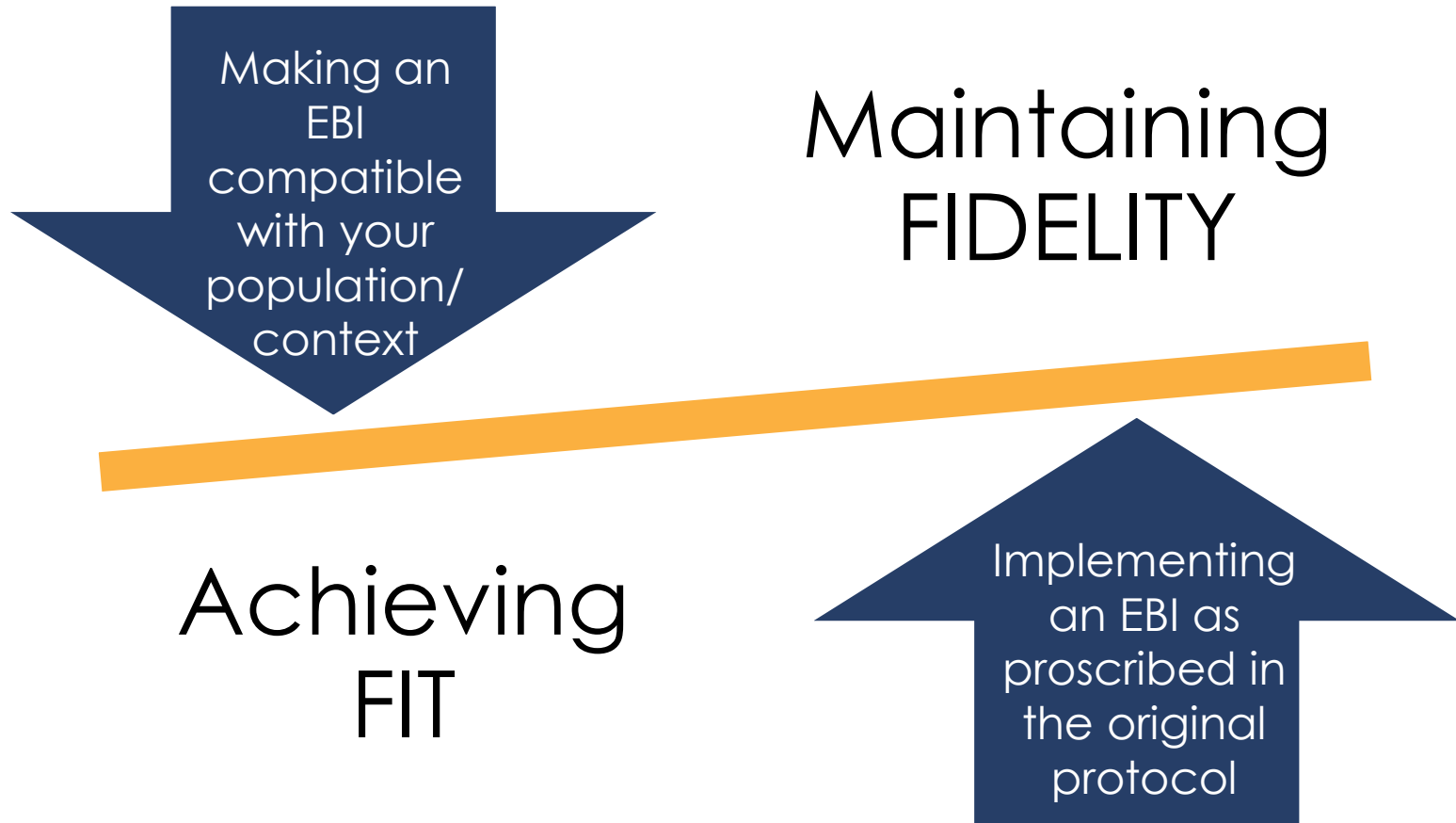


Additions

Deletions

Substitutions

Adaptation is the balance between:



Core Elements

- Required components that represent the logical mechanisms of change and key delivery steps of an EBI
- They most likely produce the EBI's effectiveness

“Recipe”
Core elements include:

1. Content
2. Delivery mechanisms
3. Methods



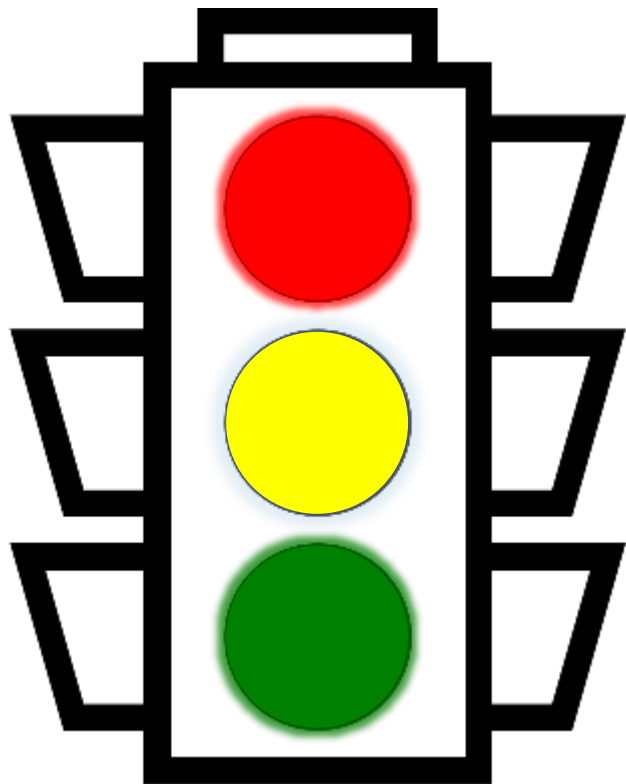
1. Assess Fit

Fit Criteria	Assessment Findings	EBI	Does This EBI Fit Your Audience?		
			NO	MAYBE	YES
Health Problem					
Objectives					
Priority Population					
Setting					
Multi-level Contributing Factors					
Resources					

2. Decide What to Adapt

Fit Criteria	Assessment Findings	EBI	Areas of Misalignment	Specific Aspects of the EBI to be Adapted
Health Problem				
Objectives				
Priority Population				
Setting				
Multi-level Contributing Factors				
Resources				

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

Adapted from: Lesesne, C. A., Lewis, K. M., Moore, C., Fisher, D., Green, D., & Wandersman, A. (2007). Promoting Science-based Approaches to Teen Pregnancy Prevention using Getting To Outcomes: Draft June 2007. Unpublished manual; Firpo-Triplett, R., Fuller, T. R. (2012). General Adaptation Guidance: A Guide to Adapting Evidence-Based Sexual Health Curricula.



Red Light Adaptations

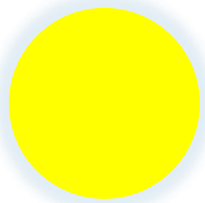
Elements that probably cannot be modified

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



Yellow Light Adaptations

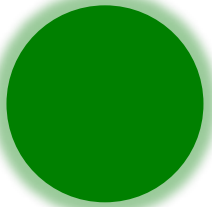
Elements that can probably be changed with caution

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/setting
- Modify who delivers the program
- Substitute activities and/or materials



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, etc.
- Change ways to recruit and/or engage priority population

Activity! – Assess EBI fit

https://miro.com/app/board/uXjVIHy-e-A=/?share_link_id=985760424286

Fit Criteria	Assessment Findings	EBI	Does this fit your audience?
Health Problem			
Objectives			
Priority population			
Setting			
Multi-level contributing factors			
Resources			

Acknowledgements

- The Cancer Prevention and Control Research Network developed this training with funding from the Centers for Disease Control and Prevention and the National Cancer Institute.
- The training content builds on the following:
 - National Cancer Institute's Using What Works http://cancercontrol.cancer.gov/use_what_works/start.htm
 - Getting to Outcomes <https://www.rand.org/health/projects/getting-to-outcomes.html>
 - Brownson et al. (2017). Evidence-Based Public Health. 3rd ed. New York, NY: Oxford University Press.
 - Institute for Healthcare Improvement's Collaborative Model for Achieving Breakthrough Improvement. www.ihp.org
 - The Centers for Disease Control and Prevention's Principles of Community Engagement