Community Health Improvement Planning

MPHTI 2012 Summer Institute

July 16-18, 2012

DAY 2 REFLECTIONS

Learning Objectives – Day 3

10. Select evidence-based public health interventions to achieve outcomes.
11. Select meaningful process measures to monitor and improve as needed.
12. Access community health assessment and improvement planning tools and resources.

EVIDENCE-BASED PUBLIC HEALTH OVERVIEW

Definition of Evidence-Based Public Health (EBPH)

"Evidence-based public health is the process of integrating science-based interventions with community preferences to improve the health of populations." Kohatsu et al., 2004

Domains that Influence Evidence-Based Decision Making

Brownson, Fielding & Maylahn, 2009

Attributes of EBPH

- Making decisions using the best available peer-reviewed evidence (both quantitative and qualitative)
- Using data and information systems systematically
- Applying program-planning frameworks (often have foundation in behavior science theory)
- Engaging community in assessment & decision making
- Conducting sound evaluation
- Disseminating what is learned to key stakeholders and decision makers

Brownson, Fielding & Maylahn, 2009

EBPH Decision-Making Process

Brownson, Fielding & Maylahn, 2009

Different Forms of Evidence

- Scientific literature in systematic reviews
- Scientific literature in one or more journal articles
- Public health surveillance data
- Program evaluations
- Qualitative data
  (from community members, other stakeholders)
- Media/marketing data
- Word of mouth
- Personal experience

Objective

Subjective

Triangulating Evidence

- Accumulation of data from a variety of sources (combines quantitative and qualitative)
- Multiple points of data collection and/or analysis

Quantitative Data	**• determines how variables are related for large numbers of people** **• lack of explaining why these relationships exist**
Qualitative Data	• "Illuminated Meaning" – provides information to explain quantitative findings

Different Types of Evidence

Characteristic	Type One	Type Two	Type Three
Typical data/ relationship	Size and strength of preventable risk – disease relationship (measures of burden, etiologic research)	Relative effectiveness of public health intervention	Information on the adaptation and translation of an effective intervention
Common setting	Clinic or controlled community setting	Socially intact groups or community wide	Socially intact groups or community wide
Example	Smoking causes lung cancer	Price increases with a targeted media campaign reduce smoking rates	Understanding the political challenges of price increase or targeting media mssg. to particular audience segments
Quantity	More	Less	Less
Action	Something should be done	This particular intervention should be implemented	How an intervention should be implemented

Where do you look for Evidence Based Interventions?

Resources for locating Evidence-Based Interventions

- The Community Guide
- Guide to Clinical Preventive Services
- Cochrane Collaboration
- Cochrane Public Health Group
- Centre for Reviews and Dissemination (UK)
- Campbell Collaboration

Resources for locating Evidence-Based Interventions

- SAMHSA's National Registry of Evidence-Based Programs and Practices
- Office of Juvenile Justice and Delinquency Prevention
- Healthy People 2020
- Cancer Control P.L.A.N.E.T.
- Robert Wood Johnson Foundation
- National Highway Traffic Safety Administration

EBPH in "Policy, Systems & Environmental Change"

What is Policy, Systems and Environmental Change?

- Community-based population health strategy
- Modify environment to make healthy choices available
- Target chronic disease prevention:
  - obesity, diabetes, cardiovascular disease, asthma

Why Policy, Systems and Environmental Change?

"It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change."

Smedly & Syme, 2000

Policy, Systems & Environmental Change – Settings

- School
- Community
- Worksite
- Health care
- State & federal policy

What is Policy Change?

- Passing of laws, ordinances, resolutions, mandates, regulations, or rules (formal and informal)

Examples:

- Land-use zoning regulations around schools to prohibit fast food restaurants from locating within one mile of a school
- Worksite policies to reward employees who bike or walk to work

Defining "PSE" - policy

Big	Little
P	p

versus

What is Systems Change?

•Interventions that impact all elements of an organization, institution, or system

Types of systems: schools, transportation, health setting

Example:

•Create a certification system for school bake sales to ensure they adhere to school wellness guidelines

What is Environmental Change?

•Changes made to the physical or built environment

Examples:

•Integrate pedestrian & cyclist-friendly elements into new developments (e.g. bike lanes, sidewalks, adequate street lighting, bicycle parking)

•Integrate green-building elements into new developments

Strategic Alliance for Health Communities CDC Program

- PS&E changes related to promoting physical activity and nutrition, reducing tobacco use and exposure
- Help eliminate health disparities
- Generated EBPH interventions:
  - Establishing worksite wellness committee (Perry County, AL)
  - Creating safe and accessible walking paths (Sumter County, AL)
  - Physical activity "bursts" in classroom (Albany County, NY)
  - Reducing sugar sweetened beverage consumption through policy and social norm change (Boston, MA)
  - Guide to implementing farm-to-school (Orange County, NY)

ACHIEVE – (Action Communities for Health, Innovation, and EnVironmental changE) CDC Program

Prevent chronic disease by promoting PS&E change strategies:

- Physical fitness and obesity
- Nutrition
- Tobacco Cessation

Generated EBPH Interventions:

- Improvements to school wellness policies – healthy food options
- Establish policies to make more walkable and/or bikeable communities
- Adoption of worksite wellness policies to promote wellness to staff and community

Challenges for Implementing EBPH Interventions

- Political environment
- Deficits of relevant and timely research
- Information systems
- Resources
- Leadership
- Required competencies

Brownson, Fielding & Maylahn, 2009

Effective Implementation Factors of EBPH

•Evidence-base champions

•Organizational culture and climate

•Leadership

•Time-efficient approaches

•On-going training

•Resources

EBPH Decision-Making Process

Brownson, Fielding & Maylahn, 2009

Selecting EBPH Interventions / Policies

- Identify goals, objectives and strategies
- Assess the quality of the scientific research
- Consider intervention "Fit" with organization and community / target audience

Explaining the Concept of "Fit"

Fit – compatibility between intervention and:

- Target population and/or
- Implementing organization

Adapted from Cancer Prevention and Control Research Network

Two Competing Aims of Fidelity-Adaptation Tension:

- Develop universal EB interventions and implement with fidelity
- Design EB interventions that are responsive to the cultural needs of a local community

Castro, Barrera, Jr., & Martinez, Jr., 2004

Assessing "Fit" on Four Levels

1. Implementor Characteristics

- Knowledge/skill/training
- Previous experience
- Beliefs & attitudes - EBIs
- Resources/support

2. Intervention

- EBI/Components
- Complexity
- Trialability
- Flexibility

3. Org./ Setting/ Community

- Support/ champion
- Trained staff
- Budget, materials
- Fit with org mission

4. Population

- Demographic characteristics
- Literacy
- Health access
- Socio-cultural norms

Adapted from Allen, Linnan & Emmons, 2011

Fidelity

"Extent to which the intervention was delivered as planned. It represents the quality and integrity of the intervention as conceived by the developers." Kreuter et al., 2009

Core Elements

- Theoretical methods that are intended to change determinants of behavior (of the at-risk group or environmental agents)
- Practical applications of methods including delivery channels
- Characteristics of program materials and messages
- Characteristics of program implementation

Cancer Prevention Control Research Network

Definition of Adaptation

"The process of modifying key characteristics of an intervention, recommended activities and delivery methods, without competing with or contradicting the core elements, theory, and internal logic of the intervention thought most likely to produce the intervention's main effects." Centers for Disease Control and Prevention

Why Adapt an EB Intervention?

- Simplify a complex innovation
- Focus in on a problem or expand to address other problems
- Increase ownership of the innovation
- Address a more heterogeneous target population
- Lack of knowledge about the innovation
- Abstract form or numerous applications possible of some innovations
- Agency required change
- Lack of available resources

Kelly et al., 2000

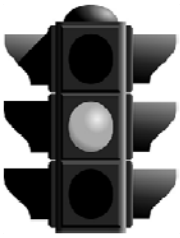
EBPH Intervention Components – Can Change

- Names of health care centers or systems
- Pictures of people and places and quotes
- Hard-to-read words affecting reading level
- Ways to reach your audience
- Incentives for participation
- Adjustments to Timeline
- Cultural indicators based on population

Cancer Prevention Control Research Network

EBPH Intervention Components – Cautious Change

- Substituting activities
- Adding activities to address other risk factors or behaviors
- Sequence - Changing the order of the curriculum or steps

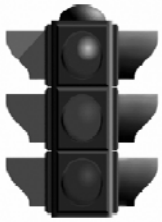


Cancer Prevention Control Research Network

Core Components – Cannot Change

"Core elements" of the intervention CANNOT change

- Health communication model or theory
- Health topic / behavior
- Deleting entire sections of program
- Reduction of program
  - Dosage (e.g., activities, time / session)
  - Major changes to timeline
- Inserting additional strategies that detract from the core components



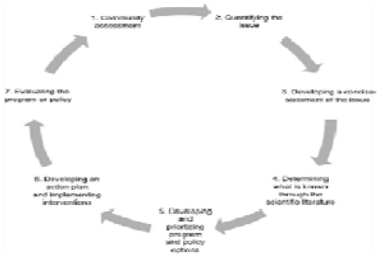
Cancer Prevention Control Research Network

Tips for Successful Implementation
This Ties Back to Action Planning!

- Clear aims and objectives
- Clear roles / responsibilities for partners and stakeholders
- Clear mechanisms for accountability
- Comprehensive -- describes specific steps, timelines, anticipated changes
- Evaluation framework
- Celebrate success

adapted from Brownson

EBPH Decision-Making Process



Brownson, Fielding & Maylahn, 2009

SEARCHING FOR EVIDENCE-BASED INTERVENTIONS:

USING "THE COMMUNITY GUIDE"

Using Community Guide to Identify EBPH Interventions

Using the Community Guide (cont.)

Using the Community Guide (cont.)

Using the Community Guide (cont.)

Using the Community Guide (cont.)

Using the Community Guide (cont.)

Using the Community Guide (cont.)

Using the Community Guide (cont.)

ACTIVITY: SELECTING EVIDENCE-BASED INTRVENTIONS

ACTIVITY: Evidence-Based Interventions

Work in your team to identify 2-3 evidence based interventions for priority issue(s).

1. Apply the PEARL.
2. Determine "fit" for your community and stakeholders.
   - Identify any adaptations you would recommend.
   - Identify potential challenges or barriers and how to overcome them.
3. Make a recommendation on whether to move forward with implementation.

PROCESS EVALUATION

Definition of Program Evaluation

"A process that attempts to determine as systematically and objectively as possible the relevance, effectiveness, and impact of activities in light of their objectives."

A Dictionary of Epidemiology, 2001

How is Program Evaluation Useful?

- Build your own evidence base
- Help to plan programs in a way to enhance likelihood that they will be effective
- Allow for midcourse corrections and changes
- Help determine if the program or policy has been effective
- Provide info. for planning the next program or policy

Brownson et al., 2011

Process vs. Outcome Evaluation

Process Evaluation

Measures what YOU do – the activities and interventions you and your stakeholders implement

Outcome Evaluation

Measures the IMPACT or CHANGE created by the series of programs, activities and interventions that you and your stakeholders implement

Process Evaluation…

- Answers questions about how the program is implemented and how the program outcomes are achieved.
  - *Is the program being implemented as planned?*
  - *How is the program achieving its objectives?*
  - *What activities were conducted?*
  - *What materials or services did participants receive?*
  - *What did people experience?*
  - *How is our coalition working?*
  - *Do we have the "right" stakeholders?*
- Tracks the strengths and weaknesses of the program and seeks to identify what parts of the program are working and which are not.

FL, Dept of Health

Intermediate or short-term evaluation (impact evaluation)…

- Answers questions about the short-term effects or benefits of a program - as opposed to long-term outcomes such as injury or death.
  - *What effects did the program have?*
  - *Can the effects be attributed to the program?*
  - *Did program participants' knowledge, attitudes, beliefs, or behaviors change as a result of the program?*
  - *Did the training program achieve its objectives?*
  - *What happened as a result of the coalition's efforts?*
- Addresses the factors that are believed to precede, and that are linked to, longer-term outcomes.

FL, Dept of Health

Long-term evaluation (outcome)…

- Health status, injury (morbidity), death (mortality), or systems changes.
- In many health programs the long-term goals are so distant that evaluating them is beyond the range of the specific program evaluation.
- Outcome evaluation questions are generally related to the overall program goal:
  - *What change in injury or death occurred because of the program?*
  - *What is the current prevalence (how many cases of "x" exist?) or*
  - *What is the current incidence of "x" (how many new cases of "x" occurred this year?)?*

FL, Dept of Health

Process evaluation provides the following information:

- **Whether program activities were accomplished**. Were new HIV policies disseminated to all school districts during the past school year?
- **Quality of program components**. How much did health education teachers improve their nutrition education knowledge due to our nutrition education curriculum workshops?
- **How well program activities were implemented**. To what extent have teachers implemented with fidelity, evidence-based tobacco-use prevention education?
- **Whether the target audience was reached**. Did all students identified with asthma receive the *Open Airways curriculum?*
- **How external factors influenced program delivery**. How are the new reading and math achievement test requirements impacting teachers' ability to provide health education instruction?

CDC Evaluation Brief, No. 4, February 2009, *Developing Process Evaluation Questions*.

Process eval made simple…

WHO?

WHAT?

WHEN?

WHERE?

HOW?

How is process evaluation useful?

Program Monitoring

Program Improvement

Building Effective Program Models

Accountability

CDC, Introduction to Process Evaluation in Tobacco Use Prevention and Control, February, 2008.

Exhibit 2-1: Four Primary Purposes of Process Evaluation

CDC, Introduction to Process Evaluation in Tobacco Use Prevention and Control, February, 2008.

Purpose	What You Can Do with Process Evaluation	Sample Questions
1. Program monitoring	Track, document, and summarize the inputs, activities, and outputs of a program. Describe other relevant characteristics of the program and/or its context.	• How much money do we spend on this program? • What activities are taking place? • Who is conducting the activities? • How many people do we reach? • What types of people do we reach? • How much effort (e.g., meetings, media volume, etc.) did we put into a program or specific intervention that we completed?
2. Program improvement	Compare the inputs, activities, and outputs of your program to standards or criteria, your expectations/plans, or recommended practice (fidelity). Relate information on program inputs, activities, and outputs to information on program outcomes.	• Do we have the right mix of activities? • Are we reaching the intended targets? • Are the right people involved as partners, participants, and providers? • Do the staff/volunteers have the necessary skills?
3. Building effective program models	Assess how process is linked to outcomes to identify the most effective program models and components.	• What are the strengths and weaknesses within discrete components of a multi-level program? • What is the optimal path for achieving a specific result (e.g., getting smoke-free regulations passed)?
4. Program accountability	Demonstrate to funders and other decision makers that you are making the best possible use of program resources.	• Have the program inputs or resources been allocated or mobilized efficiently?

Process Evaluation Activity

1. What process data will you collect and monitor to ensure your programs are on track to be successful?
2. What process data will you collect for documentation and to build your program?
3. What process data will you collect to build in accountability among stakeholders?

STATE AND NATIONAL RESOURCES

REVIEW, REFLECTIONS, EVALUATION

Learning Objectives – Day 1

1. Describe the PHAB standards for a community health assessment.
2. Define the PHAB standards for developing a community health improvement plan.
3. Define the requirements for non-profit hospital community health needs assessment and the opportunities for collaboration.
4. Analyze demographic and community health profile data to identify issues and needs.
5. Analyze qualitative community input data and information to understand community priorities, perceptions.

Learning Objectives – Day 2

6. Select and apply effective prioritization processes to apply to community health issues and problems.
7. Identify meaningful ways to engage and collaborate with community stakeholders to develop, implement and evaluation plans.
8. Use action planning tools to assist teams in the development of community health improvement plans.
9. Develop measurable outcome objectives.

Learning Objectives – Day 3

11. Select evidence-based public health interventions to achieve outcomes.
12. Select meaningful process measures to monitor and improve as needed.
13. Access community health assessment and improvement planning tools and resources.

Additional Questions or Feedback:

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Thank you!