

The Art and Science of Policy, Environmental, and Systems Change

Heart Disease and Stroke Prevention
Practitioners Institute

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Most Common Approaches to Health Behavior Change

Trying to change individual behavior directly, through:

- Education
- Awareness
- Early intervention

What's wrong with that?

“KADNAB”

Knowledge Alone Does Not Alter Behavior

- With some limited exceptions, people already know what they should be doing
- Simply telling them what to do rarely creates change

Key Lesson

Recent work in public health indicates that environmental change is a critical part of a comprehensive approach.

“Environmental”

Focus on broader forces that affect human health and shape personal behavior:

- physical
- social
- legal
- cultural
- economic

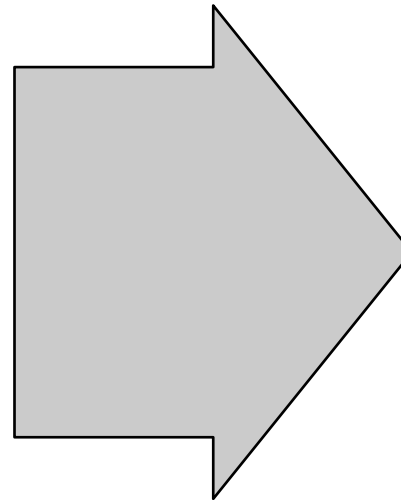
Underlying Idea

- Behavior is shaped by factors such as:
 - the available range of choices
 - social reinforcement and approval (norms)
 - rules (laws and policies)
 - ease/difficulty (benefits and barriers)
 - cost (economic and otherwise)
- These factors are the focus of environmental change.



Social Ecological Framework

- Individual factors
- Peer factors
- Institutional factors
- Community factors
- Public policy



**“Environmental
Change”**

Examples of Environmental Strategies from Public Health



**Age 21 Drinking
Law =**

**Over 17,000
lives saved
since 1975**



Mandatory Seatbelt Laws



**Under 18
No Tobacco**



**We
Card**

STATE LAW PROHIBITS THE SALE OF TOBACCO TO MINORS.

**Increase Taxation
on Cigarettes**

**Limit Access
for Adolescents**

Cardiovascular Health & Stroke Prevention: Shared Risk Factors



Strategies for Individual Change

- Awareness:
 - Eating veges is good for you
 - Exercising will reduce risk of CVD/stroke
- Educational Programming:
 - Prevalence, signs, symptoms of CVD/stroke
 - Cooking classes
- Medical management of health conditions
- *By themselves*, unlikely to have broad impact

CDC-Funded CVD State Programs

“The emphasis of the programs will be to develop a state plan to reduce cardiovascular disease and to focus interventions on environmental and policy changes that support good nutrition, enhanced physical activity, and improved risk factors for cardiovascular disease.”

Environmental Change Examples

- Providing safe and accessible walking paths
- Increasing availability and labeling of healthy food in cafeterias
- Reducing tobacco availability to youth
- On-site fitness facilities for employees
- State regulations regarding school lunches, PE
- Point of purchase reminders re: healthy foods
- Price policies, supports for healthy foods

Institutional Factors

Refers to the policies, practices, and structures of organizations, e.g., worksites, schools.

Example:

- In both policy and practice, a worksite serves healthy foods at meetings.

Community Factors

Refers to policies, practices, and structures of “communities” (can be defined by geography, identity, shared interests, etc.).

Example:

- A town implements a farmer’s market to ensure that fresh fruits and vegetables are readily available.

Public Policy

Typically refers to laws, policies, practices, and structures that cross communities.

Example:

- A state law is passed and enforced requiring a specific level of physical activity during the school day.

Look carefully! Activities that *sound* environmental but may not be...

- Health fairs
- Worksite activity programs
- Media campaigns

The Deciding Question:

Where is the locus of change?

- Environmental initiatives focus on the structure and function of organizations and communities themselves, including policies and laws.
- Using an organization or community setting as a channel to reach people to convince them to behave differently is not an environmental change.

Note

- Environmental change is not all-or-nothing
- Best approaches combine individual and environmental approaches

Key Point:

- Public health programs should be informed by a thorough analysis of the problem
- Goal is to identify and address entire range of reasons people don't practice desired behaviors
 - Usually, more than lack of awareness
 - Usually, both individual and environmental factors come into play

Challenges: Environmental & Policy Approaches

Challenges

- Environment/policy change
 - Maintaining focus on environment/policy
 - Need for clearly defined options
- Strategic challenges
 - Balance between “strategies” & “tactics”
 - Need for multiple, coordinated strategies
- Evaluation of environment/policy change

Challenge: Environment

#1: Maintaining focus on environment/policy

- Individual change is default paradigm
- Many forces conspire to make us think about individuals, e.g.
 - focus on individual risk behaviors
 - survey data
 - “priority populations”
- Suggestion: include environmental, policy & systems factors in problem assessment

Challenge: Environment

#2: Need for clearly defined change options

- Research base is growing, but still limited
- Suggestions:
 - Draw from existing studies, lessons from other substantive areas, and logic to create a “menu” of options for state and local change
 - Evaluate, evaluate, evaluate

Challenge: Strategy

#1: Balance between strategies & tactics

Strategies are not the same as tactics.

- *Strategies* will create changes in people or in the environment;
- *Tactics* are used in service of (and essential to) achieving strategies, but will not in themselves lead to desired outcomes;

For example:

Strategies vs. Tactics

Strategies (lead to):

- new policies
- decreased price
- increased availability
- healthier norms
- increased knowledge

Tactics:

- collaboration
- leadership
- data collection/evaluation
- using media

Complicating Factors

- Tactics are often important in the early stages
- Role of health organizations is often focused on tactics (e.g., data provider, convener)
- Suggestions:
 - Help to develop clear vision of desired strategic changes
 - Articulate how tactics will eventually lead to changes in people or in the environment.
 - Build infrastructure in support of these changes

Challenge: Strategy

#2: Need for multiple, coordinated strategies

- In order to affect long-term outcomes, need to create many changes
- Improved outcomes if initiatives work in sync
 - e.g., can create new bike path, educate the public about the path, and provide incentives to use it
- Suggestion: create a model of change

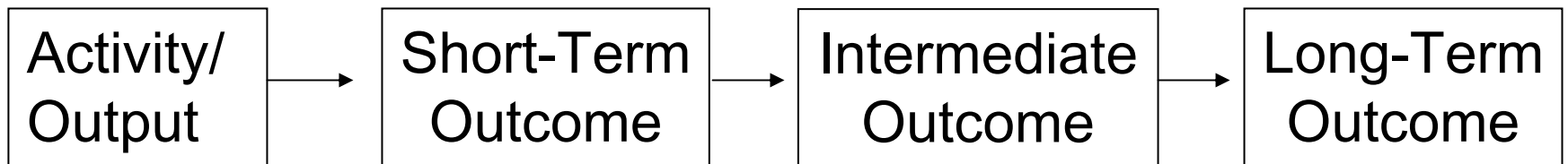


Theory of Change Model

A model of ...”the causal links that tie program inputs to expected program outputs.” (Weiss, 1998)

“A plausible and sensible model of how a program is supposed to work.” (Bickman, 1987)

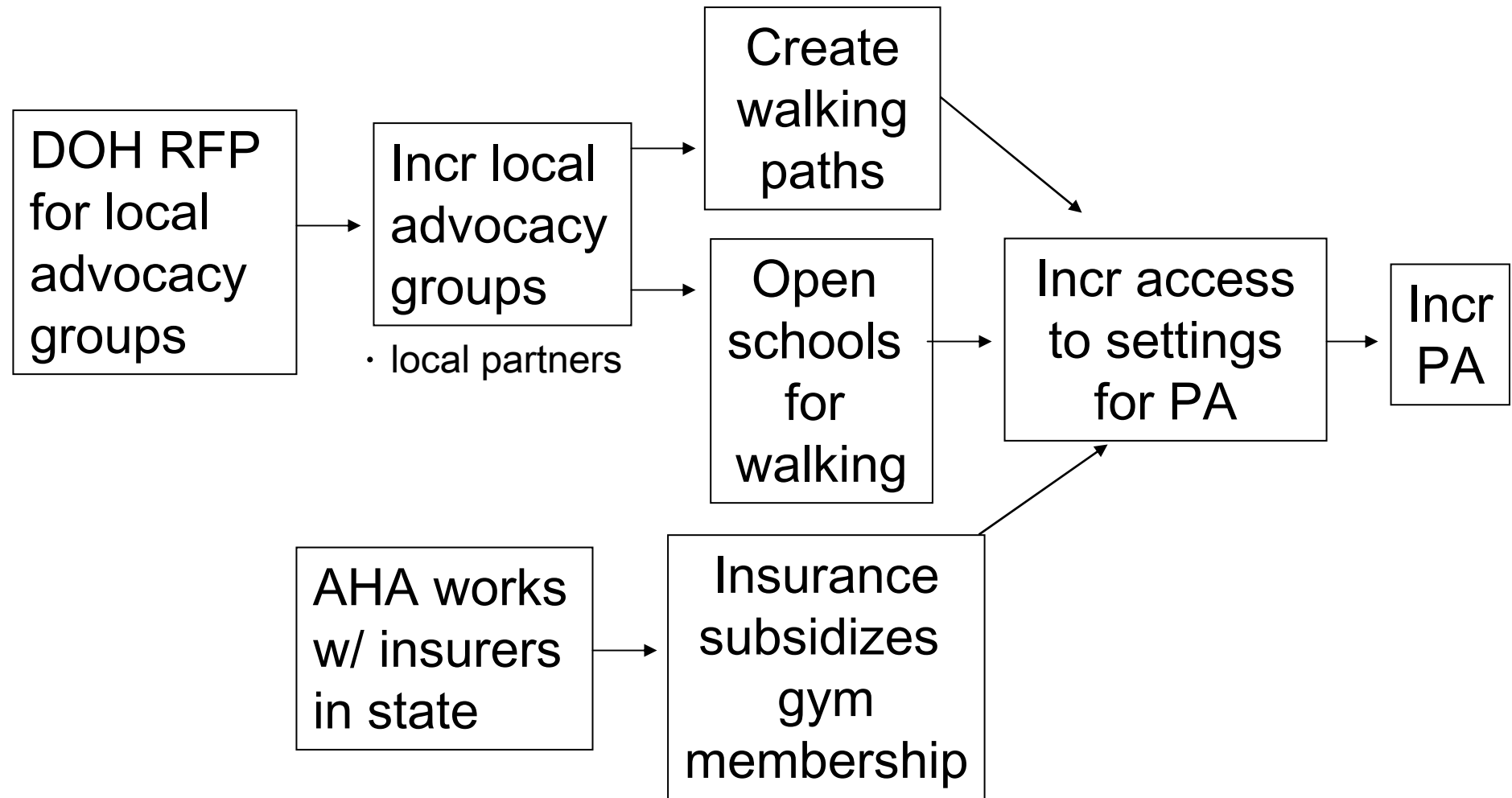
Generic Model



Specifying the Links

- Each link in the chain should specify a change that is expected to occur, rather than the program activity that is expected to cause the change
- So, rather than:
 - “nutrition outreach at supermarkets” (activity),
 - say:
 - “increased skills in preparing healthy foods” (change)
 - and
 - “increased availability of low-fat foods” (change)

Example Physical Activity Model



Benefits of Using a Model

- Helps establish intermediate outcomes
- Use as basis for evaluation
- Helps to build knowledge base about implementation and effectiveness

Challenge: Evaluation

- #1: Evaluation of combined strategies
 - large number of confounding factors
 - important to document implementation
 - need for measuring intermediate outcomes
 - often, need to measure environment
- #2: Measurement of environment itself
 - few methods validated

Recommendations

- Focus baseline assessment on environmental as well as individual factors and identify specific environmental changes to support your efforts
- Develop a coordinated, focused strategic plan that includes a plan for changing the identified environmental factors
- Include strategies as well as tactics
- For each effort, ask: “How will this program help to advance heart health or reduce stroke?”