Where’s the Logic in Logic Modeling

National Indian Health Board
September 23, 2014
Objectives

• By the end of this webinar, participants will be able to ...
  • Describe the basic component of a behavioral change logic model
  • Describe how to use a logic model
Who We Are

• **NIHB Mission Statement**

• One Voice affirming and empowering American Indian and Alaska Native People to protect and improve health and reduce health disparities
Areas of Expertise

NIHB provides a variety of services

- Advocacy
- Policy Formation and Analysis
  Legislative and Regulatory Tracking
- Direct and Timely Information Dissemination to Tribes
- Research on Indian Health Issues
- Program Development and Assessment
  Public Health Infrastructure
- Training and Technical Assistance Programs
- Project Management
Examples of TA Projects

• Tribal Public Health Capacity
• ACA Outreach and Education
• Medicare, Medicaid, and Health Policy Subcommittee (MMPC)
• HIV/AIDS Outreach and Education MSPI

Outreach and Education
Overview of Logic Models
Definition of a Logic Model

A logic model describes the main elements of an intervention and how they sequentially work together to address a specific problem or issue in a given population.
Logic Models

• Are simply a picture that describes a program
  • and its inner workings
  • Flow chart
    Diagram

• Are made far more complicated than they
  • need to be
Logic Models

In our field, we create logic models to describe:

- Evaluation plans
- Community assessments
- Prevention programs
- Behavior change

We further dissect problems so that we can more finely tune our programs
YOU HAVE A HEADACHE!!!!!!

What do you do?
Stress and tension have produced a headache

Take two aspirin

Rest for 30 minutes

Headache pain will be reduced
Logical Progression to Solving a Problem

PROBLEM

SOLUTION / ACTION

RESOLUTION / RESULT
The Process

Starts with an observation and then follows a “but why?” line of reasoning to identify causes

Then you implement the solution … and monitor the outcome
Elements of the Logic Model

PROBLEM

equals Problem Statement

SOLUTION / ACTION

equals Inputs, Activities, and Outputs

RESOLUTION / RESULT

equals Immediate and Intermediate Outcomes
Flow of a Logic Model

PROBLEM STATEMENT

INPUTS  ACTIVITIES  OUTPUTS

IMMEDIATE OUTCOMES  INTERMEDIATE OUTCOMES
Problem Statement: Description of the behaviors, causes, and context placing a specific population at risk.

Causes that put a population at risk may include: knowledge, attitudes, beliefs, behaviors, skills, access, policies, or environmental conditions.

The problem statement should be the result of an assessment or research.
Definitions of Logic Model Components

**Problem Statement**

**Inputs**
- Resources used in a program (such as money, staff, curricula, and materials)

**Activities**
- Services that the intervention provides to accomplish its objectives (such as outreach, materials distribution, counseling sessions, workshops, and training)

**Outputs**
- Direct products or deliverables of the intervention, (such as intervention sessions completed, people reached, and materials distributed)

**Outcomes**
- Immediate
- Intermediate

**Impacts**
Definitions of Logic Model Components

Problem Statement

Immediate Outcomes: Immediate results of the intervention (such as changes in knowledge, attitudes, beliefs, and skills)

Intermediate Outcomes: Intervention results that occur some time after the intervention is completed (such as changes in behaviors, skills, access, policies, and environmental conditions)
Impacts: Long-term results of one or more interventions over time (such as changes in suicide rates)

Can be within a larger area or within a confined area
The Logic of a Logic Model

• The problem statement contains
  Statement of risk behavior
  • Statement of the causes (behavioral determinants) Specifies the population engaging in the risk behavior

• Activities directly address behavioral determinants
  • Large programs generally have many activities

• Immediate outcomes show a change in behavioral determinants

  Intermediate outcomes show a change in actual risk behavior
Tips for Writing a Logic Model

Inputs are what you need to do your activities.

Activities start with verbs:
   Conduct, Distribute, etc.

Outputs are also called deliverables.

Outputs are almost always associated with numbers.

Outcomes use words to indicate a change shift.
Immediate outcomes lead to intermediate outcomes.
Youth between the ages of 14-18 living on XY Reservation are a heightened risk for suicide due to diminished access to intervention services, lack of knowledge of how to access services, and low self-efficacy to ask to seek out assistance.

<table>
<thead>
<tr>
<th>Inputs</th>
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<tbody>
<tr>
<td>• SafeTalk training for staff</td>
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<tr>
<td>• SafeTalk TOT for staff</td>
</tr>
<tr>
<td>• Technical assistance on social marketing</td>
</tr>
<tr>
<td>• Graphic design consultant</td>
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<tr>
<td>• 2.0 FTE staff</td>
</tr>
<tr>
<td>• 2 computers and workstations</td>
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<tr>
<td>• Training facilities and materials</td>
</tr>
<tr>
<td>• $200,000 grant</td>
</tr>
<tr>
<td>• Behavioral health providers</td>
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<tr>
<td>• MOU’s with local business</td>
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<tr>
<td>• Incentives for trainings</td>
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<table>
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<tr>
<th>Activities</th>
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<tbody>
<tr>
<td>• Receive training on SafeTalk</td>
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<tr>
<td>• Receive TOT Training on SafeTalk</td>
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<tr>
<td>• Deliver local SafeTalk trainings to youth, adult family members,</td>
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<tr>
<td>school faculty, and behavioral health providers</td>
</tr>
<tr>
<td>• Create texting campaign for local suicide prevention</td>
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<tr>
<td>• Recruit youth to join texting campaign</td>
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<tr>
<td>• Text suicide prevention</td>
</tr>
<tr>
<td>• Create a local social marketing campaign</td>
</tr>
<tr>
<td>• Disseminate local social marketing campaign materials</td>
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<table>
<thead>
<tr>
<th>Outputs</th>
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<tbody>
<tr>
<td>• 10 SafeTalk trainings for 100 youth</td>
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<tr>
<td>• 10 SafeTalk trainings for 150 adults</td>
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<tr>
<td>• 2 SafeTalk Training for 25 school faculty</td>
</tr>
<tr>
<td>• 1 SafeTalk training for 8 providers</td>
</tr>
<tr>
<td>• 100 youth recruited for texting campaign</td>
</tr>
<tr>
<td>• 300 suicide prevention texts sent</td>
</tr>
<tr>
<td>• 1 local social marketing campaign</td>
</tr>
<tr>
<td>• 1000 pieces of social marketing campaign distributed</td>
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<tr>
<th>Immediate Outcomes</th>
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<tbody>
<tr>
<td>Increased efficacy to seek out assistance</td>
</tr>
<tr>
<td>Increased knowledge of how to access services</td>
</tr>
<tr>
<td>Increased access to intervention services</td>
</tr>
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<tr>
<th>Intermediate Outcome</th>
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<tbody>
<tr>
<td>Decreased risk for suicide for youth between the ages of 14-18 living on XY Reservation</td>
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<th>Impact</th>
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<tbody>
<tr>
<td>Decreased suicide attempts</td>
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<tr>
<td>Decreased deaths from suicide</td>
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</table>
Youth between the ages of 14-18 living on XY Reservation are a heightened risk for suicide due to diminished access to intervention services, lack of knowledge of how to access services, and low self-efficacy to ask to seek out assistance.

Immediate Outcomes reflect a change in the causes of behavior.

Immediate Outcomes:
- Increased efficacy to seek out assistance
- Increased knowledge of how to access services
- Increased access to intervention services

Intermediate Outcome:
- Decreased risk for suicide for youth between the ages of 14-18 living on XY Reservation

Intermediate Outcome reflects a change in the actual behavior.

Impact:
- Decreased suicide attempts
- Decreased deaths from suicide
What Can Happen if Your Logic Model is Illogical

- If you don’t know the actual causes of the risk behaviors
- If your activities do not directly address the causes of the behavior

OR

You may implement a program that does not significantly impact the actual behavior because it is not addressing the “root” causes.
Why Use Logic Models?
Benefits of Using a Capacity Building Logic Model

Shows the internal logical consistency of the program and helps to identify gaps in the plan.

Makes the intended outcomes of the intervention clear so that planners can determine whether the intended activities are appropriate and realistic.

Helps in monitoring progress by providing a clear plan for an intended intervention.
Benefits of Using a Capacity Building Logic Model

Ensures that everybody (planners, managers, grant writers, line staff, funders, community members, and others) are all on the same page

Great tool for continuity

Ensures concrete effective programming

Seeks to ensure that the problem statement is based on evidence and not assumption
Using the Logic Model to Construct a Workplan

Using the activities component, begin to construct incremental tasks needed to accomplish each activity.

Construct a Gantt Chart to supplement the workplans.

Doing the Workplan will also help you to validate how many staff are needed to accomplish each task and activity.

The activities can then be grouped into objectives and goals.
Using Logic Model to Guide Evaluation Planning

Helps to focus evaluation questions

Process Monitoring and Evaluation
  Create Process Objectives (generally around the outputs)
  By the end of the 4th month, 1 social marketing campaign will have been created

Outcome Monitoring and Evaluation
  Create Outcome Objectives (for both immediate and intermediate)
  By the end of grant year 1, youth will exhibit a 25% increase in their self-reported self efficacy to access services
If not meeting outputs

• Then the logic model becomes a monitoring tool, and you can ask yourself
  • “Why aren’t we meeting our output?”
  • Did we miscalculate inputs and resources needed?
  • Are the activities taking too long?
  • ...


Using Logic Model for Budgeting

Using inputs to write specific budget line items
That includes work materials, computers, training required, and travel

Using activities to estimate staff time needed
Planned Versus Actual Logic

Planned implementation and outcomes

During the planning of a program, a logic model can
describe intended implementation
show expected outcomes

Actual implementation and outcomes

Once the program is implemented, a logic model can
describe how the implementation actually occurs
demonstrate the outcomes that actually occurred
Logic Model Structure

The structure of a logic model is flexible
   Does not have to be so linear and Western in its approach

As long as the following components are included:

   Problem Statement
   Activities
   Immediate and Intermediate Outcomes
Circular Logic Model

- Inputs
- Activities
- Outputs
- Impacts
- Intermediate Outcomes
- Immediate Outcomes
- Problem Statement
- Inputs
What Questions Do You Have?
Thank you!

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