Where’s the Logic in Logic Modeling

National Indian Health Board
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
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 aspirins.
Rest for 30 minutes.

Headache pain will be reduced.
Logical Progression to Solving a Problem

PROBLEM

SOLUTION / ACTION

RESOLUTION / RESULT
The Process

Observe the Problem → Identify the Cause → Identify a Desired/Intended Change → Identify a Solution

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.
Flow of a Logic Model

PROBLEM STATEMENT

INPUTS → ACTIVITIES → OUTPUTS

IMMEDIATE OUTCOMES → INTERMEDIATE OUTCOMES
Definitions of Logic Model Components

- **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 → Activities → Outputs

Outcomes
Immediate → Intermediate

Impacts

**Inputs:** Resources used in an 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)
Definitions of Logic Model Components

Problem Statement

Inputs  ➔  Activities  ➔  Outputs

Outcomes
- Immediate
- Intermediate

Impacts

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)
Definitions of Logic Model Components

- Problem Statement
- Inputs → Activities → Outputs
- Outcomes: Immediate → Intermediate

- 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.

**Inputs**
- SafeTalk training for staff
- SafeTalk TOT for staff
- Technical assistance on social marketing
- Graphic design consultant
- 2.0 FTE staff
- 2 computers and workstations
- Training facilities and materials
- $200,000 grant
- Behavioral health providers
- MOU's with local business
- Incentives for trainings

**Activities**
- Receive training on SafeTalk
- Receive TOT Training on SafeTalk
- Deliver local SafeTalk trainings to youth, adult family members, school faculty, and behavioral health providers
- Create texting campaign for local suicide prevention
- Recruit youth to join texting campaign
- Text suicide prevention
- Create a local social marketing campaign
- Disseminate local social marketing campaign materials

**Outputs**
- 10 SafeTalk trainings for 100 youth
- 10 SafeTalk trainings for 150 adults
- 2 SafeTalk Training for 25 school faculty
- 1 SafeTalk training for 8 providers
- 100 youth recruited for texting campaign
- 300 suicide prevention texts sent
- 1 local social marketing campaign
- 1000 pieces of social marketing campaign distributed

**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

**Impact**
- Decreased suicide attempts
- Decreased deaths from suicide
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 the behavior:
- SafeTalk training for staff
- SafeTalk TOT training
- Technical assistance

**Outputs**
- Staff training
- 2.0 FY
- 2 contracts
- Training costs $200,000
- Behavioral health MOUs
- Incremental cost

**Intermediate outcome** reflects a change in the actual behavior:
- Receive training
- Delivered training to youth and school faculty
- Created suicide prevention provider database
- Recruited texting campaign providers
- Texted campaign
- Created campaign
- Disseminate local social marketing campaign materials

**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

**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

OR

If your activities do not directly address the causes of the behavior

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 Models

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
Thank you!

National Indian Health Board

www.nihb.org