

LOGIC MODELS

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Logic Models and Program Planning

After you have <u>Defined the Problem</u> (Step 2a – Evaluation Guidelines) it is recommended that you construct a program <u>Logic Model</u>. The Logic Model depicts program outcomes, how the program is supposed to accomplish these outcomes and what is the basis (logic) for these expectations.

What Logic Models can do for you:

Logic models <u>link</u> program inputs (i.e., resources) and activities to program products and outcomes (i.e., goals) while communicating the logic (theory) behind the program, its rationale for existing. Logic models can be used to:

- identify the products, short-term, intermediate, and distal outcomes for your program;
- (2) link outcomes to each other and to program activities using the identified logic/theory/model for your program (illustrate cause and effect);
- (3) incorporate findings from research and demonstration projects;
- (4) select indicators to measure outcomes depending on the stage of your program's development;
- (5) illustrate why the program is important as well as its fundamental purpose;
- (6) depict what intermediate outcomes/products must occur before distal outcomes will be evident;
- (7) make mid-course adjustments and improvements in your program; and
- (8) become a common reference point for staff, stakeholders, constituents and funding agency

A logic model will assist you in communicating the underlying theory (logic) that you have about why your activities are a good solution to the problem identified.

Logic models can be displayed by varying methods. Some read left to right, others top to bottom with intermittent circles and squares, while still others follow a winding path; all are designed to demonstrate the link (logic/theory) of what leads to what. What are the links between resources, activities, products and outcomes? Why and how will your program work?

Logic models often provide the needed synthesis of your program to successfully convey why your program is important as well as the logic behind why you expect it to succeed. A logic model is an iterative tool, providing a framework to revisit throughout program planning, implementation and evaluation.

NOTE: Many RFAs now require that you include a logic model of your proposed program.

Stakeholders

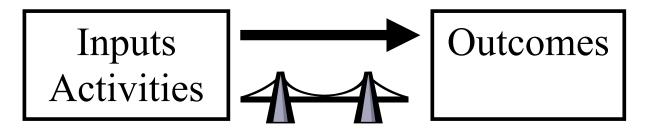
Ideally, the development of a logic model engages stakeholders (identified in Step 1 of the Evaluation Guidelines) and guides program development and evaluation planning simultaneously. It provides a forum for stakeholder differences to be identified and considered as well a catalog of resources and support for your program. By including stakeholders, you promote ownership and commitment to the program. It is hoped that all parties can come to an understanding and consensus about program outcomes and limitations, as well as activities to achieve those outcomes and future direction.

The "Logic"

The logic or rationale for your program can be developed from numerous sources considering context and stage of development of your program. These might include:

- Focus groups
- Key informant assessments
- Community needs assessments
- Formal behavioral theory
- Delphi-method or other consensus-based theory
- Previous evaluation results
- Evidence-based research/practice/intervention models

Faulty logic can lead to ineffective and inefficient programs. The logic is what links resources to activities to products to outcomes. A logic model is your best evidence as to why this program will work and best justification for spending specific resources in a particular direction. In a graphic depiction, the "arrows" portray the logic. Think of each arrow as a bridge between the boxes. The strength of your bridge depends on the strength of the logic used.



LOGIC MODEL COMPONENTS

- **Inputs:** Resources that go into the program
- Activities: Actual events or actions that take place
- **Products:** Direct tangible outputs of program activities
- Outcomes: Impact of the program; the sequence of effects triggered by the program, often expressed in terms of short-term, intermediate, and distal outcomes
- Arrows: Depict the logical links between inputs, activities and outcomes

Inputs are the various resources that go into a program. For an Oral Health Infrastructure Development program, inputs may include:

- Direct and in-kind funding
- Staff of Oral Health Unit
- Partner Organizations (support and resources)
- Steering or Advisory Board
- Legislation/Rules/Regulations
- Equipment

Activities are the actual events that take place as part of the program. The following are examples of activities in an Oral Health Infrastructure Development Program:

- Develop a coalition
- Write a state oral health plan
- Develop a comprehensive, integrated surveillance system
- Develop a culturally appropriate media kit to educate and inform population regarding Oral Health
- Develop school referral networks
- Develop fluoridation and sealant programs

TIP: List all activities with an action verb to distinguish between activities and products.

Outcomes reflect the intended accomplishments of the program. The following are some examples:

- Increase in oral health legislation/rules/regulations
- Increase in evidence-based prevention programs
- Decrease in decay
- Decrease in untreated decay
- Increase in oral cancer examinations
- Increase in awareness of oral cancer causes
- Decrease in periodontal disease
- Increase in number of providers using of sealants

Products are the direct tangible outputs of program activities. Products and short-term outcomes are often grouped together. Products are distinguished from effects/outcomes in that effects and outcomes make some <u>change</u> in a target audience. The following are some examples of products:

- Written vision, mission and goal statements for coalition
- A written State Oral Health Plan
- A comprehensive Oral Health Surveillance System
- A completed media campaign kit on oral cancer awareness available for dissemination

TIP: List all products with a noun to distinguish between products and activities.

Short-term outcomes describe the immediate effects of a program and often focus on the knowledge, attitudes, and skills gained by a target audience. Some examples:

- Increase in oral health advocacy due to active coalition that represents a broad range of committed stakeholders
- Increase in evidence-based direction for resources using state plan as the strategic guide
- Increased public exposure to information regarding oral cancer

Intermediate outcomes include behavior change, normative change, and changes in policies. Some examples:

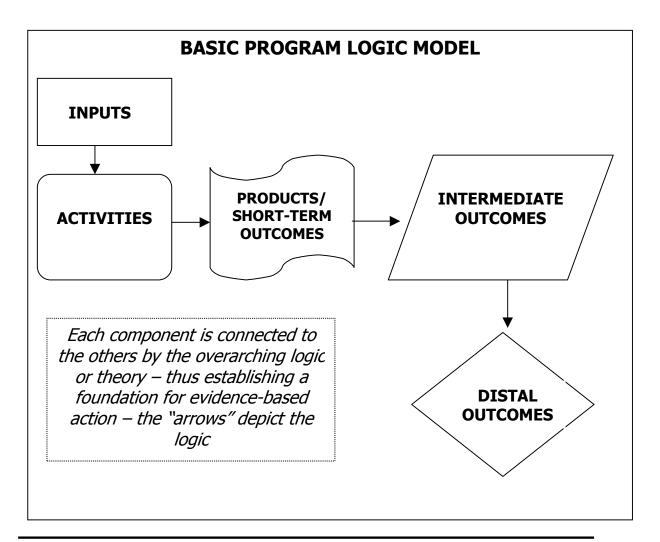
- Changes in practice law due to coalition activities
- Mandatory dental screenings for school-aged children implemented based on state plan
- Increased public behavior towards the prevention of oral cancer

Note: Short-term and intermediate outcomes are the direct result of your program. They are the evidence for believing that the distal outcomes will occur given time and credibility of the logic you have used.

Distal outcomes often take time to achieve, e.g., decreased morbidity and mortality for health promotion programs. Distal outcomes are the ultimate goals of the program. Some examples:

- Decrease in prevalence of caries
- Decrease in prevalence of oral cancer
- Decrease in prevalence of periodontal disease
- Decrease in prevalence of disease related to infection control methods

NOTE: Products and short-term outcomes often are grouped together for ease of depiction in the logic model framework.



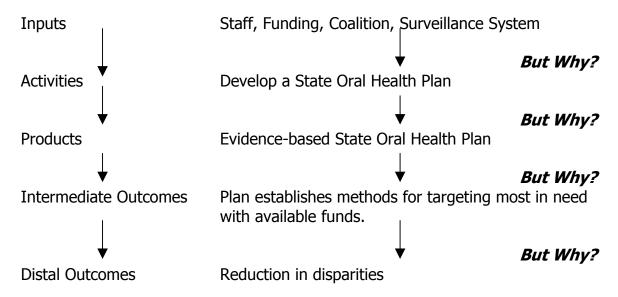
Approaches to Developing a Logic Model

There is no "right" way to begin a logic model. Design construction is based on stage of the program, identified "logic," information available concerning resources, etc. However, you should have a clear definition of the problem before starting construction of your logic model. [*Problem definition developed in Step 2a of the Evaluation Guidelines*] The two approaches described in this Workbook are the Forward Logic approach and the Reverse Logic approach. We will use the Forward Logic approach to demonstrate the construction of the Oral Health Infrastructure Logic Model. The Reverse Logic approach is described in the supplemental section of this workbook.

Left to Right or "Forward Logic"

Developing your logic model from left to right starts with articulating the program inputs and activities and requires you to work forward towards distal outcomes. This approach is often used when you need to evaluate a program in the implementation or maintenance stage but do not already have a logic model in place. You will ask the question "But Why?" as you move from left to right in your logic model.

Example:



You can also think of this left to right movement as an **IF** ... **THEN** progression. Further examples for the IF-THEN process are described below in *Step Four*.

For the purpose of constructing Oral Health Infrastructure Development logic models using the ASTDD Infrastructure Development Model and the current RFA guidelines, the construction of the logic model should proceed along the following steps using the Forward Logic approach.

Steps for Constructing a Logic Model

Step 1	Problem Definition (Step 2a Evaluation Guidelines)	
Step 2	Capacity/Resource/Gaps Inventory	
Step 3	Define Activities	
Step 4	IFTHEN Process	
Step 5	Arrange Logic Model Components	
Step 6	Logic Model Narrative	

Step One: Begin with a **problem definition**.

Case Study: Lack of coordinated resources, advocacy, legislature support and direction has led to a paucity of sustainable oral health promotion activities within New State. Moreover, lack of comprehensive, up-to-date surveillance data prohibits them from making evidence- based decisions as to priority and actions. Single activities alone will not address the oral health status of all New State citizens nor will they address the disparities that exist within its communities. It is evident that an increase of state oral health infrastructure must occur in order for New State to adequately address the oral health needs of its citizens in an effective and efficient manner. Therefore, the desired outcome is to develop sustainable oral health infrastructure within New State using the ASTDD model as their guiding logic.

You should have a good understanding of the problem definition if you have completed a needs assessment for your community, considered the appropriate theory of change, and identified your priorities within the framework of available resources and current capacity. Your problem definition defines the outcomes you will establish for a program. A distal outcome is a general, "big picture" statement of the outcomes a program intends to accomplish in the long-term to fulfill its mission. The outcome should be written so that the measurement of success is clear.

Step Two: Conduct a <u>Capacity/Inputs/Gaps Inventory</u>.

When drafting a logic model, assess your <u>inputs (resources)</u> as they relate to the problem you are addressing. Inputs for oral health infrastructure development might include items such as a water fluoridation program, a full-time dental director, MCH block grant funding, a steering committee, some surveillance capacity, legislation mandating the development of a State Oral Health Plan and your current CDC/DOH funding.

Use the Logic Model Worksheet to complete your current list of inputs. It is assumed that each state can define a time period when oral health infrastructure

development efforts began in their state. Therefore, inputs for this activity are divided into three sections: 1) infrastructure in place prior to build-up period, 2) infrastructure developed (or being developed) with non-DOH funds, and 3) infrastructure to be developed with current DOH funds. The inputs column is the far left column of the Logic Model Worksheet. Ideally, the three boxes on your pictorial logic model would be labeled: 1) infrastructure in place prior to (date), 2) infrastructure developed (being developed) starting in (date) with non-DOH funds, and 3) infrastructure to be developed with current DOH funds. Thus, you would leave the details for your logic model narrative (Step 6).

Using the inputs that you have identified, assess what components of the ASTDD Infrastructure Model (program logic) you already have (i.e., you have a full-time dental director but do not have a State Plan or an integrated surveillance system). Identify and prioritize gaps in the structure.

Prioritization should consider data from your community needs assessment, current capacity (state of infrastructure development), and available inputs. For example, if you do not have an adequate integrated surveillance system to make evidence-based decisions, you might place a higher priority on this activity before developing a state plan. Then, when you do develop your state plan, you will have the evidence needed to justify your plan. Additionally, prioritization is important when you do not have enough "inputs" to adequately complete all the activities you need to accomplish in order to achieve the outcome of comprehensive infrastructure for oral health.

It is important that you use surveillance evidence to set priorities. Use data from sources such as focus groups, community needs assessments, legislative mandates, surveillance systems, infrastructure capacity assessment in conjunction with Healthy People 2010 Oral Health objectives and current inputs to determine your state's "most in need" factors. The gaps identified as highest priority become the factors you will address in your program and the activities depicted in your logic model.

The ASTDD Infrastructure model is depicted in column two of the Logic Model Worksheet. Place a check mark $\sqrt{}$ by the gaps you have identified in your state's oral health infrastructure. Transfer the checked items to the Gaps Identified worksheet. For each gap identified, indicate the available data that would give evidence for elimination of this gap. In collaboration with your identified stakeholders and considering available evidence, prioritize each gap.

At this point you have:

- ✓ Defined the problem
- ✓ Completed a current capacity/inputs/gaps inventory
- ✓ Considered information from your community needs assessment
- ✓ Prioritized gaps based on surveillance data and community needs assessment

Step Three: Define Activities

What activities will you complete during the program period depicted in your logic model? A logic model serves as a strategic guide from planned activities to intended outcomes. If your activities are not implemented as planned it is unlikely you will achieve all of your proposed outcomes. Your proposed activities should correspond to the gaps you prioritized in Step Two.

Write down your proposed activities on the Activities Worksheet. When composing your activities, ask the following questions:

- What are we proposing to do?
- What gap(s) are we trying to eliminate?
- Why would we do this (logic)?
- How are we proposing to accomplish this activity?
- > Are the needed inputs available?
- When will we accomplish this activity?
- What is our target group? (if applicable)

You should have at least one planned activity for each gap identified as a priority. A single gap may require multiple activities such as the development of a coalition or state plan.

Step Four: IF Process

Once you've identified and prioritized your program's activities, ask "If we do this (input + activity), then what will happen (product/outcome)?" You should write an if-then statement for each of the activities you proposed in Step Three. This step is the process of linking activities with outcomes based on your intended theory/model. You should have at least one activity for each outcome identified.

IF THEN Statements are directed by your Theory of Change. For the purposes of Oral Health Infrastructure Development, the theory is the ASTDD Model for Oral Health Infrastructure Development.

For example,

- ◆ If we obtain funding for the development of an oral health advocacy coalition, then the coalition will be formed.
- ◆ If we establish this coalition, then they will develop a State Oral Health Plan.
- If we have a strong evidence-based State Oral Health Plan, then we can request funding for caries prevention programs for school-aged children.
- ◆ If we receive funding for caries prevention programs for school-aged children, then we can implement sealant (logic-based action) and referral programs (logic-based action) in our public schools.
- ◆ If we implement caries prevention programs in school-aged children we will increase the number of children with sealants; and if we implement school-based referral programs, then we will increase the number of children seen by a dental provider.
- ◆ If we increase the number of children with sealants, then we will reduce the incidence of caries. If we increase the number of children seen by a dental provider then we reduce the number of children with untreated decay.

An example of how the previous **If-Then** statements would become a pictorial logic model as well as how outputs can become future inputs is provided on the following page.

Use the activities you identified in Step Three and complete an if-then statement for each activity using the IF-THEN Worksheet.

Example:

Gaps: Lack of coordinated, linked surveillance data

No State Oral Health Plan

Oral Health Unit needs: epidemiologist, program manager, data

manager

Activities: Hire data manager to link available data sources

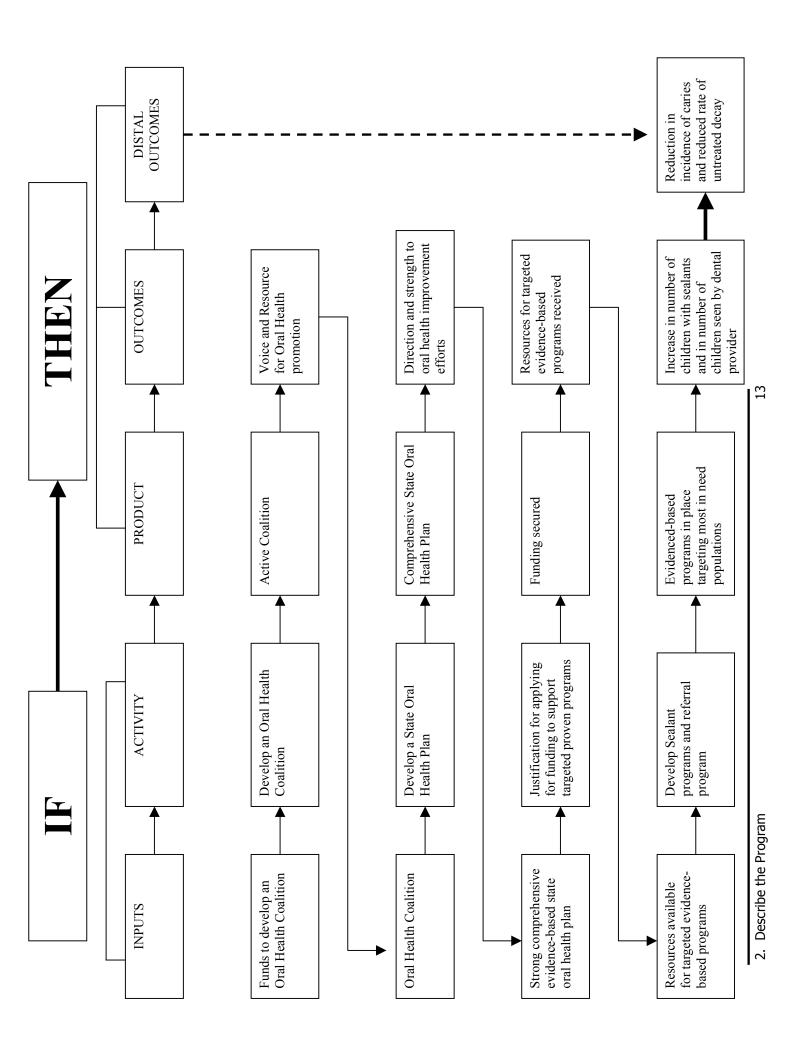
Assess gaps in available data sources

Incorporate into State Oral Health Plan method for elimination of

data gaps

IF And IF THEN

INPUTS	ACTIVITY	OUTCOME/PRODUCT
IF New State has funding to hire a data manager	And IF New State has the new data manager link all available data sources	THEN New State will have a coordinated, linked surveillance system
IF New State has a coordinated, linked surveillance system	And IF New State assesses the gaps in the surveillance system	THEN New State will have a document describing the data gaps that need to be eliminated
IF New State has a document describing the data gaps	And IF New State incorporates this document and a plan for elimination of gaps into their State Oral Health Plan	THEN New State will have a strategic guide towards the elimination of data gaps and will be positioned to apply for funding to support this proposed activity



Step Five: <u>Arrange Logic Model Components</u>

You are now ready to arrange your logic model components. Starting at the left-hand side and moving to the right, arrange your inputs, activities and outcomes in a columnar-linked format. Examine the model carefully. Does each step logically relate to the other? Are there missing steps that disrupt the logic of the model? Does each outcome have a corresponding activity? You may need to use additional arrows to link outcomes that have more than one activity etc.



An essential design element of logic models is that they are contained on a SINGLE page. It is intended to be a quick snapshot of your program. Your detail should be comprehensive enough to adequately portray the big picture of your program, but sparse enough to embody a single-page portrait framework.

Once the model is implemented, you can use it to assess whether your program is doing what it needs to do to implement change. It is important to remember that logic models change over time with improvements to the program, shifting resources, and new science supporting prevention of oral disease. Logic model development is and always will be an iterative process. Additionally, your logic model for one program can jump start the process of planning for a subsequent program as outputs become resources/inputs and health gains are expanded.

Logic models can be broad or very specific. They can be linked to one another to express different levels of effort, such as national, state and local programs. Additionally, you could prepare a family of logic models to represent diverse aspects of the program: an overall state program, multi-strategy efforts to address one of the three public health core component areas, or a specific program strategy within a core component area such a the development of a State Oral Health Plan. Examples of logic models representing different levels of detail are found in the supplemental material for this Workbook section.

In summary, drafting logic models can be challenging but worthwhile. It is like having a road map directing you to your final destination. Logic models can help you determine whether your program activities logically lead to the desired outcome. A logic model provides a quick snapshot of what you have, what you

are doing, and where you are going, as well as the direction you might need to embark upon once the current activities are completed. They are a visual depiction of the program that helps ensure that all the stakeholders understand the program's purpose, the resources it will need, the activities it will conduct, and its capacity to effect change as well as limitations. Logic models offer a useful starting place for identifying questions to be answered by the program evaluation. Finally, a collaborative process of creating logic models is an effective way to engage stakeholders and generate support and ownership for your program. This is an important first-step before creating the program workplans.

At this point you have:

- ✓ Defined the problem
- ✓ Completed a current capacity/inputs/gaps inventory
- ✓ Considered information from your community needs assessment
- ✓ Prioritized gaps based on surveillance data and community needs assessment
- ✓ Completed a list of activities
- ✓ Developed "linking" If-Then statements
- ✓ Graphically depicted your logic model on a SINGLE page

Step Six: Logic Model Narrative

An essential design element of logic models is that they are contained on a **SINGLE** page. It is intended to be a quick snapshot of your program. It is a visual depiction of your program. Therefore, it often is necessary to include short narrative bullets on subsequent pages to describe and clarify logic model components for reporting purposes and funding proposals. A narrative component to your logic model can convey the depth and detail of each activity and its intended outcome to your audience. A program report for funding agencies, stakeholders or legislators might contain:

- ✓ Logic Model
- ✓ Logic Model narrative
- ✓ Workplans
- ✓ Progress report
- ✓ Success "stories"

Logic Model Narrative Example (abbreviated)

Outcome description: Lack of coordinated resources, advocacy, legislative support and direction have led to a paucity of sustainable oral health promotion activities within New State. Single activities alone will not address the oral health status of all its citizens, nor will they address the aspect of disparity within the communities. New State needs a written, evidence-based State Oral Health Plan in order to best target those "most in need" and eliminate oral health disparities experienced in the state. A written state plan will be able to demonstrate one cohesive voice with which to advocate for funds and direct limited resources in an effective and efficient manner. A written plan will guide current steps by identifying stakeholders and persons responsible for action as well as providing a forum for next-steps in order to continue health gains in the Oral Health field. A state plan will assist in providing a coordinated, comprehensive approach to the oral health disease burden in New State.

INPUTS:

Staff

- > Full-time dental director
- > Program manager
- > Program assistant
- ➤ Half-time epidemiologist
- > Administrative support
- > Fluoride program coordinator

Coalition

- Active steering committee
- > Institutionalization of coalition
- > Administrative support for coalition
- > Broad active representation on the coalition
- Visibility of coalition
- > Stakeholder support

Surveillance System

- Comprehensive, integrated surveillance system
- > Community-level indicators
- > Mechanism for data checking
- > Secure funding
- > Institutionalization of system

Funding/support

- ➤ Legislative mandate to develop State Oral Health Plan
- > Funds to support development of State Oral Health Plan
- > Leverage Stakeholder support

ACTIVITIES

Development of State Oral Health Plan

- Include mechanism for input from non-coalition member stakeholders
- > State-wide needs assessment by community
- > Incorporate Best Practices
- > Evidence-based decisions surveillance data
- > Comprehensive:
 - Caries, periodontal diseases, oral cancer, infection control measures
 - > Infants, children, adults, aging
- Address disparity

PRODUCTS

➤ Evidence-based comprehensive State Oral Health Plan with plans for revision every two years

INTERMEDIATE OUTCOMES

- Evidence-based choice of methods to target those with the greatest need with available funds
- Cohesive direction
- > Collaboration of stakeholders
- "Next-steps" Plan for future directions as funds become available
- Voice and evidence for advocacy for additional funding
- Leveraging of funds
- Identification of stakeholders responsible for action

DISTAL OUTCOMES

- Reduction in disease disparity
- Continued Oral Health Gains

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At this point you have:

- ✓ Defined the problem
- ✓ Completed a current capacity/inputs/gaps inventory
- ✓ Considered information from your community needs assessment
- ✓ Prioritized gaps based on surveillance data and community needs assessment Completed a list of activities
- ✓ Developed "linking" If-Then statements
- ✓ Graphically depicted your logic model on a SINGLE page
- ✓ Written a descriptive narrative to accompany your SINGLE page logic model

Workplans: A Note

A workplan is the Program Manager's guide for running the project. A workplan details the goals, objectives, tasks, timelines and person(s) responsible for the action of the program. A workplan describes: 1) who needs to do what; 2) by when (as well as in what order); and 3) how in order to effectively implement the program. A logic model demonstrates the theory for choosing these particular goals and the expected outcome of completing the tasks detailed in the workplans. Work accomplished in Step 2 and Step 4 of the Evaluation Framework will assist you in developing your workplans. Workplan development is an important "next-step" after developing your logic model. A workplan workbook is included in the Evaluation Guidelines: Step 2C.

Other names for a logic model

- Theory of change
- Theoretical underpinning
- Weight-of-evidence model
- Conceptual map
- Rationale
- Program hypothesis

- Model of change
- Causal chain
- Roadmap
- Blueprint
- Action and inquiry Maps
- Program plans

Points to Ponder

Ideally, a broad range of stakeholders should be invited to the table to collaborate in the construction of your program logic model. Identifying partners, existing agendas and potential barriers as well as non-traditional areas of support during construction of your logic model will assist in the acceptance of your logic model. Engaging stakeholders in the process promotes a sense of commitment and shared vision as well as ownership of the plan. Remember to review your RFA, budgets, vision/mission statements, strategic and operational plans, previous evaluation reports, coalition goals, etc. before constructing your logic model.

- Relax! The first one might be a little rough but it will get easier.
- Include broad range of stakeholders when developing a logic model. This encourages "buy-in" and support. Consider the range of stakeholders that affect the program (e.g., Board of Education support is essential for establishing a school-based sealant program). Include stakeholders during Logic Model construction that represent those who will participate in, or be influenced by the program the target group.
- Identify potential barriers as early as possible community factors may counter the direction of program outcomes and/or influence the achievement of distal outcomes.
- Engage partners who both support and inhibit the progress of better oral health – competing and complementary causes.
- Ensure that the existing vision and mission of potential partners will be compatible with current plans
- Plan for sustainability i.e., how can you build your program into the life of an existing established system?

- Consider feasibility as one factor in the equation when developing a logic model and planning for evaluation.
- Don't be afraid to call in an "outsider" to facilitate construction.
- Implementation <u>details</u> should be covered in your logic model narrative and/or your work plan not in your logic model graphic.

$\sqrt{}$ Checklist for describing the program

- Document the need for the program (step 2a).
- Document program resources.
- Note the program's stage of development.
- Explain the program context.
- List and describe program activities.
- State program outcomes and objectives.
- Prepare a logic model (step 2b).
- Prepare workplans (step 2c).

Resources

- CDC Evaluation Working Group www.cdc.gov/eval
- 2. U.S. Census Bureau State Data Center Program www.census.gov/sdc/www
- 3. Healthy People 2010 www.health.gov/healthypeople
- 4. American Evaluation Association www.eval.org

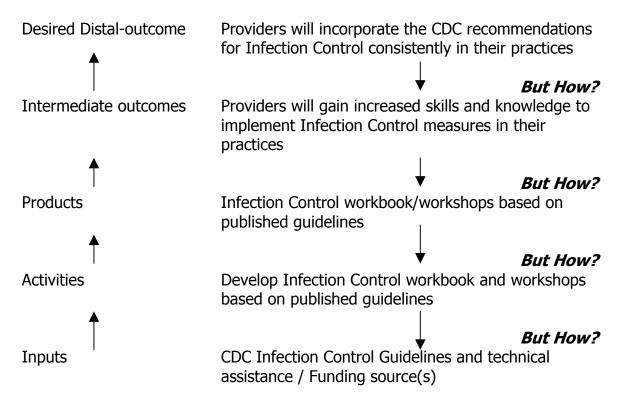


Logic Model Construction Approaches

Right to Left or "Reverse Logic"

Developing your logic model from right to left starts with desired outcomes and requires you to work backwards to develop activities and inputs. Usually used in the planning stage, this approach ensures that program activities will logically lead to the specified outcomes if your arrow bridges are solid (sound logic). You will ask the question "But How?" as you move to the left in your logic model. This approach is also helpful for a program in the implementation stage that still has some flexibility in its choice of program activities.

Example:



Logic Model Worksheet - INPUTS

If we have these INPUTS

Existing Infrastructure (prior to date Most likely, these items have been *institutionalized*

(being developed) with funding other Additional Infrastructure developed Date When OH Infrastructure than direct DOH dollars

Development build-up began

Additional Infrastructure to be developed with current DOH funding

Logic Model INPUTS Narrative Worksheet			
Infrastructure inputs prio	or to		
	 Date		
>			
>			
>			
>			
>			
>			
>			
>			

Infrastructure buildup inputs (non-DOH funded)

Date

Date

> > >

A A A

Infrastructure buildup inputs (current CDC/DOH funds)

A A A A A A A

A A /

Logic Model INPUTS Narrative Example

Infrastructure inputs prior to _____1996____

	<i>Date</i>		
>	Dental school		
>	> 4 Dental hygiene schools		
>	, -		
>	 Part-time dental director Water fluoridation program in 60% of state water plants 		
>	> Sealant program in 45/56 counties		
>	> 1987 oral health survey − 3 rd grade students		
>	Active dental hygiene association		
A A A A A			
>			
>			
Infrast	ructure buildup inputs (non-DOH funded)1996		
	Date Date		
>	Mandate from legislature to develop state oral health plan-1999		
	Access coalition-1998		
	Expanded sealant program to 56/56 counties-1998		
	Expanded OH curriculum grades K-8 - 2000		
\triangleright	Mandatory OH school screenings - 2000		
	Increase in Medicaid reimbursement - 2001		
A A A A	> State-wide, lifespan OH needs assessment to be conducted - 2001		
Infrast	ructure buildup inputs (current CDC/DOH funds)		
>	Expand dental director to full-time		
>	Expand access coalition to active comprehensive OH coalition		
>	Water fluoridation coordinator hired		
>	Epidemiologist/project coordinator hired for OH unit		

Coordinated, linked surveillance system developed and used to direct

Biannual OH survey 3rd grade; 7th grade; mothers and infants established

Evidence-based state oral health plan encompassing the life-span

State infection control surveillance guidelines established

state plan

OH Web site

If we have these INPUTS

So that we address these of infrastructure **ACTIVITIES**

We should get these **PRODUCTS**

Essential Elements of Oral Health Infrastructure

ASSESS

- Sustainable surveillance system that provides data for evidence based plans and programs
 - Increase in evidence-based directives

DEVELOP POLICY

- Active coalition /advocacy voice
 - Increased oral health capacity
 - State oral health plan
- legislation/rules environment Increased supportive

ASSURE

- awareness campaigns Communication/
- Sustainable population-based interventions
- Health systems that promote OH
 - Sustainable funding sources that promote the growth of Oral Health prevention and
- Coordinated and comprehensive intervention activities system of care

25

ASSESS

- Complete needs assessment
 - Identify baseline data

Infrastructure

Existing

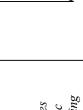
- Develop integrated tracking at community level
- Develop integrated tracking of program capacity & level of services delivered

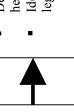
DEVELOP POLICY

- Mobilize support
- Develop state & community Oral health capacity
- Develop evidence based Oral health plan
 - Identify support for legislation/rules

ASSURE

- Identify current levels of OH awareness and education
- resources for population based Identify areas of need and
 - Identify health systems interventions interventions
- sources and clear leveraging Leverage budget (resources from public and non-public activities)

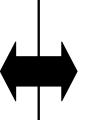






developed with Infrastructure Additional





GAPS IDENTIFIED WORKSHEET

PRIORITY GIVEN	GAP IDENTIFIED	EVIDENCE

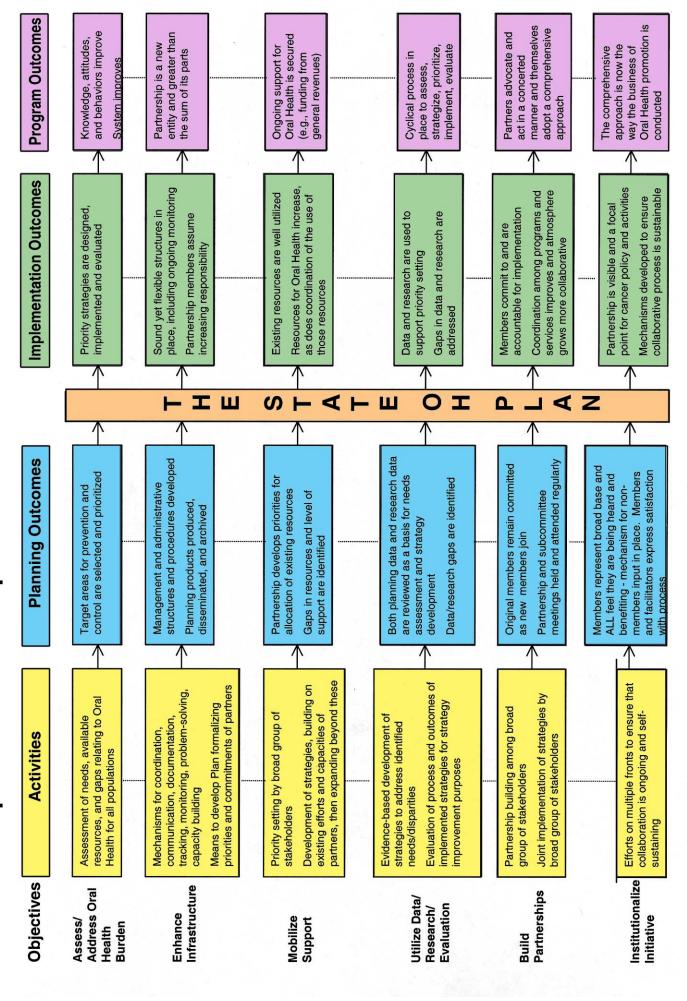
GAPS IDENTIFIED EXAMPLE

PRIORITY GIVEN	GAP IDENTIFIED	EVIDENCE
	State-wide, lifespan needs assessment	So programs and state plan can be evidence driven and targeted to those with greatest need
	Expand OH Unit Full-time dental director Epidemiologist	Build OH unit capacity Don't have adequate surveillance capabilities
	Project coordinator Data manager	Don't have adequate capabilities to analyze and use surveillance data
	Water fluoridation program coordinator	Don't have adequate water fluoridation surveillance or coordinator
	Expand coalition to be comprehensive, addressing oral health issues across the life-	Need to address oral health issues across the life-span not just school-aged children
	span and advocacy	Need to address all aspects of oral health and capacity development
	Expand surveillance capabilities	Don't have evidence to develop evidence- based state plan or targeted programs
		Need to use scarce resources efficiently
	Expand infection control surveillance	Infection control guidelines compliance surveillance currently non-existent in state
_	Identify current levels of OH awareness and education	Research indicates that lack-of perception of need is often one of the reasons adults do not seek oral health prevention services

ACTIVITIES WORKSHEET

GAP IDENTIFIED	ACTIVITY	QUESTIONS: WHO WHAT WHEN WHERE and WHY

Conceptual Model of Comprehensive Oral Health State Plan Process



Surveillance Logic Model

Inputs Needed

STAFF (including contract

- and in-kind)
 - Epidemiological support
 - Data management Information technology
 - Support Oral health policy leadership
- Data collection staff

DATA SOURCES

- Existing state data sources
- National data sources
- Community-level data sources

EQUIPEMENT

Information technology hardware and software

OTHER

- Funding
- Ethical and community support

2. Describe the Program

Activities

Develop surveillance plan including flow chart of systems and data collection methods to support oral health program Establish objectives for surveillance

Select or develop case definitions/indicators (using standard health indicators whenever possible) Link existing data sources
Identify data gaps
Collect data to eliminate data gaps,
obtain community-level indicators,
or meet other pressing data needs

Develop logic data checks and data cleaning protocol
Develop and test analytic approach
Conduct analysis and interpret

findings Develop dissemination approach Develop written surveillance report Develop dissemination plans

Ensure data security
Develop sustainability strategies
Evaluate surveillance system

Intermediate Outcomes

Ongoing Surveillance of trends in oral health indicators

Increase in evidence-based programs, planning and evaluation

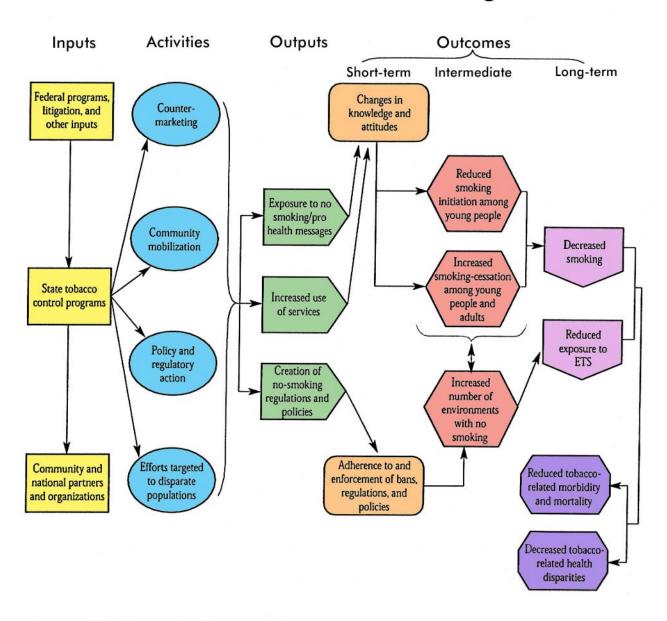
Increase in programs targeting populations most in need

Distal Outcomes

Improved oral health

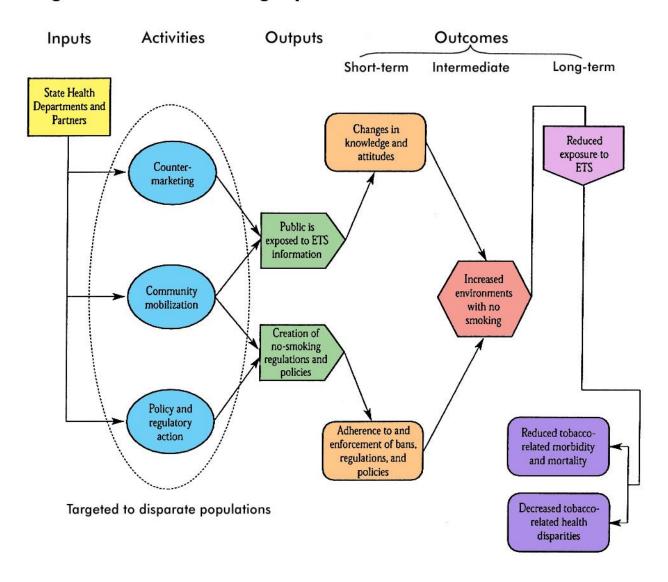
Documentation of improvements in oral health indicators (preferably improvements resulting from the program, in target populations

Tobacco Use Prevention and Control Logic Model



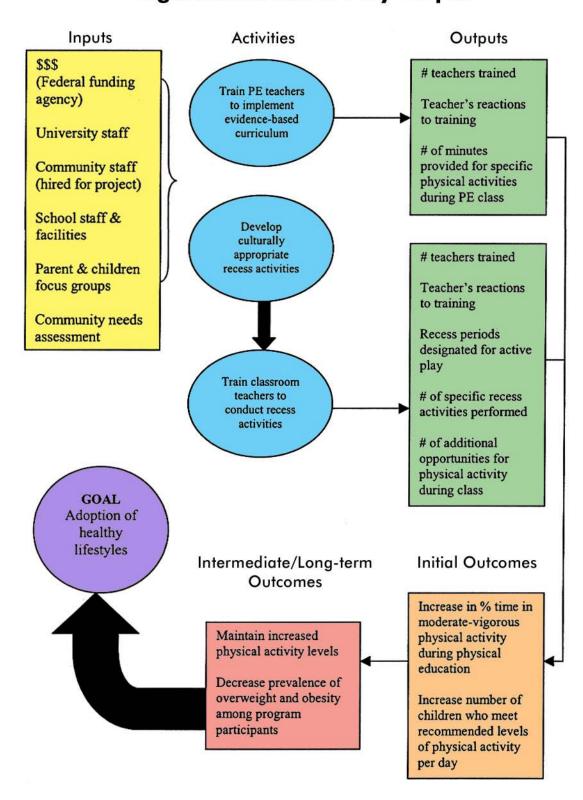
Courtesy of the Office on Smoking and Health

Logic Model for Eliminating Exposure to Environmental Tobacco Smoke



Courtesy of the Office on Smoking and Health

Logic Model: Active Play Project



Cardiovascular Health (CVH) State Program Logic Model

