Welcome to today's Coffee Break, presented by the Evaluation and Program Effectiveness Team in the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention. We are fortunate to have Derrick Gervin as today's presenter. Derrick is a member of the Evaluation and Program Effectiveness Team. My name is Aisha Tucker-Brown and I am today's moderator.

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*Note: Screen magnification settings may affect document appearance.

Overview

- ❑ Conceptualization
- ❑ Design
- ❑ Assessment
- ❑ Ways to make logic models work for you
- ❑ Resources

During today's Coffee Break, I will discuss the importance of conceptualizing, designing, and assessing logic models that suit your needs, as well as ways to use Funding Opportunity Announcement (FOA) logic models as a guide in planning. We will end by sharing some helpful resources on logic models.

Logic Models

- ❑ Provide a Visual Depiction
- ❑ Describe
- ❑ Connect
- ❑ Emphasize
- ❑ Document

The road you take is up to you…

I know not everyone is a fan of logic models. In fact, people tend to either love them or hate them. Regardless of their popularity, logic models can be powerful tools that can support your evaluation work by:

- Providing a visual depiction of how a program is supposed to work.
- Describing the inputs, activities, and outcomes of a program.
- Visually connecting a program's planned work and expected outcomes.
- Emphasizing or highlighting key program components.
- Documenting program growth or change over time.

During the conceptualization phase of developing a logic model, there are a few questions that should be considered.

For example, what are the key components or strategies that should be included? Is it most helpful to develop a big picture logic model that depicts all major components of the program? Or is it more useful to develop a logic model that highlights a specific domain or strategy?

It is also beneficial to give some thought to the primary target population for the logic model. Is the logic model being developed for the funder in response to an FOA? Or will the logic model be used to guide the work of program managers and staff? In some cases, logic models may be developed to help community-level stakeholders and participants better understand the program.

In terms of the type of logic model needed, it would be time well spent to consider whether a theory-focused logic model that emphasizes your program's assumptions and provides a context for understanding the needs for the program is what is needed; or you may determine that an activity-focused logic model that shows the implementation process and focuses on the planned work of the program is best. A third option is to use an outcome-focused logic model that connects the resources and/or activities with the desired program outcomes and impacts.

As the primary goal of logic models is to provide a visual depiction of the program, conceptualizing how program components are related and which should be included will prove helpful. Just remember, it's not possible to include every detail of your program in the logic model, so try to focus on what's most important to know.
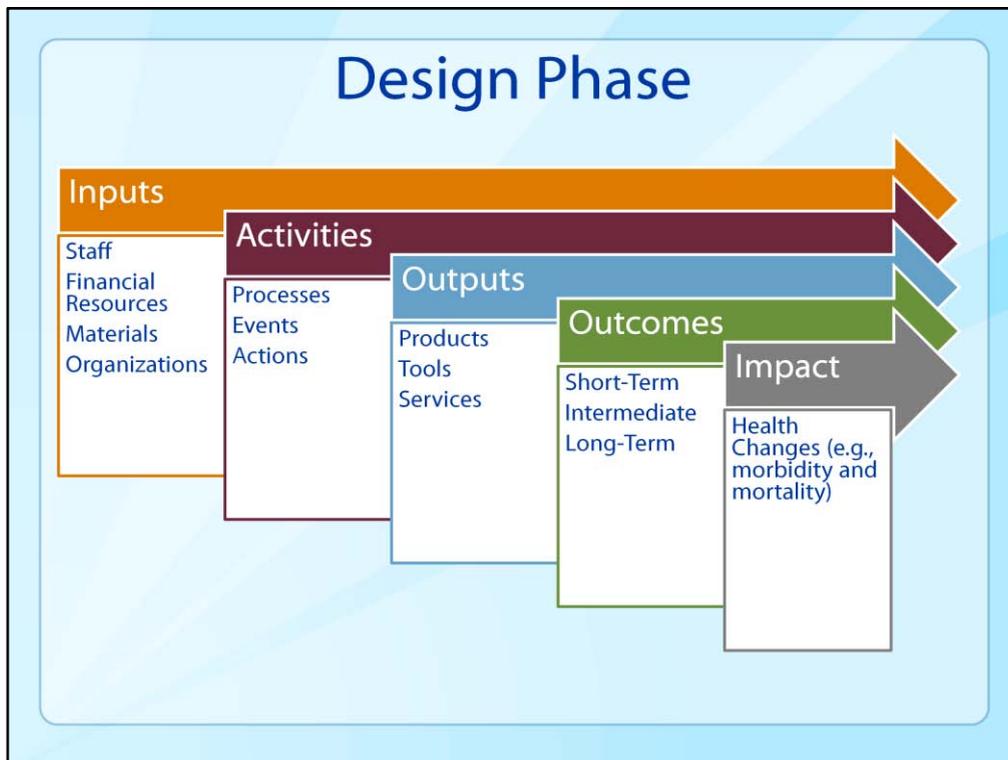
You've considered which aspects of the program to emphasize, the target population, and the type of logic model needed; it's now time to design your logic model.

While many logic models are presented in a linear diagram from left to right, logic models can be presented visually in various forms, designs, and levels of technicality.

As mentioned earlier, there are some common components of logic models that are often useful in describing your program: inputs, activities, outputs, outcomes, and impacts.

- **Inputs** are resources that go into a program or intervention; they are what we invest. They include financial, personnel, and in-kind resources from any source.
- **Activities** are events undertaken by the program or partners to produce desired outcomes; in other words, activities are what we do.
- **Outputs** are the direct, tangible results of activities; they are what we get.
- **Outcomes** are the effects of the program or initiative and may be indicated as short-term, intermediate, or long-term outcomes; outcomes are what we achieve.
- **Impacts** refer to the ultimate impact of the program. They could be achieved in a year or take 10 or more years to achieve. These may or may not be reflected in the logic model, depending on the purpose and audience of the logic model.

Assesment Phase

❑ Use of checklists
❑ Stakeholder review
❑ Peer review

After designing your program logic model, it's a good idea to check to ensure all key components have been included. One way to do this is to use a checklist.

Checklists will help Identify and classify program inputs, activities, outputs, and outcomes. They can help determine if an appropriate level of detail is used and can identify any major assumptions or contextual factors that impact your program. Checklists can also help verify that your logic model is easy for others to read and understand.

The University of Wisconsin-Extension Center and the Kellogg Foundation have developed checklists to assist with assessing the quality of logic models. These checklists are included in the resources section at the end of this presentation.

Stakeholder review and peer review will help determine whether the program theory is consistent with available data about the program or with research evidence. Does the research evidence on which an existing program was based still hold true, or does the logic model need to be reconsidered in light of new evidence?
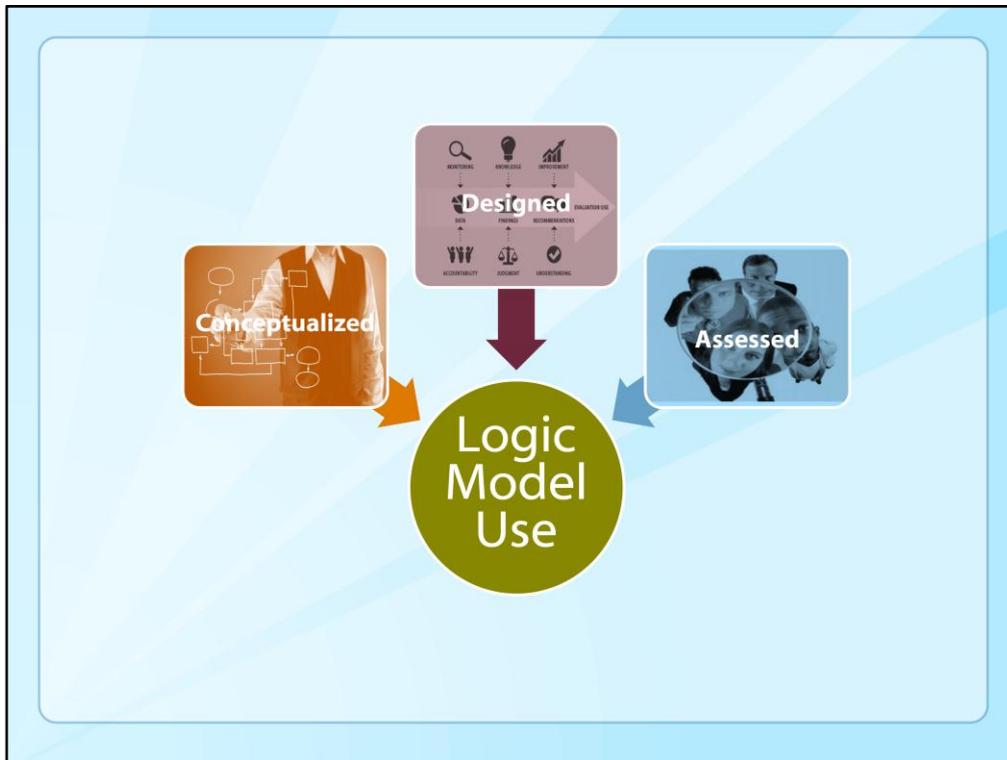
Now that you've conceptualized, designed, and assessed the quality of your logic model, you're ready to make the logic model work for you.

Often logic models are developed during program planning but are never reviewed or updated. The following logic models were all developed for FOAs and serve as good examples of how organizational priorities and assumptions can influence logic model design and use.

WISEWOMAN Logic Model

Inputs/Outputs

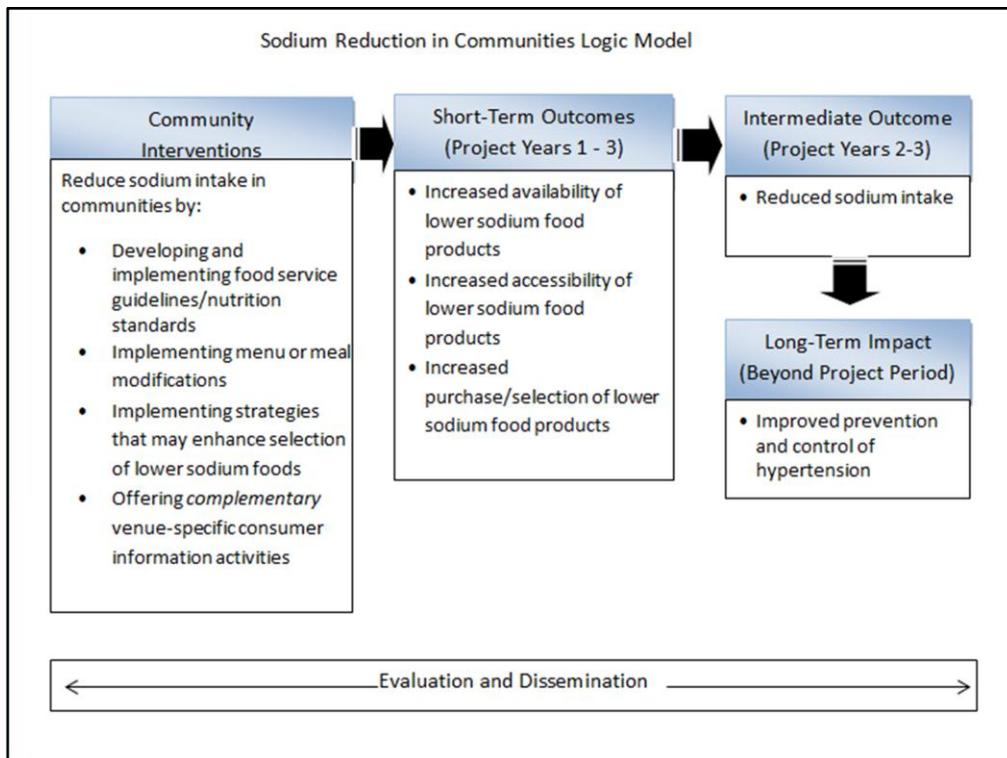| STRATEGIES / ACTIVITES	SHORT-TERM OUTCOMES	INTERMEDIATE OUTCOMES	LONG-TERM OUTCOMES
Domain 1. Epidemiology and Surveillance Gather, analyze, and disseminate data and information Use surveillance, epidemiology, and evaluation data to inform, prioritize, deliver, and monitor programs and health outcomes **Activities:** a. Use existing surveillance data to identify CVD risk factors, morbidity and mortality, and needs of population b. Develop and implement minimum data elements (MDEs) system and other data collection activities c. Establish/network with existing data collection systems to collect and report program related data **Domain 2. Environmental Approaches** Engage in environmental approaches that promote health and support and reinforce healthful behaviors **Activities:** a. Complete biennial community scan for available resources and gaps b. Partner for physical activity, healthy food, and smoking cessation c. Work with partners to increase access to resources/services that support healthy behaviors **Domain 3. Health Systems** Develop health system interventions to improve the effective delivery and use of clinical and other preventive services **Activities:** a. Provide cardiovascular risk screening b. Ensure provision of risk reduction counseling and referrals c. Ensure delivery of evidence-based lifestyle programs d. Work/contract with health systems/providers who use clinical systems of care successful in BP control **Domain 4. Community Clinical Linkages** Adopt strategies to improve community-clinical linkages **Activities:** a. Partner or contract with community groups that provide evidence-based lifestyle programs b. Implement systems to facilitate provider referrals to community resources, including lifestyle programs c. Collaborative program planning, implementation, and evaluation activities with chronic disease programs to increase program impact	**Epidemiology and Surveillance** • Collection and use of high quality data and information for program improvement, reporting, and evaluation • Increased detection of CVD risk factors **Environmental Approaches** • Results from environmental scans used to identify and improve community resources **Health Systems** • Increased systems and practices in place that support improved CVD risk factors, particularly control of high blood pressure (HBP) **Community Clinical Linkages** • Increased referrals to Quit Line or smoking cessation programs • Identification of, access to, and utilization of community resources including lifestyle programs • Increased referrals and participation in lifestyle programs **Individual Changes** • Increased awareness of HBP and other CVD risk factors • Improved medication adherence for HBP • Improved lifestyle changes to reduce CVD risks, focus on HBP control • Increased self-monitoring of BP • Improved Quality Of Life	**Epidemiology and Surveillance** • Effective use of quality improvement and performance management (QI/PM) cycles using evaluation and data monitoring results. **Environmental Approaches** • Environmental changes in communities that result in more places for physical activity, increased access to healthy food, smoking cessation, and more smoke-free public places. **Health Systems** • Maintain continuity of relationship with systems and practices that support improved risk factors, particularly control of high blood pressure • Maximize numbers of eligible women that are screened for CVD risks, provided with risk reduction counseling, and all follow-up services as appropriate. **Community Clinical Linkages** • Maintain access to and utilization of community resources including lifestyle programs **Individual Changes** • Maintenance of lifestyle changes to improve CVD risk • Maintain Quality Of Life improvements	Improved hypertension control Improved prevention of hypertension Improved cholesterol control Improved tobacco control/ reduction in smoking

The WISEWOMAN Program Logic Model is a good example of how a logic model can be used as a communication device to aid in planning. As you can see, the four chronic disease domains, strategies, and activities are all clearly indicated.

Specific short and intermediate outcomes related to epidemiology and surveillance, environmental approaches, health systems, community clinical linkages, and individual changes are suggested. Because the inputs and outputs may vary across the 21 WISEWOMAN-funded programs, they have been omitted from the logic model.

In developing your program logic model, you may decide that it's important to include the inputs and outputs so that program stakeholders have a better understanding of the program's planned work. In fact, I want to remind everyone that FOA logic models are often intended to serve as a guide and that it's OK to add program activities or outcomes that are more relevant to your program.

Sodium Reduction in Communities Logic Model

Community Interventions

Reduce sodium intake in communities by:

- Developing and implementing food service guidelines/nutrition standards
- Implementing menu or meal modifications
- Implementing strategies that may enhance selection of lower sodium foods
- Offering *complementary* venue-specific consumer information activities

Short-Term Outcomes (Project Years 1 - 3)

- Increased availability of lower sodium food products
- Increased accessibility of lower sodium food products
- Increased purchase/selection of lower sodium food products

Intermediate Outcome (Project Years 2-3)

- Reduced sodium intake

Long-Term Impact (Beyond Project Period)

- Improved prevention and control of hypertension

Evaluation and Dissemination

The Sodium Reduction in Communities Logic Model is a good example of a hybrid activity- and outcome-focused logic model that depicts how four specific strategies to reduce sodium intake in communities may contribute to clear short-term, intermediate, and long-term outcomes. Another unique feature of this logic model is the emphasis on evaluation and dissemination, as represented by the box at the bottom of the page, which highlights the program's aim to continue to build practice-based evidence around effective population-based strategies to reduce sodium consumption. Individual programs can add additional details regarding evaluation and dissemination by including a broad timeline or even planned products. These types of details will make the logic model more program-specific and aid in program planning.

NHDSP Evaluation Planning Logic Model
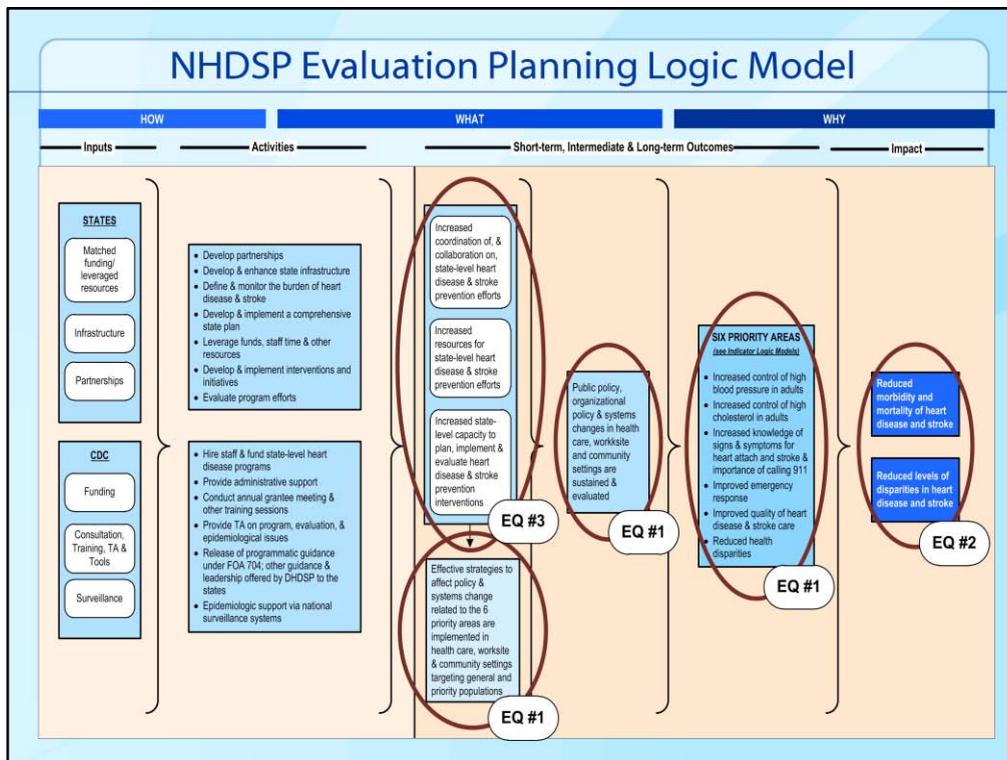
Here we have the logic model that was used for the former National Heart Disease and Stroke Prevention Program. The logic model was developed as part of the evaluation planning process to graphically summarize program resources, key activities, and intended outcomes, and to emphasize primary evaluation questions and activities.

This logic model shows the relationship between specific evaluation questions that ask:

1. What policy and systems-level changes relevant to heart disease and stroke prevention have states and communities adopted?
2. What are the long-term public health outcomes/impacts that may be affected by the program?
3. How has the program enhanced the infrastructure and capacity of state health departments to bring about policy and systems-level changes?

As evaluation questions are already linked to the logic model outcomes, programs could also link relevant indicators to help with program planning and implementation. This is a great way to include the major program components, evaluation questions, and indicators all within the logic model.

State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health Program Logic Model
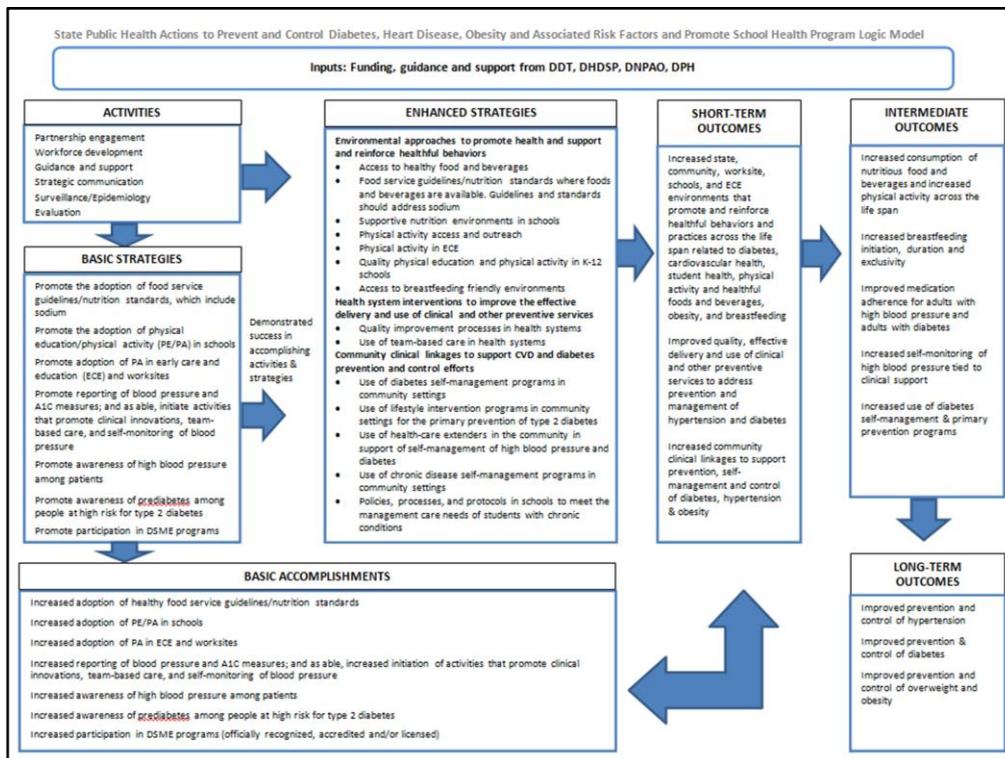
The final logic model is the State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health Program Logic Model (1305 logic model).

In addition to being organized by domain and strategy, the 1305 logic model highlights basic and enhanced-level strategies. Some programs may find it helpful to develop a logic model that focuses solely on basic or enhanced strategies. While others may want to show how basic and enhanced strategies are related and contribute to shared outcomes. Some programs may even find it useful to develop domain-specific logic models that focus on the program's planned work and expected outcomes.

In summary, you will maximize the use of logic models by:

1. Identifying the products and short-term, intermediate, and distal outcomes for your program;

2. Linking outcomes to each other and to program activities in order to illustrate cause and effect;

3. When possible, incorporating findings from research and demonstration projects;

4. Showing the link between evaluation questions, indicators, and outcomes, depending on the stage of your program's development;

5. Maximizing use by illustrating why the program is important as well as its fundamental purpose;

6. Making mid-course adjustments and improvements in your program; and

7. Making the logic model a common reference point for staff and stakeholders, which may mean referring to the logic model regularly in meetings or going as far as posting the logic model in common areas.

References and Resources

- DHDSP Evaluation Guide: *Developing and Using a Logic Model*. Available at: http://www.cdc.gov/dhdsp/programs/nhdsp_program/evaluation_guides/logic_model.htm
- Division of Oral Health: *Steps for Developing Logic Models* workbook. Available at: http://www.cdc.gov/oralhealth/state_programs/pdf/logic_models.pdf
- W.K. Kellogg Foundation *Logic Model Development Guide*. Available at: http://www.wkkf.org/knowledge-center/resources/2006/02/WK-Kellogg-Foundation-Logic-Model-Development-Guide.aspx
- University of Wisconsin-Extension. Available at: http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html
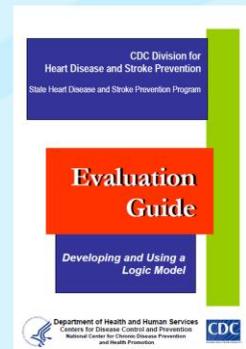
I've provided a link to the DHDSP evaluation guide on developing and using a logic model that provides more information about logic models.

Additional resources listed included are:

- The *Steps for Developing Logic Models* workbook by the Division of Oral Health.
- A link to the Kellogg Foundation's *Logic Model Development Guide* and a link to the University of Wisconsin-Extension's logic model information.
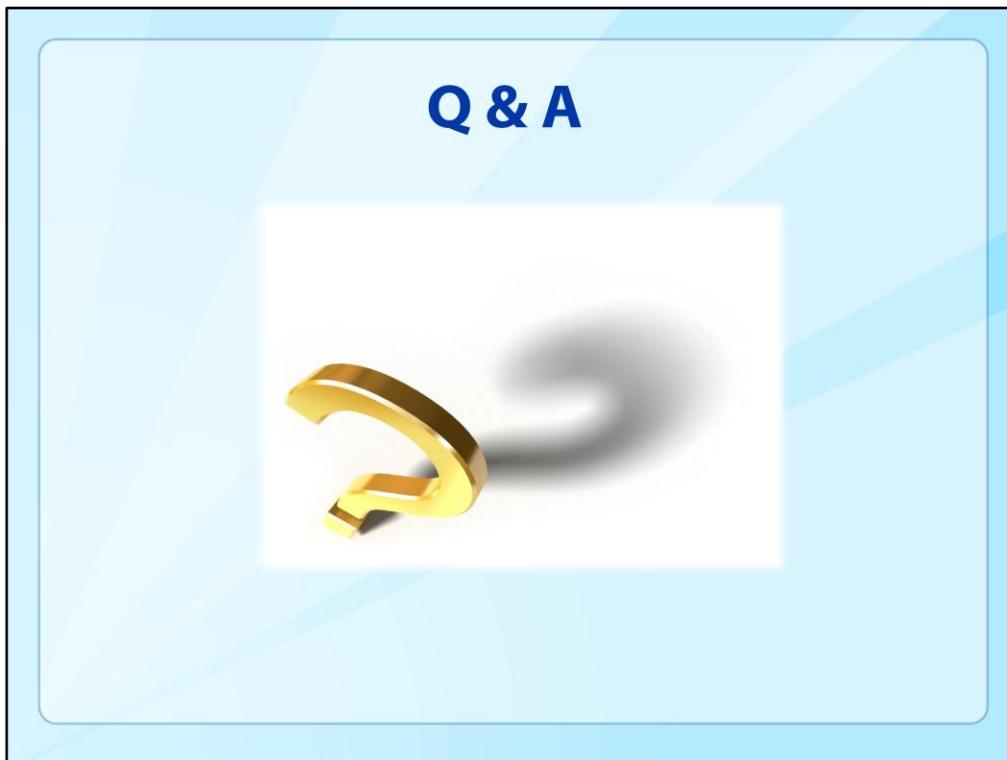
Question 1: Who is the best person to develop the program logic model?

Response: It depends on the evaluation capacity within your program. Ideally, an evaluation team or a group of stakeholders should participate in that process. Realistically, I know that often one person may be assigned the task of developing the logic model or carrying out the evaluation; if that is the case, I would suggest once that logic mode is developed, you at least put it before your evaluation team or before other stakeholders to help vet that logic model to be sure that key components are included.

Question 2: Is it better for a logic model to be more detailed or more higher-level?

Response: Often at the planning stage of a program they tend to be high-level, but as your program progresses, hopefully the logic model will become more specific in terms of meeting the needs of your stakeholders. Some of that depends on who your stakeholders are; you have to think about who will be the target group for this logic model and how they will respond best to it. If you have a very technical audience who really understand the connections between your outputs and activities and outcomes, it may be OK to have a detailed, very specific logic model.

Question 3: How often should the logic model be updated?

Response: I think that's another question that also depends [on the evaluation capacity of your program]. Whenever your program theory changes or there are some major components that change within your program, it would be reasonable to update your logic model—maybe a year or 2 years within the program may be appropriate. If your program has been consistent in terms of its work, interventions, and strategies, then you may not have to update that logic model for 4 or 5 years.

Thank You

If you have any questions, comments, or topic ideas send an email to:

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National Center for Chronic Disease Prevention and Health Promotion
Division for Heart Disease and Prevention

If anyone thinks of additional questions or topics related to reporting evaluation findings or ways you would like to receive more technical assistance about this topic, please feel free to email us at the address listed on the slide.