



Theory of Change, Logic Model, and Performance Measurement



Session Outline



- Theory of Change
- Logic Model
- Performance Measurement
- Q&A



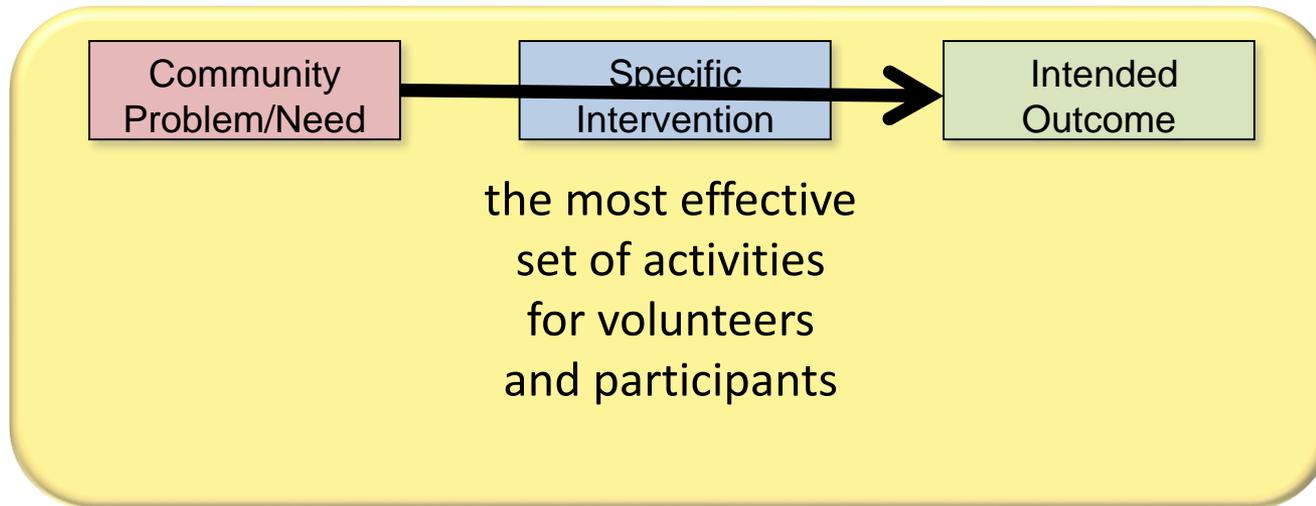
Learning Objectives

- Know the elements of theory of change
- Understand how theory of change informs program design
- Identify key components of a logic model and understand how to create a logic model as part of a CNCS application
- Define performance measurement
- Know how CNCS uses performance measures
- Learn characteristics of high quality performance measures

Theory of Change



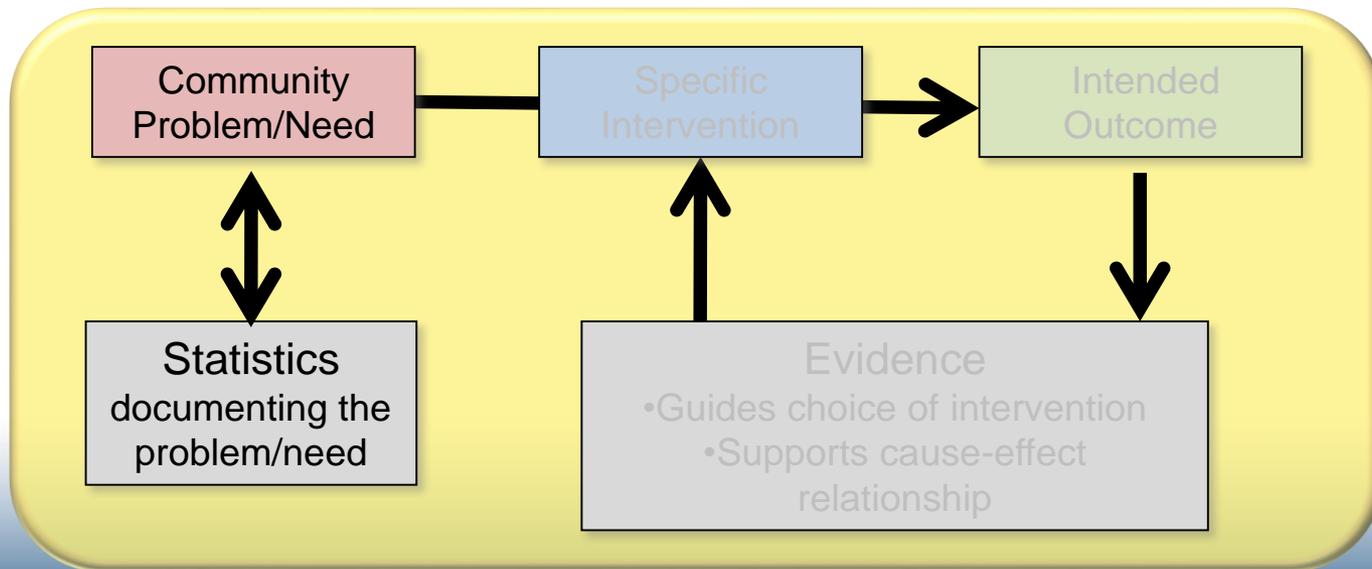
Theory of Change



- Looks at cause and effect relationships
- Identifies specific interventions to achieve the desired result
- Shifts thinking from “*what we are doing*” to focus on “*what we want to achieve*”

Theory of Change Elements

- **Community Problem:** The negative condition that exists in the community
- **Community Need:** The prevalence and severity of the problem



Community Problem/Need

Statistics or data documenting prevalence and severity of the problem should answer these questions:

- **SCOPE:** Who and how many are directly affected? How severe is this?
- **SIGNIFICANCE:** What makes this a compelling need? Is it likely to become worse? What will happen if we do nothing?
- **CAUSE(S):** Why does the need exist? How is it perpetuated?

Documenting Community Need

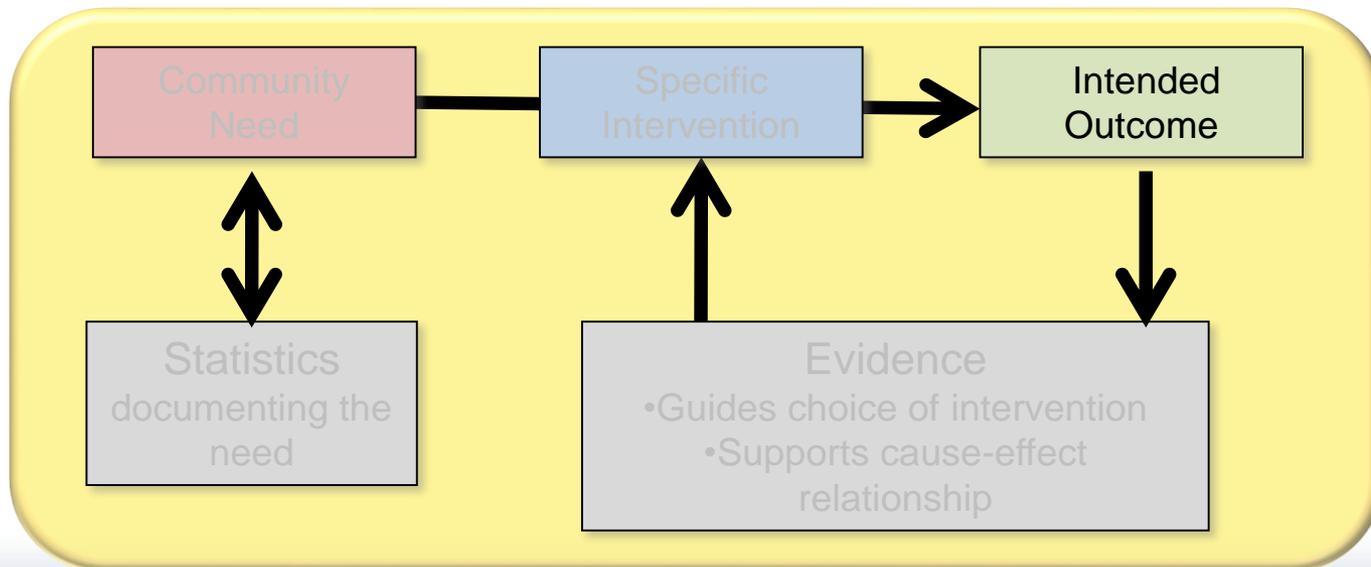
Healthy Futures Program Example

- **Scope:** National Survey of Children and Health found childhood obesity in State X increased 23% between 2003 and 2007 – the 2nd fastest rate of increase in US (2010). CDC data show nearly one-third of children and teens are obese or overweight in Webb County (2009).
- **Significance:**
 - Obese children found to become obese adults
 - Links between childhood obesity and early onset of cardiovascular disease, and Type II diabetes
 - Webb County rising in state and national averages for cardiovascular disease
 - Long term health care costs rising
- **Causes:** Diet, sedentary lifestyle

Intended Outcome



- What change are you hoping to make related to the identified problem?



Identifying the Intended Outcome

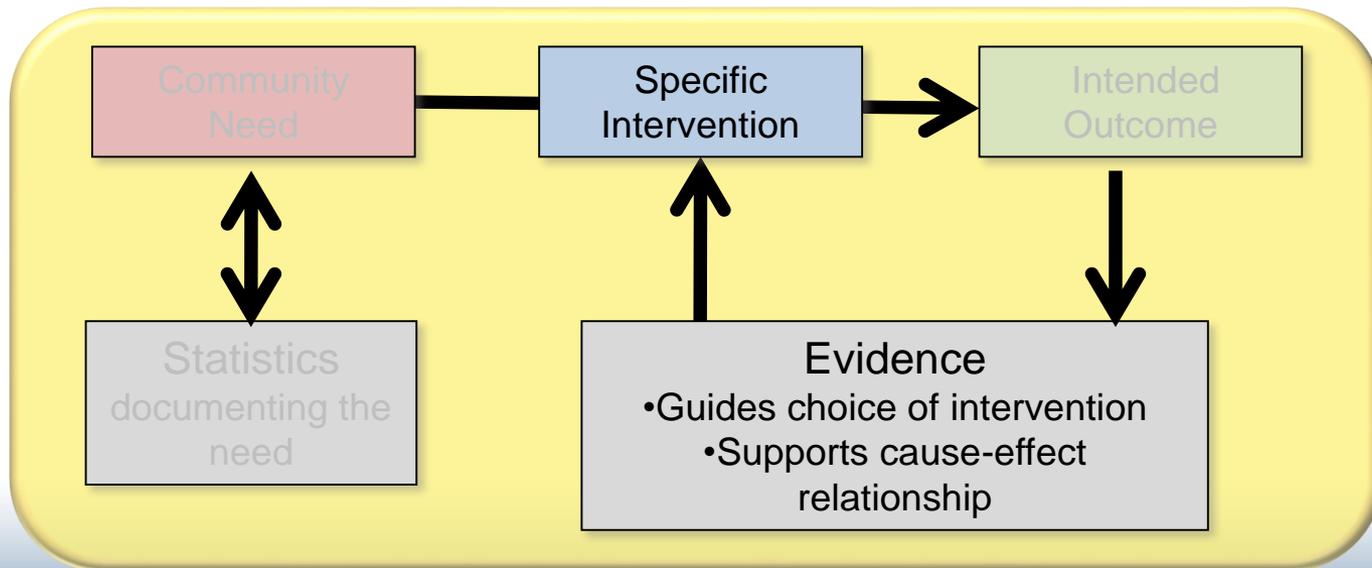
Healthy Futures Program Example

- Possible outcomes to measure:
 - Increased knowledge of what is “healthy food”
 - More frequent choice of healthy foods to eat
 - More frequent involvement in physical activity or exercise
 - Improved physical condition



Intervention

- An intervention is the specific set of activities in which participants and volunteers will be engaged. What is the best way to achieve the intended outcome?



Intervention



Describe the design and dosage of your intervention (service activity):

- **Design** (Specifics of the intervention)
- **Dosage**
 - **Frequency** (How many sessions a week?)
 - **Intensity** (Length of each session)
 - **Duration** (How many total weeks, sessions or months?)

Intervention Example

Healthy Futures Program Example

- **Design:** national service participants implement the Shape Up curriculum with economically disadvantaged urban girls ages 14-16 to increase physical activity (30 minutes/session) and educate them on healthy eating
- **Frequency:** twice a week afterschool
- **Intensity:** 60 minutes per session
- **Duration:** 12 weeks



Example: Riverton Literacy Corps

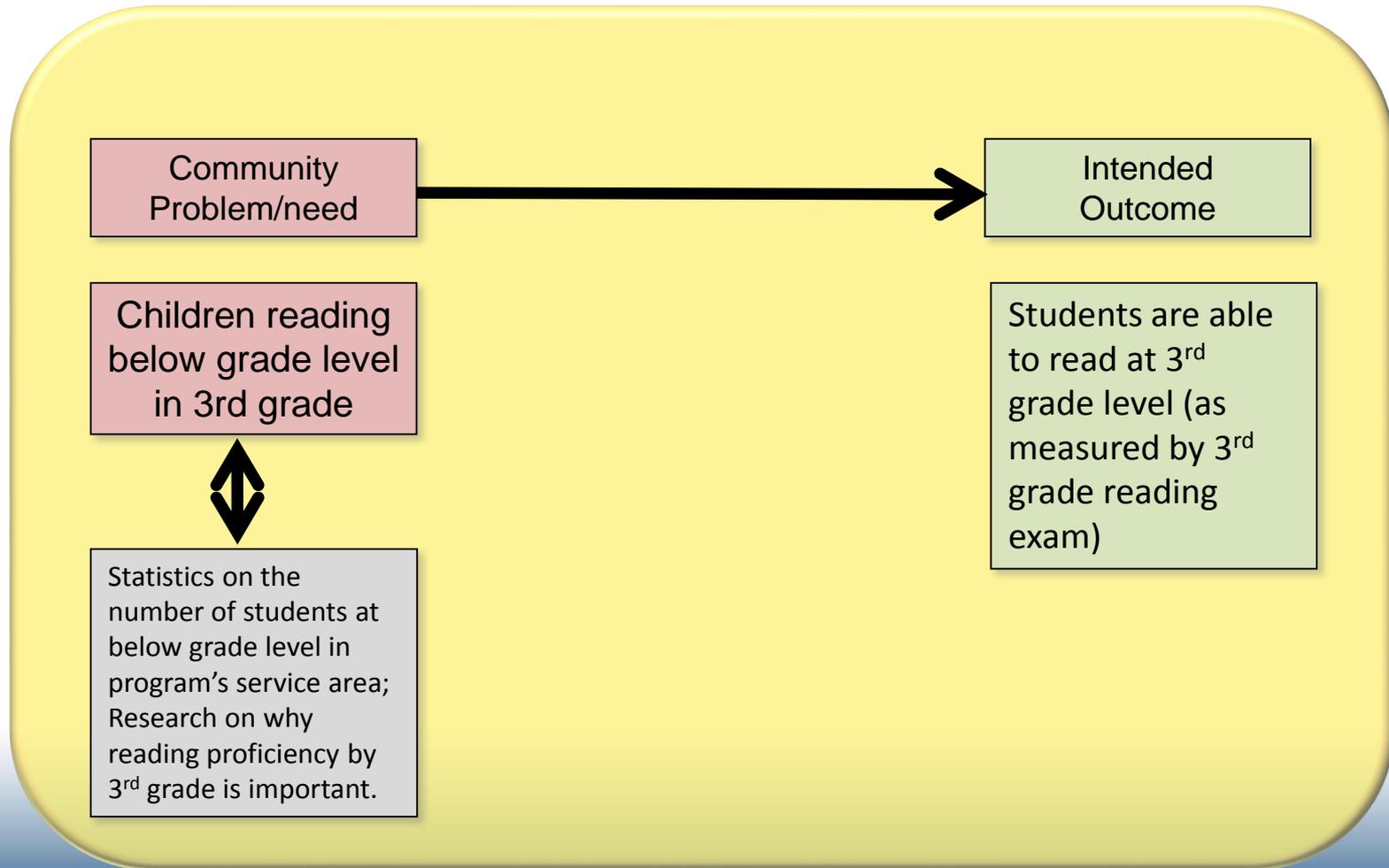
Community
Problem/need

Children reading
below grade level
in 3rd grade

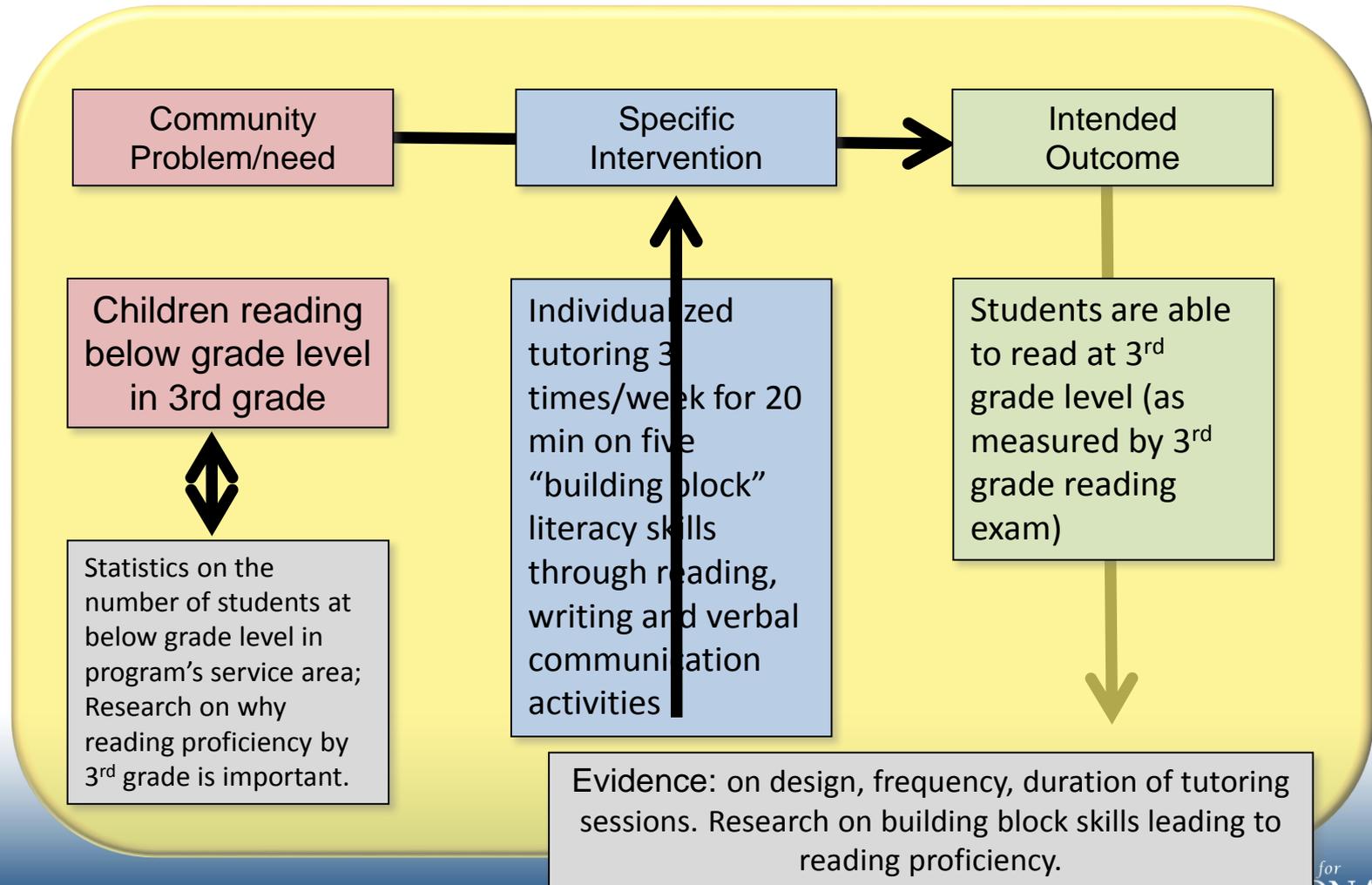


Statistics on the
number of students at
below grade level in
program's service area;
Research on why
reading proficiency by
3rd grade is important.

Example: Riverton Literacy Corps



Example: Riverton Literacy Corps



Testing Your Theory of Change

- Is the intervention designed to solve the problem?
- Is the intervention likely to lead to the outcomes?
- Are the intended outcomes meaningful/important?
- Is the magnitude of the change worth the effort?

Questions?



Practice Activity



- Read Practice Activity #1 Handout and Complete Questions 1-3
 - 15 minutes

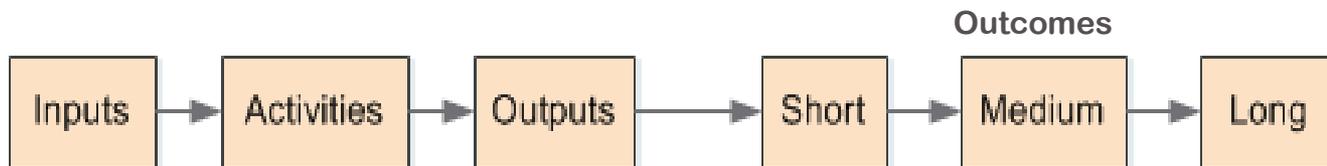
- Discussion
 - 5 minutes

Logic Model



What Is a Logic Model?

- A detailed visual representation of a program and its theory of change.
- Communicates how a program works by depicting the intended relationships among program components:
 - Inputs or resources
 - Activities
 - Outputs
 - Outcomes



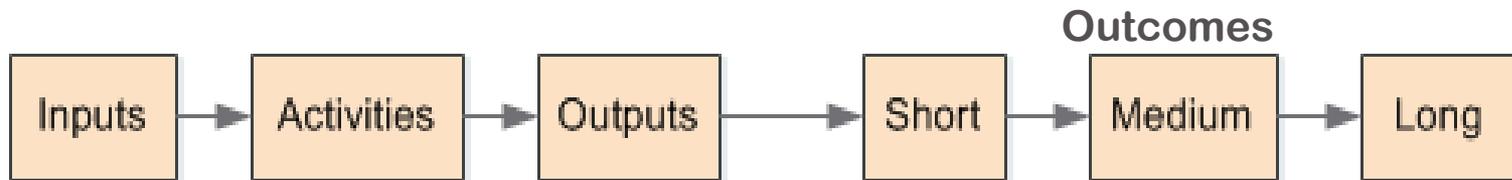
Why Develop a Logic Model?

- Generate a clear and shared understanding of how a program works
- Support program planning and improvement
- Serve as foundation for evaluation

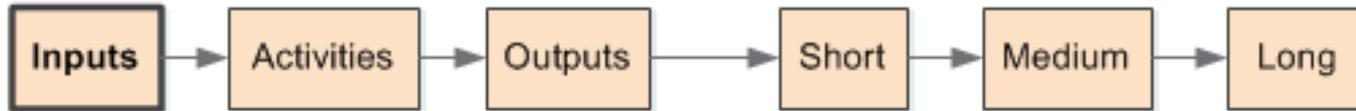
Key Components



- Inputs or resources
- Activities
- Outputs
- Outcomes (short-, medium- and long-term)



Key Components - Inputs



- **Inputs or resources** include the human, financial, organizational, and community resources available for carrying out a program's activities.
- Examples:
 - Funding
 - Program staff
 - AmeriCorps members
 - Volunteers
 - Research

Source: W.K. Kellogg Foundation Evaluation Handbook (2004)

Key Components - Activities



- **Activities** are the processes, tools, events, and actions that are used to bring about a program's intended changes or results.
- Examples:
 - Workshops on healthy food options
 - Food preparation counseling
 - Referrals to food programs and resources

Source: W.K. Kellogg Foundation Evaluation Handbook (2004)

Key Components - Outputs



- **Outputs** are the direct products of a program's activities and may include types, levels and targets of services to be delivered by the program.
- Examples:
 - # individuals attending workshops
 - # individuals receiving services
 - # individuals receiving referrals

Source: W.K. Kellogg Foundation Evaluation Handbook (2004), Adapted

Key Components - Outcomes

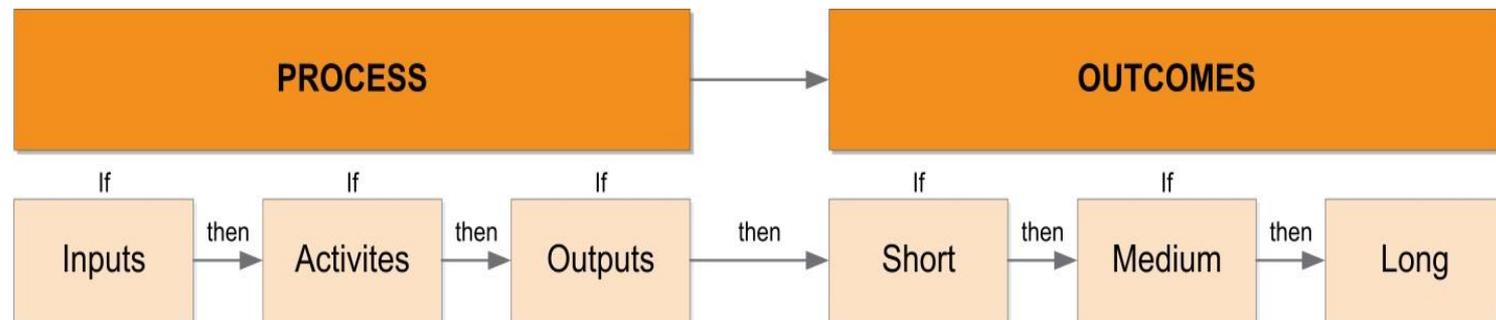


- **Outcomes** are the expected changes in the population served that result from a program's activities and fall along a continuum, ranging from short to long term results:
 - Short-term: changes in knowledge, skills, and/or attitudes (e.g., ↑ knowledge healthy choices)
 - Medium-term: changes in behavior or action (e.g., ↑ adoption of healthy food practices)
 - Long-term: changes in condition or status in life (e.g., ↑ food security)

Source: W.K. Kellogg Foundation Evaluation Handbook (2004), Adapted

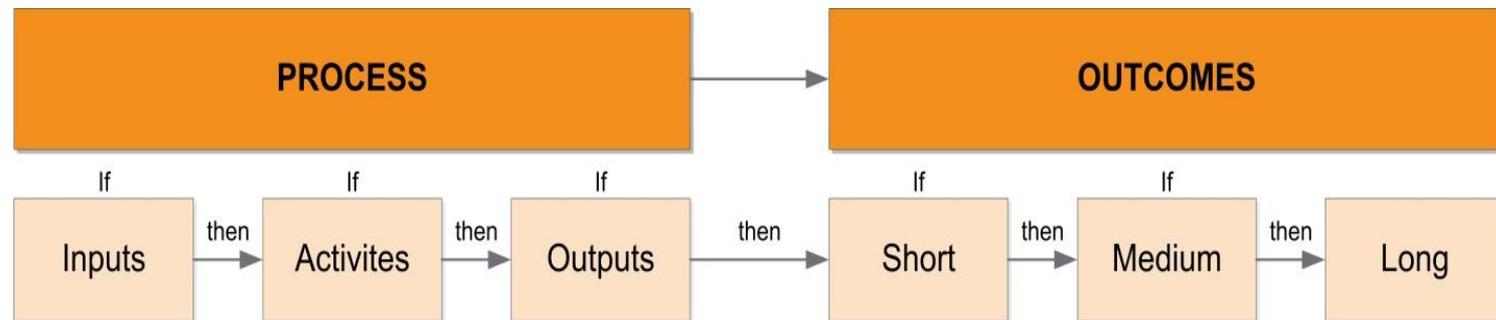
How to Read a Logic Model

- Read from left to right
- Two “sides” to a logic model - a process side and an outcomes side



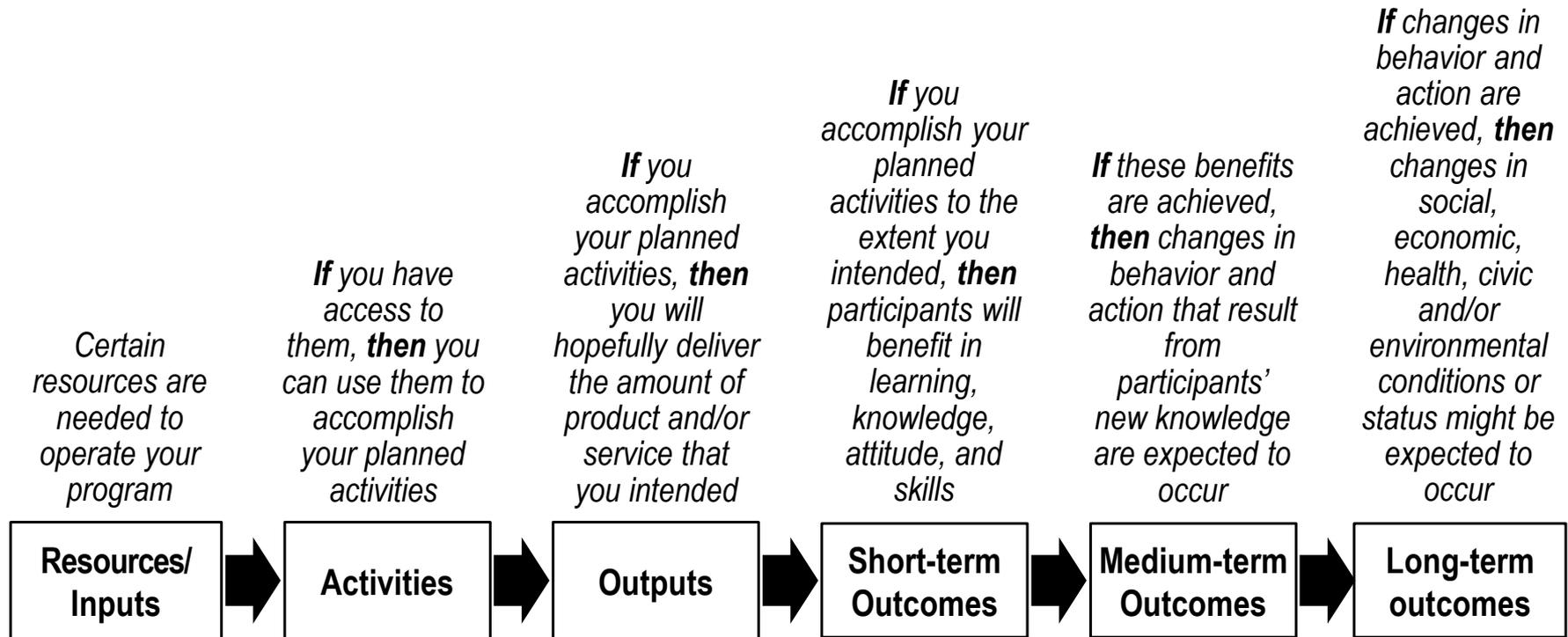
How to Create a Logic Model

- Two main approaches are used to create a logic model:
 - Reverse logic (right to left) – asks “but how” questions
 - Forward logic (left to right) – uses “if...then” statements



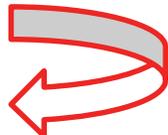
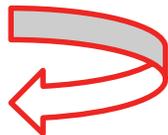
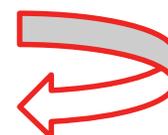
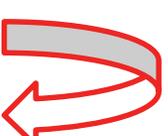
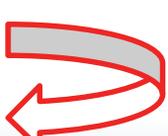
How to Create a Logic Model Using Forward Logic

Forward logic uses “**if-then**” statements.



Source: W.K. Kellogg Foundation Evaluation Handbook (2004), Adapted

How to Create a Logic Model Using Reverse Logic

- What is the desired long-term outcome?
 - Increase # of healthy families. **But how?** 
- What is the desired intermediate outcome?
 - Increase # of families using healthy food practices. **But how?** 
- What is the desired short-term outcome?
 - Individuals gain knowledge of healthy food choices. **But how?** 
- What outputs are needed to achieve the outcomes?
 - 200 families complete an educational workshop. **But how?** 
- What activities are needed to achieve the outcomes?
 - Conduct four educational workshops per month. **But how?** 
- What inputs are needed to achieve the outcomes?
 - Funding, program staff, AmeriCorps members, volunteers, research.

Verify Your Logic Model

- Consider asking the following questions:
 - **Level of detail:** Does your model contain an appropriate amount of detail for its intended use? Does it include all key program components?
 - **Plausible:** Does the logic of the model seem correct? Are there any gaps in the logic of the program?
 - **Realistic:** Is it reasonable to assume that the program can achieve the expected outcomes?
 - **Consensus:** Do program staff and external stakeholders agree that the model accurately depicts the program and its intended results?

Logic Models as a Performance Measurement Tool

- A logic model can serve as a framework for planning performance measurement activities. It can help to:
 - Identify components of your program to include in performance measurement
 - Identify indicators and the measures of progress/performance that align with program components

Resources for Logic Model Development

W.K. Kellogg Foundation Logic Model Development Guide

<http://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide>

Innovation Network Logic Model Workbook

http://www.innonet.org/client_docs/File/logic_model_workbook.pdf

Resources for Logic Model Development

University of Wisconsin Extension: Program Development and Evaluation

<http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>

CDC Program Evaluation Resources:

<http://www.cdc.gov/eval/resources/index.htm>

Measuring Program Outcomes: A Practical Approach (United Way)

Developing and Working with Program Logic Models (Bureau of Justice Assistance)

Questions?



Performance Measurement



What is Performance Measurement?

- Ongoing, systematic process of tracking your program or project outputs and outcomes
- **Outputs:** Amount of service provided (people served, products created, or programs developed)
- **Outcomes:** Changes or benefits that occur
 - Can reflect changes in individuals, organizations, communities or the environment
 - Typically include changes in **knowledge, attitude, behavior** or **condition**
 - Must have a logical connection to the intervention and be aligned with outputs

Purpose of Performance Measurement



- Recognition of progress
 - Collect reliable information about the intervention's implementation and progress toward outcomes
- Accountability to funders and stakeholders
 - Communicate achievements in a meaningful and compelling way
- Program Improvement
 - Spot and correct problems
 - Strengthen the intervention
 - Determine where to allocate limited resources

Performance Measurement and Impact Evaluation

Differences: Key Areas	Performance Measurement	Impact Evaluation
Implementation	Monitoring and reporting of program accomplishments and progress	In-depth research activity that assesses whether the program works as expected
Time Focus	Ongoing	Conducted periodically or on an ad-hoc basis
Cause and Effect	Demonstrates if a change occurred, but not why; Change is not attributable to intervention	Tests cause and effect relationship between intervention and outcomes with a comparison or control group;

CNCS National Performance Measures

Grantees and sponsors contribute to the National Service story by selecting national performance measures:

- Agency-Wide Priority Measures
- Complementary Program Measures



CNCS National Performance Measures

Reflect the CNCS Strategic Plan and its programming priorities:

- Disaster Services
- Economic Opportunity
- Education
- Environmental Stewardship
- Healthy Futures
- Veterans & Military Families
- Capacity Building



CNCS National Performance Measures

- Grantees and sponsors use common terms, definitions and measurement approaches.
- CNCS Programs have specific performance measurement requirements.



How CNCS Uses Performance Measures

- Tell the story of the collective impact of national service programs
- National Performance Measures:
 - Reflect CNCS Strategic Plan and programming priorities
 - Allow for consistent terms, definitions, and approaches to measurement (“speaking the same language”)
 - Priority Measures: used across multiple CNCS programs
 - Complementary Measures: customized for particular programs (e.g., AmeriCorps)
- Applicant-determined Measures*:
 - Intended for programs whose interventions, outputs, or outcomes do not fit under existing National Performance Measures

**Some National Performance Measures have applicant-determined outcomes - majority of VMF outcome measures are applicant-determined*

Performance Measure Requirements

- One aligned performance measure (output + outcome) for primary intervention
- Programs may create additional performance measures to measure outcomes of significant program interventions

VMF Performance Measures

- V1 - Number of veterans that received CNCS-supported assistance
- V2 - Number of veterans engaged in service opportunities as a National Service Participant or volunteer
- V3 - Number of veterans assisted in pursuing educational opportunities
- V4 - Number of veterans assisted in receiving professional certification, licensure, or credentials
- V6 - Number of housing units developed, repaired, or otherwise made available for veterans

VMF Performance Measures

- V7 - Number of family members of active duty military service members that received CNCS-supported assistance
- V8 - Number of veterans' family members that received CNCS-supported assistance
- V9 - Number of active duty military service members that received CNCS-supported assistance
- V10 - Number of military family members engaged in service opportunities as a National Service Participant or volunteer

Outcomes



Types of Outcomes

Attitude/Belief	Knowledge/Skill	Behavior	Condition
Thought, feeling	Understanding, know-how	Action	Situation, circumstance
			

Outcome Examples— Education



Attitude/Belief	Knowledge/Skill	Behavior	Condition
Increased interest in school	Improved math ability	Increased school attendance	Successful completion of High School
			

Outcome Examples— Healthy Futures



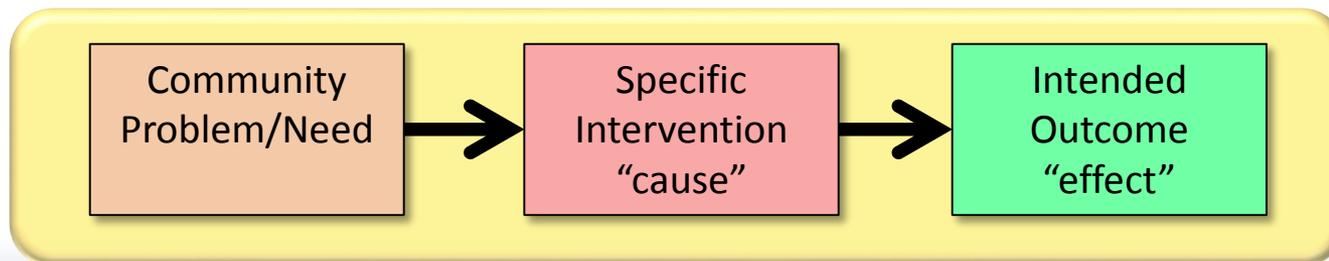
Attitude/Belief	Knowledge/Skill	Behavior	Condition
Increased desire to adapt good nutrition habits	Improved low-budget cooking skills	Increased healthy food intake	Improved household food security (supply)
			

High Quality Performance Measures

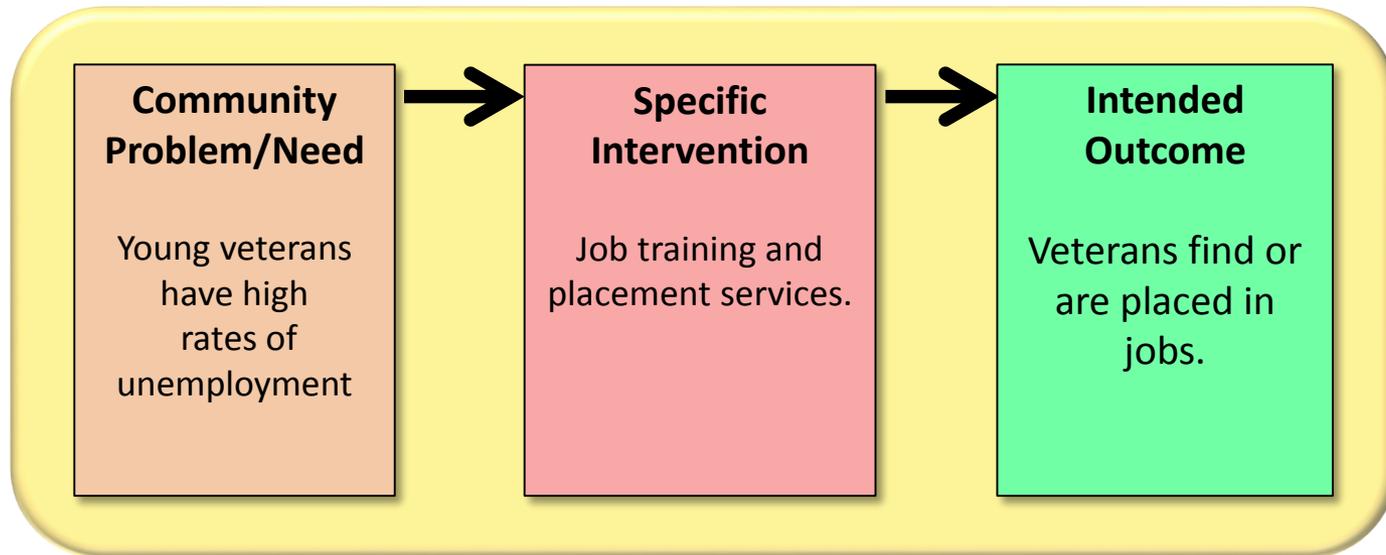
- Alignment with theory of change
- Alignment of outputs and outcomes
- Meaningful change – Worth measuring

Alignment with Theory of Change

- Logical connection between problem, intervention, outcome
- The intervention is likely to lead to the outcome
- The outcome measures what the intervention is trying to accomplish (change in knowledge, attitude, behavior, condition)

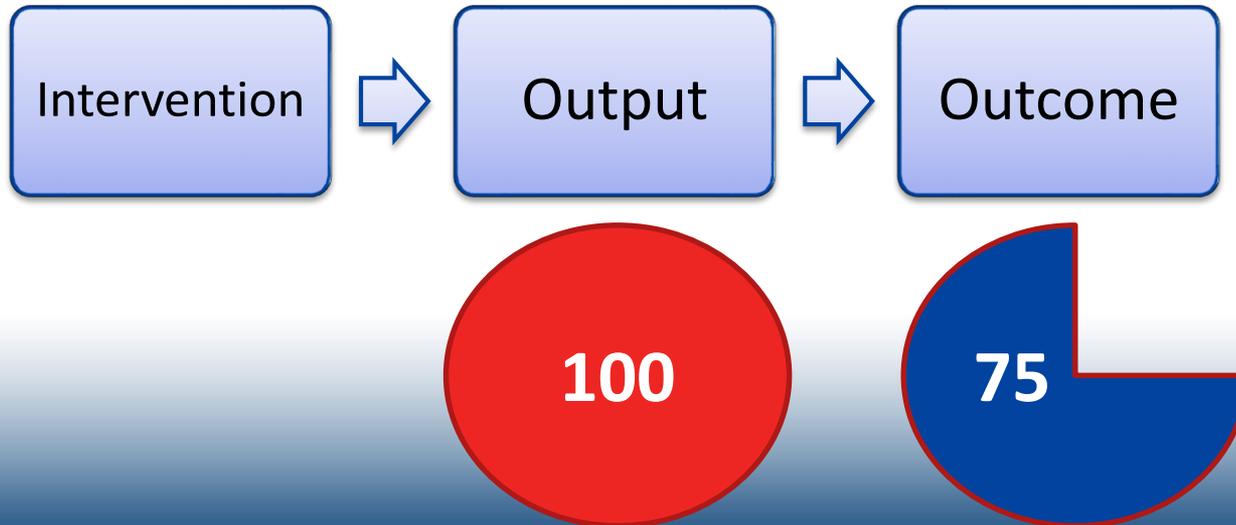


Theory of Change: VMF Example



Alignment of Outputs and Outcomes

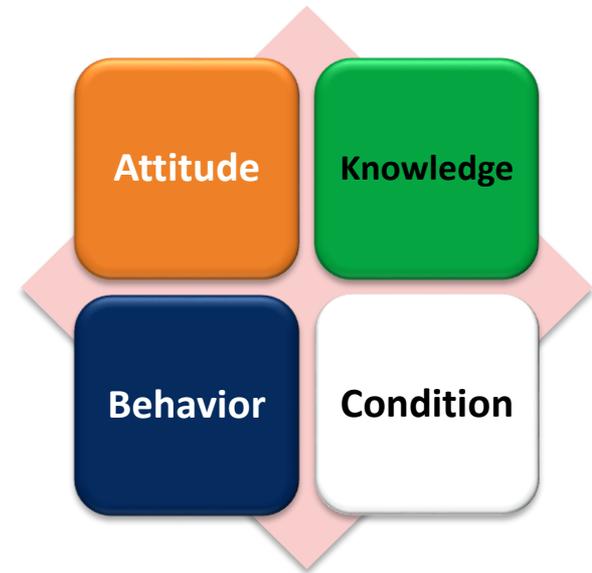
- Intervention produces output
- Output leads to the outcome
- Output and outcome measure the same intervention and beneficiaries
- National Measures aligned as directed in CNCS guidance



Meaningful Outcomes

The Outcome should:

- Reflect a meaningful change in knowledge, attitude, behavior or condition
- So what?
- Be ambitious yet realistic



Meaningful Outcome



- Is the outcome logically connected to the community problem?
- Is the outcome central or peripheral to the program's theory of change?



Meaningful Outcome



- Beneficiaries. Is the target audience identified in the outcome?
- Scope of the outcome. How many will benefit?
- Magnitude of the outcome. How much change will occur for beneficiaries?
- Data collection plan. Are proposed methods/instruments appropriate? Is there a clear plan/timeline for developing instruments and collecting data?

Practice Activity



- Read Activity #2 Handout and Complete Worksheet
 - 10 minutes

- Discussion
 - 5 minutes

Best Practices: Performance Measure Design



- Select PMs that fit your program design and theory of change, not vice versa
- Less = more: focus on a small number of high-quality measures
- Measure outputs and outcomes for program beneficiaries*
- Clearly define all terms used
- For longer-term outcomes, set targets that are achievable in a single grant year

**Except for member development and teacher corps measures*

Best Practices: Performance Measure Design (continued)

- Use numerical targets, not percentages
- For outcomes that require participant follow-up, set targets that take into account response rate attrition
- Clearly distinguish outcomes from outputs while maintaining logical alignment
- Choose outcome measures that are ambitious but realistic; ensure that the program can realistically document or track the required information.



Questions?



Resources



AmeriCorps Performance Measures Page:

<http://www.nationalservice.gov/resources/performance-measurement/americorps>

CNCS Performance Measurement Core Curriculum:

<http://www.nationalservice.gov/resources/performance-measurement/training-resources>