

Overview of Performance Measurement Outputs and Outcomes

Special Note

This skill building activity can be used to apply the concepts and principles covered in this module to real world situations.

Introduction

This exercise is appropriate for those who are new to performance measurement concepts. It builds on the module's definitions of output and outcome, and the types of outcomes. There are two sections:

1. The first section provides examples of results and asks whether they are outputs or outcomes. If the learner decides the example is an outcome, s/he is asked whether it is an example of a change in attitude, knowledge, behavior, or condition.
2. The second section asks the learner to consider his/her own intervention, describe the intended outcome, and identify what type of outcome it is.

Key Points

An **output** is a type of measure that tabulates, calculates, or records the actual products or services delivered by a program, such as students receiving tutoring or houses built. In other words, outputs are the amount of service provided. They measure the completion of activities and document the fact that individuals received services, products were created, or programs were developed. They answer the question, "How much service did we perform?" or "What products did we develop?"

An **outcome** is a type of measure that indicates progress toward achieving the intended result of a program, which usually represents a change in the situation of beneficiaries of service, such as educational achievement or housing. In other words, outcomes reflect the changes or benefits that occur. Outcomes answer the question, "What difference did our service make for beneficiaries?" or "How did the new system or product enhance the capacity of the organization to serve the community?"

Outcomes may be changes in attitude or belief, knowledge or skills, behavior, or condition. Understanding the type of outcome will help to determine how to measure it.

- "Attitude" outcomes involve a change in thought or feeling.
- "Knowledge" outcomes involve a change in understanding or ability - what a person learns or is able to do.
- "Behavior" outcomes involve changes in actions, such as conduct or habits, often in a specific context.
- "Condition" outcomes involve a change in situation or circumstance.

Sticking Points and Common Issues

Below are a few issues that may come up as learners consider the material.

How do I know if it is better (more appropriate) to measure attitude, knowledge, behavior, or condition for my intervention?

What are you trying to change? Review your “theory of change”. Your theory of change drives the selection of an appropriate outcome to measure. What is the need or problem you are addressing? What is the most important, measurable change that will address this need or problem?¹

Are certain types of outcomes considered to be stronger than others, and if so, why?

Changes in condition and behavior could be considered “stronger” outcomes than changes in attitude or knowledge, although this depends on your theory of change. Changes in condition (situation) and behavior (conduct and habits) often address the community need or problem more directly than internal changes that individuals experience (attitude, knowledge).

A change in condition will occur but not for some time. How do I connect it to my intervention?

You will need to measure a change that is observable in a shorter (i.e., one year) timeframe. Consider measuring changes that lead up to the longer term condition change. In addition, if possible, continue to track the longer term change in condition so you know whether your intervention is having the intended effect.

Note that in some situations, behavior change may not occur for some time either. Again, consider measuring changes that would logically precede the behavior change.

I know a change occurs but I don't know how to “prove” it.

Performance measurement doesn't seek to “prove” that an intervention caused a change. However, it can give you data that shows you are making progress. How do you know the change occurs? What evidence do you have that shows your intervention is having the effect you intended? For more information on measuring the change, see the data collection modules in this series.

¹ For more information, see the module “Theory of Change” in this series.

Exercise

1. Output or Outcome: Read the examples and identify whether it is an output (amount of service) or outcome (change after receiving service). If an outcome, identify the type of outcome it represents.

Result	Output or Outcome?	If outcome, what type?
a. Children increase participation in afterschool team sports.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior <input type="checkbox"/> Condition
b. Children attend afterschool fitness activities.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior <input type="checkbox"/> Condition
c. Normally homebound seniors are escorted to social events.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior <input type="checkbox"/> Condition
d. Veterans increase awareness of support services available in the community.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior <input type="checkbox"/> Condition
e. A food bank is able to serve more people because of an increase in donations.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior

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		<input type="checkbox"/> Condition
f. Erosion decreases in a flood-prone area after work has been completed along river banks.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior <input type="checkbox"/> Condition
g. Citizens report they are more motivated to recycle.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior <input type="checkbox"/> Condition
h. High school students are recruited as volunteers for a new peer mentoring program.	<input type="checkbox"/> Output	<input type="checkbox"/> Attitude
	<input type="checkbox"/> Outcome	<input type="checkbox"/> Knowledge <input type="checkbox"/> Behavior <input type="checkbox"/> Condition

2. Your Intervention: Briefly describe your own intervention. (Who is doing the intervention and who will be served? What will occur? Where and when will the intervention take place? How often and for how long?)

What outcomes do you expect to see? What types of outcomes are they, and when are they likely to occur?

Outcome	Type of outcome (attitude, knowledge, behavior, or condition)	When is this likely to occur? (in the short term, medium term, long term?)

Of the outcomes you listed, which represents the most meaningful change? Which most directly addresses the need or problem? _____

How will the outcome (change) reduce or mitigate the need or problem? _____

Answer Key and Points to Consider

Answers and discussion points are in italics.

1. Output or Outcome

Result	Output or Outcome?	If outcome, what type?
a. Children increase participation in afterschool team sports.	<i>Outcome</i>	<i>Behavior</i>
b. Children attend afterschool fitness activities.	<i>Output</i>	<i>N/A</i>
c. Normally homebound seniors are escorted to social events.	<i>Output</i>	<i>N/A</i>
d. Veterans increase awareness of support services available in the community.	<i>Outcome</i>	<i>Knowledge/Skill</i>
e. A food bank is able to serve more people because of an increase in donations.	<i>Outcome</i>	<i>Condition</i>
f. Erosion decreases in a flood-prone area after work has been completed along river banks.	<i>Outcome</i>	<i>Condition</i>
g. Citizens report they are more motivated to recycle.	<i>Outcome</i>	<i>Attitude/Belief</i>
h. High school students are recruited as volunteers for a new peer mentoring program.	<i>Output</i>	<i>N/A</i>

FOLLOW-UP DISCUSSION

Outputs are the amount of service provided (e.g. people served, products created, programs developed). They measure the completion of activities; they do not measure a change. In the examples, there are three outputs. Two outputs are counts of people who received services (b and c), and one output is a count of community volunteers recruited to provide a service (h).

Outcomes are changes or benefits that occur. Look for words like “increase” or “decrease”, “improve”, “enhance”, etc. In the examples, there are five outcomes:

- Example “a” is change in **behavior**. “Behavior” outcomes involve changes in actions, such as conduct or habits, often in a specific context. “Increase participation” is an act (behavior) that we can observe. In this case, we would want to define what is meant by “participation” before we measure it. “Increase participation” might mean that children attend more afterschool activities,

attend the same activities more frequently, or take a more active role during activities than in the past.

- *Example “d” is a change in **knowledge**. “Knowledge and skill” outcomes involve a change in understanding or ability - what a person learns during an intervention. If someone increases their awareness, they learned something they didn’t know before. This could mean that they will change behavior (use the services) in the future, but we can’t say that this will happen because the measure focuses on awareness only.*
- *Examples “e” and “f” are changes in **condition**. “Condition” outcomes involve a change in situation or circumstance. The food bank has increased its capacity and is now in a better position to serve. A change in an organization’s capacity is a change in its situation. In the example of the flood-prone area, the situation has also changed: erosion has decreased. Changes in the environment are a change in condition.*
- *Example “g” is a change in **attitude**. “Attitude and belief” outcomes involve a change in thought or feeling. If someone’s motivation has changed, this represents a change in thought and feeling.*

2. Your Intervention

FOLLOW-UP DISCUSSION

Why is it important to know the type of outcome you want to measure?

- *The type of outcome depends on your intervention and the need or problem that your intervention is trying to address. For example, if the problem is that children do not get exercise that helps to prevent obesity, and your intervention is a fitness program, then the outcome would likely be a change in behavior. The type of outcome you want to see will determine how you measure it. For example, a change in knowledge is usually measured by some type of test.²*

Why is it important to think about when the change is likely to occur?

- *Knowing when the change should occur helps to plan logistics. For example: Who will provide the data and when are they available? When should you get pre-post data, if needed? Who will collect the data and what training do they need? What program schedule restrictions should be considered? What reporting due dates do you need to be aware of?*

Consider the next steps. Now that you know what type of outcome you will measure, who would be the best data source? How will you know if a change occurs?

- *Changes in attitude or belief are internal. The best source would be the person experiencing the change.*
- *Changes in knowledge or skill are internal but can be demonstrated by the person experiencing the change.*
- *Changes in behavior could be observed and reported by the person undergoing the change, and/or by external observers.*

² For more on measuring outcomes, see the data collection modules in this series.

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- *Changes in condition are also facts we can observe. The person undergoing the change or an external observer could attest to the change.*