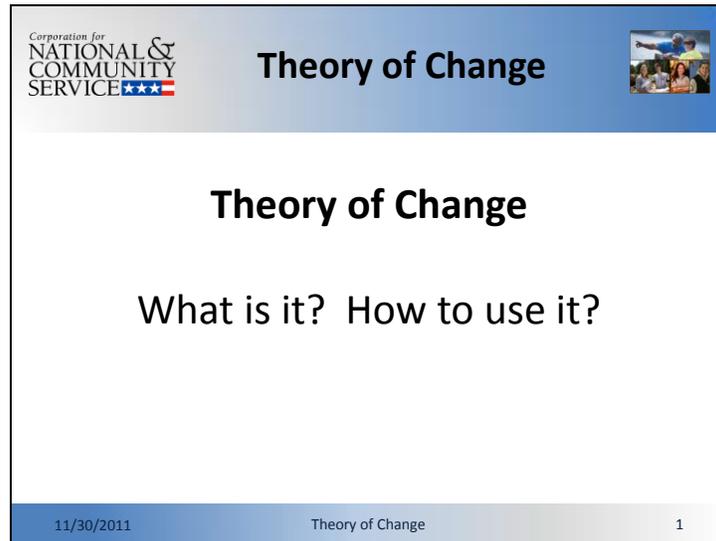


Slide 1



The image shows a presentation slide with a blue header and footer. The header contains the logo for the Corporation for National & Community Service on the left and the title "Theory of Change" on the right. A small photograph of a group of people is in the top right corner of the header. The main body of the slide is white and contains the title "Theory of Change" and the subtitle "What is it? How to use it?". The footer contains the date "11/30/2011", the title "Theory of Change", and the page number "1".

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Theory of Change

Theory of Change

What is it? How to use it?

11/30/2011 Theory of Change 1

Note to Facilitator: Use this presentation and the accompanying material (best practice example, worksheet) to introduce training participants to Theory of Change as a useful way to employ evidence to articulate relationships between community need, services and outcomes.

Slide 2

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Theory of Change



What is a “Theory of Change”?

A theory of change looks at *cause and effect* relationships and identifies specific interventions to achieve the desired result.

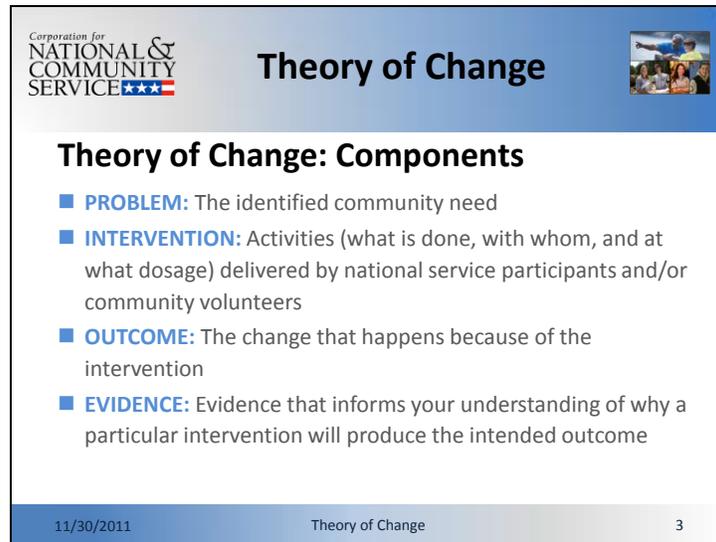
If the INTERVENTION (X) is delivered at a certain dosage, then the expected OUTCOME (Y) will happen.

$$X \rightarrow Y$$

11/30/2011 Theory of Change 2

A theory of change attempts to articulate a cause-and-effect relationship using If-Then logic to explain the result of a specific intervention.

“*If* we conduct an intervention, *then* a particular result will occur.”



The slide features the Corporation for National & Community Service logo in the top left, which includes the text "Corporation for NATIONAL & COMMUNITY SERVICE" and a small American flag graphic. The title "Theory of Change" is centered at the top in a large, bold font. To the right of the title is a small photograph of a group of people. Below the title, the section "Theory of Change: Components" is followed by four bullet points, each starting with a blue square icon. The footer contains the date "11/30/2011", the text "Theory of Change", and the number "3".

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Theory of Change

Theory of Change: Components

- **PROBLEM:** The identified community need
- **INTERVENTION:** Activities (what is done, with whom, and at what dosage) delivered by national service participants and/or community volunteers
- **OUTCOME:** The change that happens because of the intervention
- **EVIDENCE:** Evidence that informs your understanding of why a particular intervention will produce the intended outcome

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A theory of change has three main components: Problem, Intervention, and Outcome.

The alignment among these three components is critical.

First, there is a problem.

Second, there is a specific intervention (or strategy) that will help solve the problem.

Third, if we deliver the intervention according to plan, it will bring about a measurable change that eliminates or substantially ameliorates the problem.

Underlying this three-step logic are two types of data or evidence:

- Data that documents the existence of the community need your intervention will address;
- Evidence that informs your understanding of why a particular intervention will be effective in addressing the need and in producing the intended outcome.

Slide 4

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An Example From Everyday Life

- I have strep throat (PROBLEM).
- If I take antibiotics (INTERVENTION)
- Then...I will get better (OUTCOME)
- Which antibiotics fight strep the best (EVIDENCE)

Antibiotics → I get better.
If X → Then Y

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Science provides the most familiar examples of how theories articulate causal relationships.

This example shows alignment between the components of a theory of change.

It is assumed that the goal is that you want to ameliorate the strep throat.

And you gather evidence as to the best possible intervention; i.e. which antibiotics fight strep the best.

Slide 5

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Is This Always True?

- If I take penicillin, I will get better.
- If I take a different antibiotic, will I get better?
- Some interventions (antibiotics) work better than others. Some don't work at all.

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Let's look more closely at this example.

We know that if we have strep throat and take penicillin, we will get better.

But what if we take a different antibiotic? If the other antibiotic does not target the right type of bacteria, then it won't help.

In this example, we understand that some interventions are more effective against a particular problem than others and we are gathering the evidence for which intervention we will choose.

Some interventions don't work at all.

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How Do We Know?

- How do we know which antibiotic is best?
- We look at the evidence. There is research that shows which antibiotic is likely to get the best result.
- We consider constraints that may preclude the ideal intervention, e.g., penicillin may be too expensive.
- If we can't have the most promising intervention, we need to understand the tradeoffs.

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How do doctors know which intervention is the best one for strep throat?

They look at the evidence:

- There is a body of evidence gleaned from experiments designed to test the effects of many different interventions.
- There is medical literature that tells doctors that penicillin will be an effective intervention for strep throat.

Sometimes there are many different interventions from which to choose.

There may be evidence suggesting that one of these is more likely than another to achieve the desired result, but sometimes constraints preclude a doctor from prescribing the ideal intervention.

For example, someone may be allergic to penicillin, or it may be too expensive. In these cases, the doctor can choose a different intervention that may not be the favored one, but that is still likely to cure strep throat.

In a case where the choice of intervention is affected by constraints, it is important that both the doctor and the patient understand the tradeoffs.

Shifting back to the world of social science and national service programs, it is likely that many programs develop their interventions in response to constraints, particularly resource restraints (time, money, availability of volunteers, etc.).

It is important that they have been intentional about the choices and tradeoffs they made, that they can articulate them, and that the proposed intervention is still based on evidence and likely to achieve a significant outcome.

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What Do We Need to Show?

The following is required:

Evidence that supports your **intervention**. Will using National Service participants and community volunteers achieve the intended outcome?

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It is important to understand the difference between providing data that demonstrates that a problem or need exists in the community and providing evidence to support the intervention. National service grant application narratives require both, but in this presentation we are focusing on evidence to support the intervention.

Slide 8

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What is Evidence?

- Data that demonstrates that the proposed intervention is likely to solve the identified problem
- For example: Evidence says that X hours of tutoring leads to academic outcomes...so the intervention features X hours of tutoring by national service participants

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Evidence is comprised of data demonstrating that the proposed intervention is likely to solve the identified problem.

Example: Evidence says that X hours of tutoring lead to specific academic outcomes.

The chosen intervention features X hours of tutoring so that the student will meet grade level standards.

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Data that Documents Why

The evidence basis for an intervention may include:

- Past performance measurement data
- Results from an impact evaluation of your program
- Results from impact evaluations and other research documenting outcomes of similar programs

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It is not sufficient to just say “we believe our chosen intervention is likely to be successful in addressing the community need we have identified.”

You must present evidence showing that program models/interventions like yours have a successful track record in addressing the need and in producing the intended outcome(s).

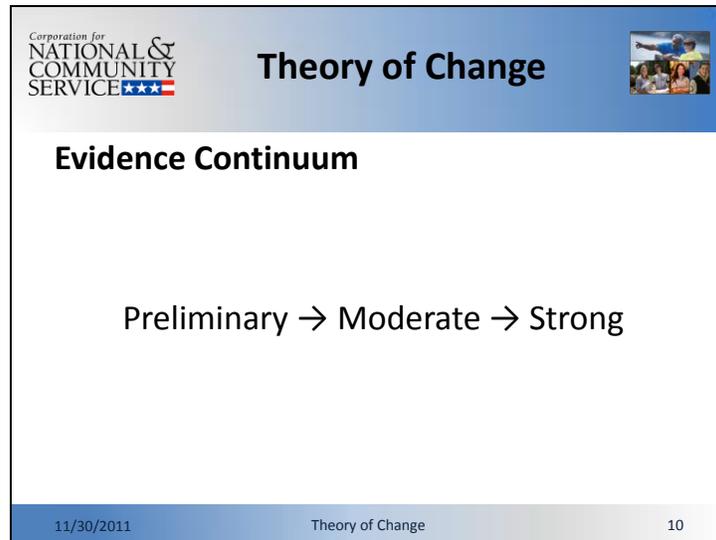
There are several types of evidence that you can select to make the case that your intervention will have the desired result.

Any one of these that has shown positive results which have been collected using rigorous methodologies can be used.

It makes for an even stronger case if you have more than one type of evidence to present that shows similar findings.

Types of evidence include:

- Past performance measurement data
- Results from an impact evaluation of your program
- Results from impact evaluations and other research documenting outcomes of similar programs



The slide features a blue header with the Corporation for National & Community Service logo on the left and the title 'Theory of Change' in the center. A small photo of a group of people is in the top right corner. The main content area is white with the title 'Evidence Continuum' and the text 'Preliminary → Moderate → Strong'. A blue footer contains the date '11/30/2011', the title 'Theory of Change', and the page number '10'.

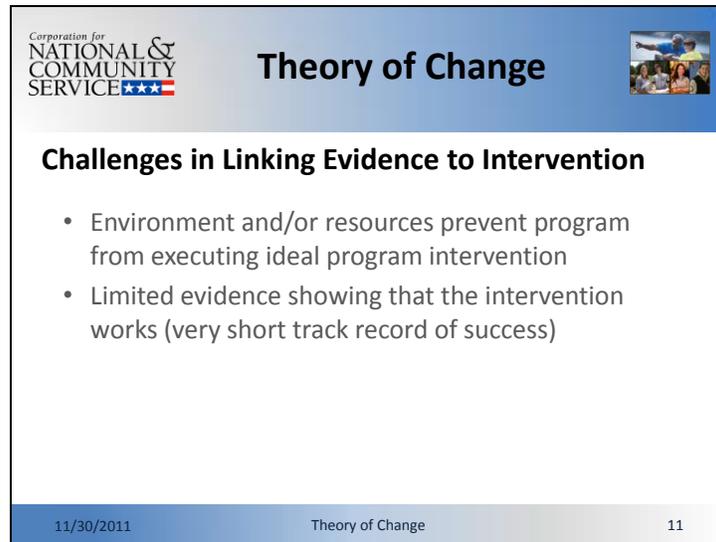
It is important to recognize that there is an evidence continuum.

Interventions that are very new may only have preliminary evidence to support their efficacy. As an intervention is studied more and more, there may be moderate and eventually strong evidence to support it or to suggest that the intervention does not lead to the desired outcome.

Preliminary evidence would be data that come from initial studies of a new intervention. Another example of preliminary evidence would be performance measurement data collected by the program. This evidence is considered preliminary because it does not provide evidence to support the existence of a causal relationship between the intervention and the outcomes.

Moderate or strong evidence would be data from quasi-experimental designs or similarly rigorous approaches that seek to determine whether the intervention causes the outcomes.

Evidence would move from moderate to strong as a body of rigorous studies accumulates confirming the theory of change and more clearly specifying the conditions under which the intervention is most – and least – likely to be successful.



The slide features the logo for the Corporation for National & Community Service in the top left corner, which includes three stars. The title 'Theory of Change' is centered at the top in a large, bold font. To the right of the title is a small photograph showing a group of people. Below the title, the section 'Challenges in Linking Evidence to Intervention' is highlighted in bold. A bulleted list follows, detailing two main challenges. At the bottom of the slide, there is a footer with the date '11/30/2011', the title 'Theory of Change', and the slide number '11'.

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Challenges in Linking Evidence to Intervention

- Environment and/or resources prevent program from executing ideal program intervention
- Limited evidence showing that the intervention works (very short track record of success)

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There might be times when constraints prevent a program from selecting the ideal intervention. In those cases, you need to explain the tradeoffs you are making (like in the example about choosing one antibiotic instead of another) and why the proposed intervention is the best one given the constraints.

An example: Several studies show that children who receive 30 minutes of one-on-one tutoring three times per week on five key emergent literacy skills show greater gains in reading level than those receiving a similar intervention for only 30 minutes twice per week, or a different intervention for 30 minutes three times per week.

An example of a constraint might be that the ideal intervention is three times per week for 30 minutes, but your program only has the capacity to provide 30 minutes twice a week.

In this type of situation, you would want to provide evidence that shows the intervention will still be effective even with the reduced frequency, in other words, that students would still be likely to make gains in reading, but the gains are not likely to be as dramatic as they would be with a more intense “dosage” of service. (There may also be a “dosage” threshold below which no measurable gains appear.)

When looking at the evidence in your field, it is important to not just look for evidence that supports the intervention you have in mind.

You want to look at all the evidence because you may find a more promising intervention that you hadn't previously considered.

In some cases, applicants propose an intervention so new and innovative that there is little evidence to support it.

If so, it is important to clearly outline the theory for why this intervention will work, and why it will solve the problem in a way that has not been done before.

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Example: Riverton Literacy Corps

PROBLEM	INTERVENTION	OUTCOME
<p style="font-size: small; margin: 0;">Children at risk of failing third grade reading exam</p> <p style="font-size: small; margin: 5px 0 0 0;">DOCUMENTATION: Statistics on the number of students at risk of failing in program's service area; Research on why reading proficiency by 3rd grade is important.</p>	<p style="font-size: small; margin: 0;">Individualized tutoring on five "building block" literacy skills through reading, writing and verbal communication activities</p> <p style="font-size: small; margin: 5px 0 0 0;">EVIDENCE: Research on how children learn to read supporting theory that mastering building block skills leads to proficiency. Research on design, frequency, duration of tutoring sessions.</p>	<p style="font-size: small; margin: 0;">Students master five building block skills.</p> <p style="font-size: small; margin: 5px 0 0 0;">RESULTS: Students pass state reading exam.</p>

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Let's look at an example for a literacy tutoring program.

The problem is that third graders at Riverton Elementary are significantly lagging behind in their reading skills, as demonstrated by high failure rates on the state reading exam. This is supported by data documenting numbers and research on importance.

The intervention will provide individualized tutoring to students identified as "at risk". This tutoring will focus on five "building block" literacy skills through integrated reading, writing and verbal communication activities. Research has shown this model to be causally linked to demonstrable improvement in reading skills. This is supported by research outlining the intervention design, frequency, duration and content.

The outcome sought by the program is for students to master these literacy skills as demonstrated by passing the state reading exam.

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Theory of Change



What is Your Program's Theory of Change?

Theory
If national service participants (or community volunteers)
_____ (Intervention) then beneficiaries will
_____ (Outcome).

Intervention
Describe the design and dosage of your intervention.

- Design (who does what with whom?)
- Frequency (how often does it happen?)
- Intensity (one on one, small group, or...?)
- Duration (how long and over what period of time?)

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Here are some questions to ask yourself when developing your own Theory of Change.

Facilitator Notes: A worksheet is provided with this module that participants can use during the session to begin formulating their own Theory of Change. In addition to allowing time for participants to draft their Theory of Change on their own, you may want to have participants pair up, exchange drafts, and give each other feedback. Participants should try to identify areas where their companion's Theory of Change is weak, unclear or sketchy.

Also included is an example from a national service program describing the Theory of Change. This can be utilized for discussion and further reflection and clarification.

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Included Resources

1. Theory of Change Worksheet
2. Theory of Change Example – AmeriCorps Literacy Program

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