Describe the theory of change

This section explains how and why you might use a theory of change when commissioning and managing an evaluation.

It explains options for how it will be developed or revised, how it will be represented, and how it will be used.

You might be actively involved in these processes or oversight them. In either case it is important to be aware that there are choices to be made and that informed choices will produce more useful theory of change and better evaluation.

A theory of change explains how the activities undertaken by an intervention (such as a project, program or policy) contribute to a chain of results that lead to the intended or observed impacts. Other labels that your colleagues, partners and evaluators might use include: *results chain, logic model, program theory, outcome mapping, impact pathway and investment logic*.

A theory of change is often developed during the planning stage but can also be useful for monitoring and evaluation. A good theory of change can help to: develop better Key Evaluation Questions, identify key indicators for monitoring, identify gaps in available data, prioritize additional data collection, and provide a structure for data analysis and reporting.

Your intervention might already have a theory of change that was developed in the planning stage. You are likely to benefit from reviewing and revising the theory of change as part of commissioning an evaluation in the following circumstances:

- there is disagreement about how valid or comprehensive the current theory of change is
- there are gaps or errors in the current theory of change
- there is little evidence to support the current theory of change (either from the program or from other research and evaluation)
- your understanding of how the project or program works has developed further since the original theory of change was developed,
- the context has changed in significant ways
- the current version is adequate for planning purposes but needs more detail for an evaluation

As a manager, you might be directly involved in developing (or revising) and using the theory of change, or you might oversee the process which internal staff and/or an external evaluator conduct. Whatever your level of direct involvement, you will want to ensure the quality of the process and the product. A key part of this is ensuring there are informed choices made about the processes used to develop (or revise) the theory of change and how to represent it. These choices should take into account how the theory of change is intended to be used and any particular features of the intervention. The following sections discuss these in more detail.

The rest of this section provides guidance in terms of the following key issues:

1. Planning how the theory of change will be used for monitoring and evaluation
2. What the theory of change should cover
3. The process for developing or revising the theory of change
4. The scope of the theory of change
5. Explicit and appropriate change theories and action theories
6. The representation of the theory of change

1. Planning how the theory of change will be used for monitoring and evaluation

Depending on the timing, a theory of change can be used to anticipate what will happen, and establish data collection processes to track changes going forward, or used to make sense of what has happened and the data that have already been collected.

A theory of change can inform the development of a monitoring and evaluation.

Existing data (where available from the intervention and/or previous research and evaluation) can be mapped onto the theory of change then used to identify priority areas for collecting additional data. These might include:

- Assumptions on which the theory of change is based.
- Contextual factors that might be important to gather data on and use to investigate patterns in results – for example, does the intervention work particularly well at certain sites or for certain groups of people
- Indicators of the quality and quantity of inputs and activities to support effective management
- Early indicators of progress or lack of progress in achieving results. This can be particularly important when the intended impacts are longer-term and information about intermediate outcomes is needed to inform decisions
- Links where the causal chain seems to break – where achieving a particular intermediate outcome does not seem to lead to the subsequent outcome
- Causal links which are not well established
- Identifying outliers – "bright spots" that might inform learning and serious problems that need to be addressed immediately

A theory of change can provide a framework for a "performance story" – a coherent narrative about how the intervention makes particular contributions. This can be useful for communicating about the intervention to potential partners, participants and policymakers, and for also providing a consistent point of reference for those involved in implementing and managing it.

2. What the theory of change should cover

A theory of change is not just a list of activities with arrows to intended outcomes. It needs to explain how these changes are understood to come about and the role the intervention will play in this – and the role of other factors, including other interventions.

It therefore needs to include both:

While the core of the theory of change focuses on the links between activities and impacts, it is more useful if it does not only cover these. Check if the following elements are in place and, if not, if it is possible to add them either in the main diagram and narrative or in supplementary documents:

- **Change theory:** this identifies one or more causal mechanisms by which change comes about for individuals, groups and/or communities. (more guidance is provided below on this)
- **Action theory:** this explains how interventions are constructed to activate their theory of change in terms of the activities that will be undertaken and what level of success will be needed for each result to produce the final intended impact (more guidance is provided below on this)
- how **other projects and programs** contribute to producing impacts
    - those who are explicitly collaborating (these are referred to as 'boundary partners' in outcome mapping forms of theory of change)
    - others who have positive or negative influence

- how **the particular contexts in which the intervention is implemented** affect activities and results
- **potential unintended results**, both positive and negative,
- **assumptions** on which the theory of change is based – these are in addition to the cause-effect relationships shown in the logic model and often involve assumptions about the context
- how participants **become engaged** in a project, program or policy,
- how **results are expected to be sustained** after a project, program or policy ends or participants' engagement ends.

A negative theory of change can also be developed to identify possible negative unintended outcomes in order to set in place risk mitigation strategies to avoid them, and data collection that will detect if they have occurred.

3. Process for developing or revising the theory of change

A sound theory of change draws on a range of evidence – previous similar projects and programs, previous research and evaluation, the mental models of stakeholders (including planners, managers and staff, partner organizations, and intended beneficiaries), and observation of the program and patterns in outcomes and impacts..It is important to ensure that the process is adequately inclusive of relevant perspectives, values and evidence. If the theory of change has only used a group meeting to build it, it is likely that some more systematic analysis and review of relevant research and evaluation will improve its quality

If you are developing a new theory of change, or reviewing an existing one, check if these different processes have been included and, if not, if it is possible to add them:

- A **situation analysis –** an assessment of the needs and problems the intervention is intended to address and of the resources and opportunities that might be drawn on to do this?
- Download some questions that can be used to structure this situation analysis.
  - **Questions to ask in a situation analysis to develop a theory of change**
    DOC
    31.5 KB
- A **review of existing documentation** which explains why an intervention was developed
- **Relevant research, evaluations and other evidence from** similar projects, programs or policies
- **Talking with stakeholders** about how they understand the intervention works or is intended to work – what are the intended outcomes and how do they think they might be achieved (their mental models of the intervention).
- Download some questions that can be used in individual or group interviews with key informants, including those who designed a project, program or policy, those who are currently working to deliver or manage it, and those who are involved in it in other ways.
  - **Sample interview questions to articulate the implicit theory of change of a project.doc**
    DOC
    33 KB

Check that the process of reviewing or developing the theory of change **involves the right people in the right ways** in the process of developing or reviewing the theory of change. In some cases it will be possible and desirable to involve a range of people in the whole process of gathering information and developing the theory of change; in other cases it will be better to delegate or hire someone to develop a draft and then engage the wider group in reviewing and revising the draft.

- Download this matrix of different people and groups and roles that can be used to support discussion of this issue and document the decisions made.
  - **Who should do what in developing a theory of change**
    DOC

[40 KB]

If you are reviewing and revising an existing theory of change, talk with your staff, colleagues and partners and check previous documentation to review it in terms of these issues:

- What **evidence** was the basis for its development? What additional evidence should be used in the review?
- Whose **mental models** formed the basis of it? To what extent and in what ways were the perspectives and mental models of intended beneficiaries and partner organizations included?
- Were there **different views** about it – in terms of what the intended outcomes and impacts were and/or how these might be brought about?
- Has there been **more recent research and evaluation**, or similar projects and programs, that could inform the theory of change?

If there are gaps in the evidence that has been used to develop the theory of change, or indications that it has changed since being developed, draw on these different sources of evidence to revise it.

A theory of change has most benefit if it provides a common reference point for those working together. This means it needs to be accessible and referred to during discussions and decisions about the project or program. But sometimes it is ignored or forgotten after the initial planning stage, especially if new people come into the program or project and are not aware of what has been done.

Talk with your staff, colleagues and partners to find out:

- Is the current theory of change known, understood and currently used? What can be learned from this?
- If the theory of change isn't being used, is this because of perceived inadequacies?
- If the theory of change is being used, what has been learned about it in use?

4.Identify the outcomes and impacts to be included and who will be involved in producing these

It is important to be clear about the intended impacts of projects, programs and policies. Sometimes there will be different views among partner organisations about these.

The intended impacts might be for:

- Participating individuals – for example, increased skills or knowledge or changes in behaviour
- Other individuals affected by participants – for example, students taught by teachers whose skills have been improved by the project or program
- Organizations
- Communities
- Networks and systems of organizations and services

In some programs and projects there is clarity and agreement about the intended impacts. In other cases there is disagreement (for example, when different partner organizations have different agendas for involvement) or uncertainty (for example, in a capacity development project where the specific changes that will arise are not tightly specified in advance).

Talk with your staff, colleagues and partners and check previous documentation to find out:

- Is there agreement about the intended impacts or do different partners, organizations or individuals have different views, or is there uncertainty?
- If there are different intended impacts, is there tension between them or are they synergistic?

It is also important to be clear about how these intended impacts are expected to be produced – and who will be involved in doing this. In some cases, your project or program might be directly involved – for example, providing direct services. But in many cases, you will be working with other organizations either at the same time or in sequence to bring about the intended changes.

For example, you might work with participants to increase their knowledge and skills, and then they work directly with intended beneficiaries, or you support them to produce research outputs and then organizations are intended to use this research to inform and improve policy and planning.

Talk with your staff, colleagues and partners and check previous documentation to find out:

- Who is expected to be involved in bringing about changes?
- Should they also be involved in developing or reviewing the theory of change?

5. Explicit and appropriate change theories and action theories

For example, behavior changes (such as reduced drink driving or increased uptake of science research) can come about through one or more change theories:

- changing social norms
- changing incentives (higher risk of sanctions or increased rewards)
- capacity development
- increasing opportunities and/or removing barriers.

For each change theory, there are different possible action theories about what activities might be implemented to trigger the change theory. For example, changing incentives in terms of increasing rewards might involve:

- providing an individual monetary bonus for all who comply
- creating a lottery for all who comply with one or more winners drawn randomly
- providing public recognition and praise for high performers

Being explicit about change theories and action theories makes it easier to identify what are appropriate local adaptations of a program and what constitutes good quality implementation. It is likely that there will be different change theories and action theories at different stages of the project or program and at different sites.

Try to ensure that the theory of change has explicit change theories and action theories. Talk with your staff, colleagues and partners, check previous documentation and review relevant research and evaluation to find out:

- What are the change theories underpinning expected changes for individuals, organizations, and communities? How plausible do these seem?
- How well does the theory of change make explicit the change theories underpinning it?
- Are there different change theories at different stages of the project or program?
- Are there different change theories for different people? (For example, motivation for some people who already have capacity, and capacity-building for people who already have motivation)
- Would the theory of change be improved if additional change theories were added in key points?

The project or program activities are intended to contribute to the change process. How they do this can be understood as an action theory – a theory that if the project or program does particular things, these activities will trigger the type of change identified in the change theory.

Talk with your staff, colleagues and partners, check previous documentation and review relevant research and evaluation to find out:

- What are the action theories underpinning the different change theories for individuals, organizations, and communities? How plausible do these seem?
- How well does the theory of change make explicit the action theories underpinning it?
- Are there different action theories for different people? (For example, motivation for some people might be triggered by providing a tangible incentive of public recognition for their work; for others a financial reward might be needed to be seen as motivating)
- Would the theory of change be improved if additional action theories were added in key points?
- Download example change theories and action theories that could produce different types of outcomes and impacts at different stages of a program.
  - **Some example change theories and action theories**
    DOC
    71.5 KB

6. The representation of the theory of change

A theory of change is often represented in a diagram with an accompanying narrative. There are different types of diagrams that can be used. Diagrams should clearly show the direction of change and are most commonly drawn to be read from left to right, top to bottom, or bottom to top.

Sometimes it is useful to have several different versions – such as an overview diagram for general use with more detailed diagrams of particular components or for particular purposes. For complicated theories of change, it can be helpful to have different diagrams with varying levels of detail. An accompanying narrative can complement the diagram and be more accessible for some people.

There are many different options for representing a theory of change and it is important to choose a format which will communicate clearly. Four main options include:

- a simple, linear **results chain** – This has a series of boxes often in the form of inputs, activities, outputs, outcomes and impacts. It is most appropriate for fairly simple interventions, where activities are undertaken at the start and then the consequences flow through in a linear fashion.

Flow chart showing results chain from inputs on left to impacts on the right

- an **outcomes hierarchy** - This shows the sequence of results, from short-term to long-term. It is appropriate when the causal chain is complicated, with multiple strands. It focuses attention on the causal sequence and provides information about activities in a separate narrative or table

Flow chart how a hierarchy of outcomes could flow from left to right

- a **triple column/row** . This shows the causal pathway in terms of intermediate outcomes, activities which directly produce these, and the influence of other factors and programs. It can be particularly useful for showing activities that occur along the causal pathway, and for showing clearly the contributions of other partners and contextual factors

Flow chart showing activities flowing down and other factors flowing up into a horizontal outcomes hierarchy

- **a set of principles**. This is particularly appropriate for adaptive, emergent projects and programs, in terms of principles. For example, the following principles have been identified for strengthening research capacity in low and middle income countries (Add source):

Principles for strengthening research capacity in low and middle income countries

1. Network, collaborate, communicate and share experiences
2. Understand the local context and accurately evaluate existing research capacity
3. Ensure local ownership and secure active support
4. Build in monitoring, evaluation and learning from the start
5. Establish robust research governance and support structures, and promote effective leadership
6. Embed strong support, supervision and mentorship structures
7. Think long-term, be flexible and plan for continuity

Check the quality of the diagram in terms of its coherence, logic and clarity and revise it as needed:

- Does the diagram provide a **clear overall message** about how the project, program and policy contributes to the end results? If not, can the diagram be redrawn to emphasise the overall narrative? For example:
  - If there are three main parallel elements, create a symmetrical diagram which conveys this message clearly.
  - If there is a lot of detail, provide a summary version that can then be expanded or further explored.
  - Avoid too much detail about the impacts and how they will be measured.
- Can the diagram be read as a **coherent story** about sequence and consequence? In particular:
  - check that every arrow is meaningful (one thing leads to or helps to bring about another thing) and that the wording in each box is appropriate.
  - indicate the direction of expected change (increased or decreased)

Talk with your staff, colleagues and partners, check previous documentation and review other theories of change to find out:

- What would be the best way to represent the theory of change?
- Would it be helpful to have different versions for different users and/or different levels of detail?