PROGRAM EVALUATION FUNDAMENTALS RESOURCE GUIDE

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Contents

If you have any questions regarding this Resource Guide or would like support with an evaluation you are working on, please contact the OHTN for further information at:

info@ohtn.on.ca

Purpose and Importance of Evaluation

Program Evaluation can provide many benefits when implementing a program. It helps to determine efficacy, achievement of goals and objectives, as well as measuring the impact of the program. Some benefits to program evaluation are as follows:

- identify successful strategies
- modify or discontinue interventions that do not yield desired results
- share findings with stakeholders
- provide donors with evidence of the results of their investment
- demonstrate the organization's interest in accountability.

More generally, evaluation helps program managers identify what is and is not working, as well as how to make the project work better. Evaluation also provides a means of demonstrating to project staff and donor agencies the extent to which a program or project is achieving its objectives. Program evaluations helps program managers identify successful project outcomes and objectives, as well as different aspects of objectives that can be restricted and refocussed.

There are three main disclaimers to keep in mind and get comfortable with:

1. Process and approach: every community, and every program is unique, so there are different approaches to evaluate each program. The evaluation process will depend on each program's need, context and circumstances.

2. Critical elements: there are common critical elements to every program in order to ensure that effective evaluation strategies are developed and implemented that lead to real improvements within the program.

3. Evaluation Planning: evaluation planning is continuous and iterative as each evaluation leads to changes in practice. These changes can lead to further evaluation and changes.

Key Considerations:

What will be understood from an evaluation of the program?

How to engage clients and other important stakeholders in this evaluation?

What are some engaging ways to collect data and stories?

How to make sense of all the data collected?

What inspires the team to improve the program for next time?

How to share the real story of our program with diverse stakeholders

Module 1: Introduction

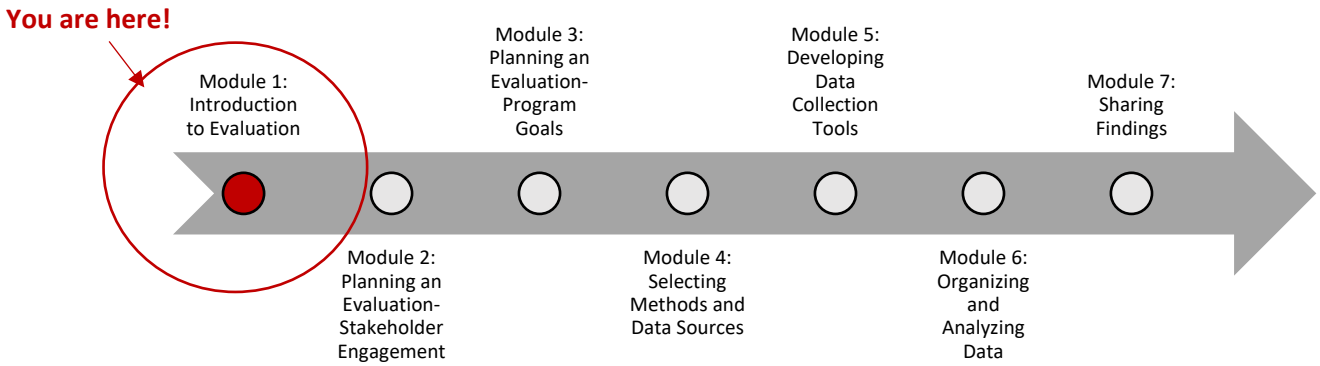
Purpose

The purpose of this module is to introduce evaluation, some common concerns and the role of evaluation.

Learning Outcomes:

By the end of this module you will be able to:

- Explain what evaluation is
- Identify some common concerns of evaluation and compare them to your concerns
- Consider the purpose of evaluation (why an evaluation should be done)
- Understand and knowing when an evaluation should be d



What is Evaluation:

Evaluation is the systematic assessment of the design, implementation or results of an initiative for the purposes of learning or decision-making (Canadian Evaluation Society, 2015). More simply, evaluations assess or appraise data to understand key details of the program and or inform strategic decisions, thus improving the project or program in the future.

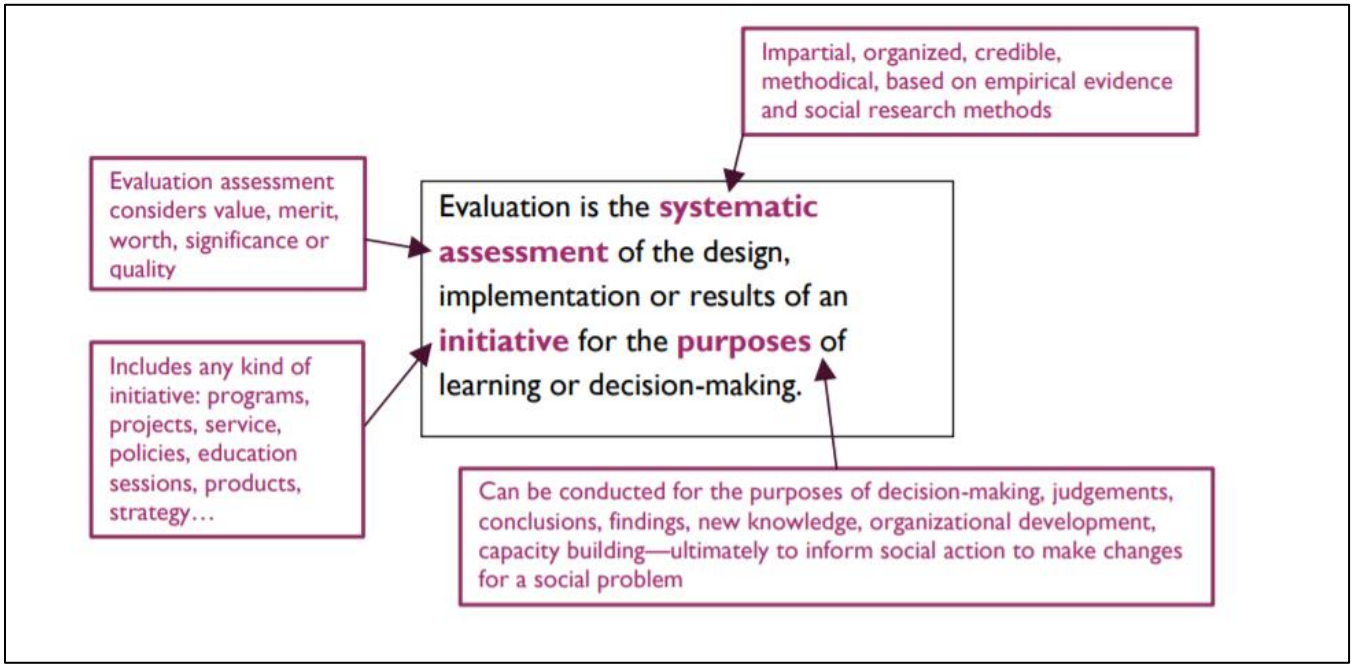


Figure 1: What is Evaluation

Evaluations are conducted to answer questions of interest to program stakeholders. Typically, these questions address program accomplishments, improvements, and changes for future programming. Evaluations should help to draw conclusions about five main aspects:

- relevance
- effectiveness
- efficiency
- impact
- sustainability

Types of Evaluation:

Evaluations fall into one of two broad categories:

Formative evaluations	Conducted during program development and implementation and are useful if you want direction on how to best achieve your goals or improve your program.
Summative evaluations	Should be completed once your programs are well established and will tell you to what extent the program is achieving its goals.

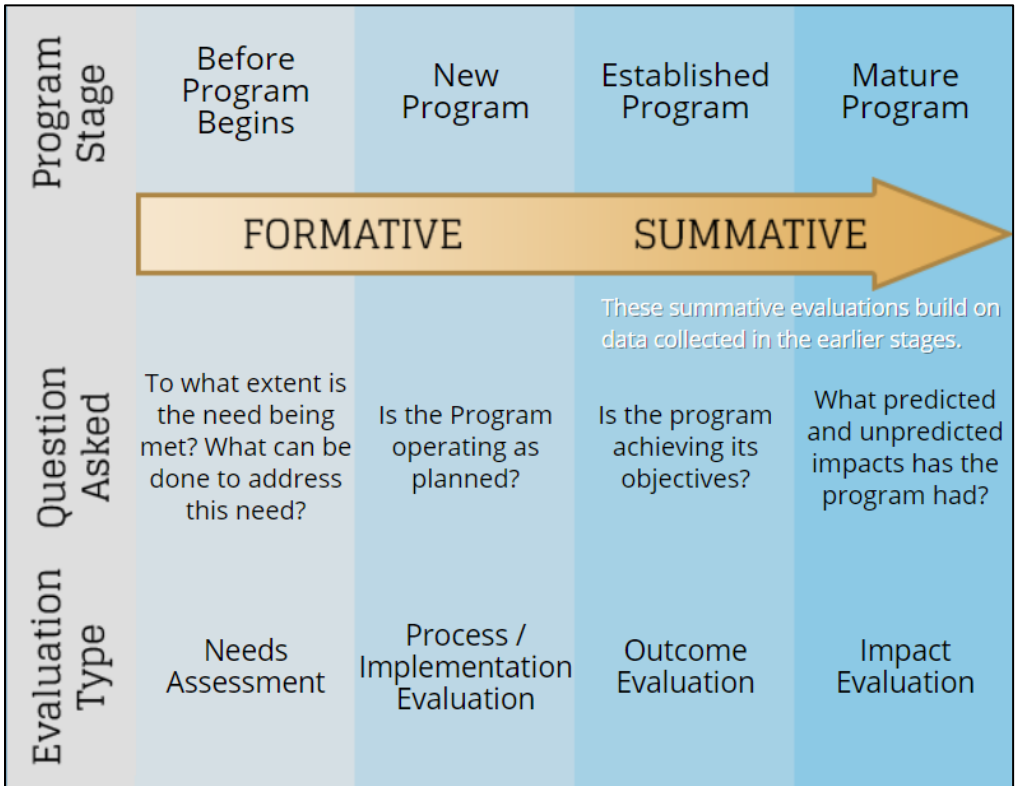


Figure 2: Formative and Summative Evaluation from: https://meera.snre.umich.edu/evaluation-what-it-and-why-do-it#

Within the categories of formative and summative, there are different types of evaluation outlined in Table 1 below. Determining which of these evaluations is most appropriate depends on the stage of your program.

TYPE OF EVALUATION	PURPOSE
FORMATIVE	
1. Needs Assessment	• Determines who needs the program, how great the need is, and what can be done to best meet the need. • A needs assessment can help determine which audiences are not currently served by programs and provide insight into what characteristics new programs should have to meet these audiences' needs. • A needs assessment helps to determine whether there is a need for a program to address this issue and is typically conducted before implementing a program. The overarching evaluation question in this domain asks: Is there a need for this type of program in this context?
2. Process or Implementation Evaluation	• Examines the process of implementing the program and determines whether the program is operating as planned. • Can be done continuously or as a one-time assessment. • Results are used to improve the program. A process evaluation of an HIV/AIDS program may focus on the number and type of participants reached and/or determining how satisfied these individuals are with the program. The overarching evaluation question in this domain asks: Was this program implemented properly and according to the plan?
SUMMATIVE	
1. Outcome Evaluation	• Investigates to what extent the program is achieving its outcomes. • These outcomes are the short-term and medium-term in program participants that result directly from the program. • For example, HIV/AIDS outcome evaluations may examine improvements in participants' knowledge, skills, attitudes, intentions, or behaviors. The overarching evaluation question in this domain asks: Did this program achieve its desired outcomes and have an impact on its intended targets?
2. Impact Evaluation	• Determines any broader, longer-term changes that have occurred as a result of the program. • These impacts are the net effects, typically on the entire school, community, organization, society, or environment. EE impact evaluations may focus on the educational, social, or human health impacts of HIV/AIDS programs.

Table 1: Formative and Summative Evaluation

This resource guide will focus on two main types of evaluations:

Process evaluations	Assess whether a program was implemented as planned (i.e.: whether the intended target population was reached, clients were satisfied with the program etc.)
Outcome evaluations	Determine whether and to what extent the expected changed in client outcomes occurred and whether these changes can be attributed to the program or program activities

Common Concerns of Program Evaluation:

Program managers often express legitimate concerns or fears when considering a program evaluation. While these concerns are valid, they can often be addressed fairly readily. Examples include:

- **Evaluation will divert resources away from the program**. While it is true that evaluation will take some upfront resources, what a program can learn from an evaluation can help streamline its resources to focus on "what works" for program participants and improve outcomes.
- **Evaluation will be an additional burden on staff.** In order to minimize the potential burden on program staff, evaluation activities can be incorporated into ongoing program management activities.
- **Evaluation will produce negative results.** Finding out "what does not work" is as important as finding out "what does work."
- **Evaluation is just another form of program monitoring.** Program monitoring assesses whether a program follows specified performance standards (e.g., number of participants served), while an evaluation assesses whether expected outcomes were achieved.
- **Evaluation will be too complicated**. While some evaluations are complex, evaluation designs can be simple and straightforward which is the aim of this Evaluation Curriculum: to provide the support and resources for conducting an evaluation. As a result, if you run into any issues we promise to help you find the answers and when needed we can re-direct you to other experts and contacts within the OHTN and external to the organization as well.

Adapted from*:* https://www.childtrends.org/wp-content/uploads/2013/04/child_trends-2007_10_01_rb_whyprogeval.pdf

When and Why to Evaluate:

Why is it important to conduct program evaluations?

The main goal of an evaluation is to provide useful feedback to various audiences, including sponsors, donors, client groups, administrators, staff, and other constituencies. The feedback gained from the evaluation should influence decision-making and policy formulation.

The benefits of undertaking monitoring and evaluation include better decision making, supporting learning and accountability and getting information for reporting (Image: IIED)

Figure 3: Benefits of Evaluation

In addition, evaluation helps you:

- ✓ Identify what is and is not working in a program.
- ✓ Demonstrate to funders and the community what a program does and how it benefits participants.
- ✓ Support fund-raising by providing evidence of a program's effectiveness.
- ✓ Improve productivity by identifying weaknesses as well as strengths.
- ✓ Add to the existing knowledge in the field about what does and does not work for a specific program and its target participants.

Adapted from: Center for Social Research Method, 2002

Reasons to Conduct Evaluation:

What works? What does not work?
•Are participants benefitting? Are participants satisfied with the program? Are subgroups benefitting? (eg. race or gender related) •Are recruitment strategies working? •Do the staff have adequete skills and trianing?
Is the program effective?
•Findings can: prove the worthiness of a program (to funders and the community) •provide an outreach tool for collaborative partnerships •Gain program funding and re-funding
Improve Practice
•Improve how staff deliver services, in turn increase program outcomes •Assist Management with assessing staff's performance
Increase Capacity
•Builds capacity through staff and program assessments, measuring staff performance, and assessing program objectives
Program Accountibility
•Provides feedback for internal and external reporting of effectiveness of the program •Accountibility is useful for prospective funding
Increase Impact of Services
•Provides an opportunity for clients to provide constructive feedback
Program efficacy
•Allows the program to fully examine and describe the effectiveness •Creates sustainability through opportunities for duplicating program elsewhere

Table 2: Reasons to Conduct Evaluation: Adapted from*:* *https://studylib.net/doc/8573437/what-is-program-evaluation%3F-written-by-carter-mcnamara; https://www.childtrends.org/wp-content/uploads/2013/04/child_trends-2007_10_01_rb_whyprogeval.pdf*

When should you be conducting a program evaluation?

Program evaluation should serve a useful purpose, be conducted in an ethical manner, and produce accurate findings. Evaluation findings should be used both to make decisions about program implementation and to improve program effectiveness. Many different questions can be part of a program evaluation, depending on how long the program has been in existence, who is asking the question, and why the information is needed.

There are some programs that may not benefit from program evaluation:

- A program that is unstable, unpredictable, and/or the routine is inconsistent
- those involved cannot agree about program goals
- when funder or manager is unwilling to include important and central issues in evaluation

Adapted from Thomson and Hoffman (2003); https://meera.snre.umich.edu/evaluation-what-it-and-why-do-it#

Is the timing right?

Is there an opportunity for an evaluation to have an influence? Has the project accumulated enough implementation experience to enable useful lessons to be extracted? If the evaluation was planned in advance, is the evaluation still relevant?

A common misconception is that program evaluation must occur at the end of a program or initiative. If evaluation is only focussed on judging the merit of an initiative then it would only occur at the end of a well-established program. However, there are other purposes for undertaking an evaluation in addition to that of making a judgement about the value or worth of a program or activity, this is summative evaluation. Evaluation may also be used to refine or improve a program, this is formative evaluation. Using program evaluation throughout program development will assist in generating new knowledge where there is limited information on specific topics. Evaluation can guide the development of a program by anticipating and prevent issues as well as making ongoing improvements by ensuring there is appropriate data collection to support end-of-project evaluation.

Implementation	Were the program's activities put into place as originally intented?
Effectiveness	Is the program ahcieving its goals and objectives?
Efficiency	Are the program activities being produced with appropriate use of resources (eg. budget, staff)
Cost-effectiveness	Does the value or benefit of achieving the program's goals or objectives exceed the cost of producing them?
Attribution	Is the progress on the program's goals or objectives related to this specific program (or other programs as well?)

All of these are appropriate evaluation questions and might be asked with the intention of documenting program progress, demonstrating accountability to funders, and or identifying ways to make the program better. As you can likely tell, there is not one specific point to ask these questions as they could be asked at different points in the project timeline.

Module 2: Planning an Evaluation- Stakeholder Engagement

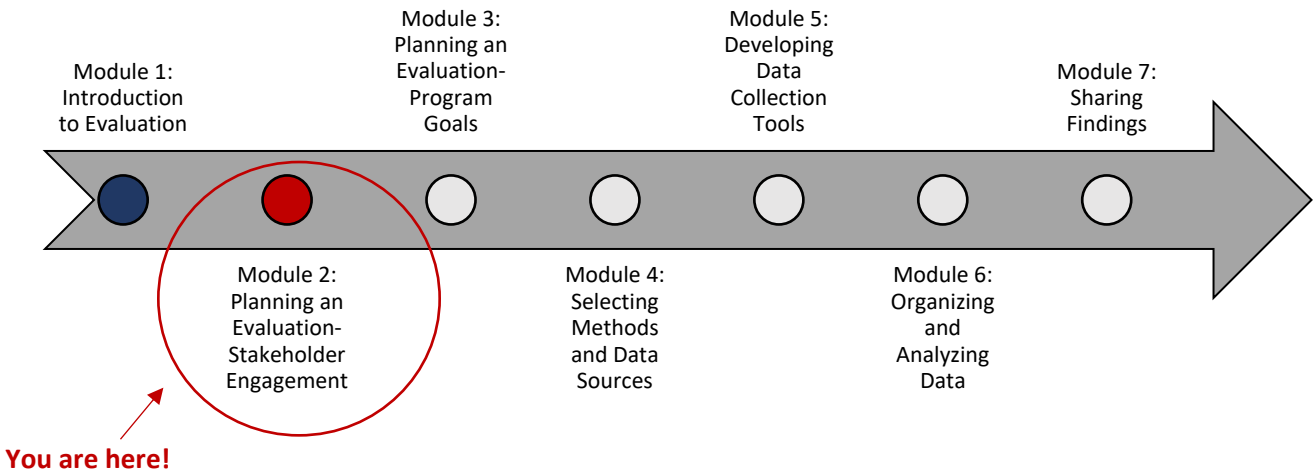
Purpose

The previous section provided a brief overview of evaluation concepts. This section is the first of three sections that will provide a step-by-step guide to preparing for and developing an evaluation plan.

Learning Outcomes:

By the end of this module you should be able to:

- Understand the importance of stakeholder engagement
- Decide who the key stakeholders are and who should be involved
- Determine the engagement plan
- Begin drafting evaluation questions with stakeholders



Getting Started

The first consideration is which program will be evaluated. Once that has been decided, in a series of meetings, a clear description of the program will need to be developed. The following list describes the key elements of a program description:

- Need or problem addressed by the program
- Purpose and rationale of the program, if possible have the program's Theory of Change outlined
- Origin and history of the program
- Program's organizational structure
- Program's stated objectives
- Major service activities and program components

- Clients receiving services through the program
- Service providers, staff and other people involved
- Resources: funding source(s)/ budget

Stakeholder Involvement

All evaluations should have multiple stakeholders. A stakeholder is any person or group who has an interest in the program being evaluated or in the results of the evaluation. Stakeholders may include funders, project staff, administrators, project participants or clients, community leaders, collaborating agencies, and others with a direct or even indirect interest in program effectiveness.

Stakeholder involvement is essential in conducting a program evaluation, from the beginning stages and throughout the entire project. Plans for ensuring this involvement should be addressed in detail in an evaluation plan. This involvement is particularly useful from a knowledge exchange point of view and is important in terms of using the findings for program decision-making and improvement.

To ensure multiple perspectives about the salient issues are being gathered, involve as many stakeholders as possible in initial evaluation discussions. Otherwise, the evaluation is likely to be designed based on the needs and interests of only a few stakeholders—usually the ones with the most power— and may miss other important questions and issues of stakeholders who are not included. While involving every stakeholder may not be realistic, try to consult with representatives from as many stakeholder groups as possible when designing or redesigning the evaluation plan.

The person who assumes the role of project lead on an evaluation works closely with the evaluation team including program managers, program staff and other stakeholders. The project lead will clarify roles and responsibilities, identify why the evaluation is being done, identify who the end users will be, and develop an agreement on what is to be evaluated. A part of their role is to coordinate the work as well as stakeholder communications. Ensuring good communication with stakeholders throughout an evaluation is important. The project lead may be a different person from the program lead or manager.

Identifying Purpose of Stakeholder Engagement

The first step in successful stakeholder engagement is to clarify the purpose of the engagement project. Having a clear purpose will help focus objectives and maximise the impact of activities. Understanding the purpose of engagement also allows for clear communication with stakeholders. From the outset, it is important to define the reason for undertaking stakeholder engagement. This may involve outlining the problems to address, the decisions to reach or the relationships to build. Understanding the purpose of reaching out to stakeholders will inform all subsequent parts of the engagement process.

Adapted from Stakeholder Engagement Toolkit

Purpose of Engagement	Your Ideas
What is the purpose of engagement?	
What are the engagement objectives?	
What are the project objectives?	
What is the scope of engagement?	
What are the risks of engagement?	
What are the benefits for stakeholders?	
What engagement has already occurred?	
What are the negotiable and non-negotiable elements?	
What are the limitations? (e.g. time, staff, resources, etc.)	
What obligations should be considered? (e.g. ethics, privacy, cultural responsiveness etc.)	
Will more than one stage of engagement be required? Is it necessary to engage using multiple methods?	
What can be implemented to ensure a diverse group of stakeholders?	
Who are the critical stakeholders to project delivery?	

Template 1: Purpose of Evaluation

Identify Key Stakeholders

Stakeholder identification will assist in making informed decisions about who to engage with and how best to do so. In the stakeholder identification process, you should also consider the level of influence of the stakeholder or stakeholder group and their capacity for committing to the project.

Identify potential stakeholders for the program evaluation. Be clear on (PHO Program Eval 10 Steps):

- Who are the key, participating stakeholders?
- Who are the primary intended users of the evaluation findings? (You may need to come back to this question once you have identified the evaluation's purpose.)
- What are stakeholder expectations about their level of participation? (Who should be involved in the design, implementation and use of the evaluation?)

Types of Stakeholders	Possible Stakeholder groups	Communication plan
Program Staff	Program staff, Program leadership, Other accountable for program/project	
Organizational Leadership	Executive Director, Program Manager, Board of Directors, Advisory Boards & Steering committee	
Program Beneficiaries	Families, Youth, Children	
Researchers and Evaluators	Researchers, Evaluators, Graduate Students	
Volunteers		
Funders	Funders, Donors, Other funders and co-funders, Collaborating organizations	
Community	Community service groups	
Groups	Referring agencies, Schools, Policy Groups	
Local policy makers and advisors	Advocacy organizations	
Other	Staff from similar programs and/or initiatives, Professional associations	

Template 2: Stakeholder Identification

Public Health Ontario has identified are four levels of stakeholder involvement in evaluations which can be seen in the image below:

- **Core**: closely involved in the program, or will be closely linked to the implementation of the evaluation. Examples: the program lead or the evaluator.
- **Involved**: will be frequently consulted about the evaluation, or part of the planning process. Examples: program staff who may collect data from program participants, decision makers who will use the evaluation findings, or program participants.
- **Supportive**: provide some form of support for the evaluation, such as facilitating access to data or sharing their expertise on evaluation methods.
- **Peripheral**: need to be kept informed. Example: the organization lead.

The stakeholder engagement wheel is a tool for thinking about and categorizing stakeholders systematically. Use it to gauge stakeholders' ideal level of involvement in your evaluation.

Adapted from *Public Health Ontario* https://www.publichealthontario.ca/-/media/documents/E/2016/evaluating-hp-programs-workbook.pdf

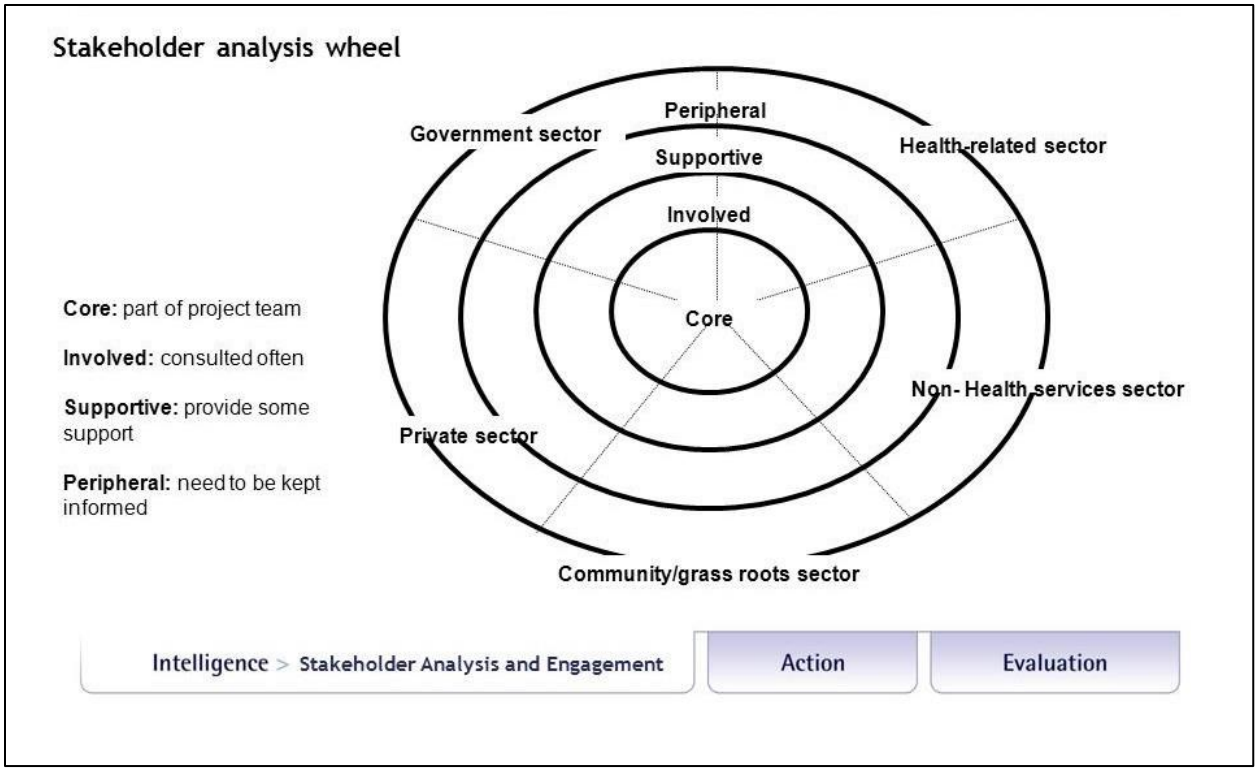


Figure 4: Stakeholder Analysis Wheel from –https://www.publichealthontario.ca/-/media/documents/E/2016/evaluating-hp-programs-workbook.pdf

Develop an Engagement Plan

In the engagement planning process, it is important to tailor the approach and design to address engagement objectives and meet stakeholder needs/expectations. As stakeholders may have differing capacities to participate in engagement, a tailored approach will help accommodate and encourage diversity in participants.

The plan should also include mechanisms to ensure proper documentation is maintained to demonstrate equitable processes for stakeholders and transparent decision making.

For assistance building a meaningful engagement plan, refer to the Public Participation Framework.

An engagement plan should be a live/iterative document that describes and outlines how to engage with identified stakeholders. Specifically, an engagement plan with stakeholders should include:

- A clarification of why this evaluation needs to be done (purpose and objective; what is to be examined and why)
- Decide who the key stakeholders are and who should be involved
- Determine what resources are available to complete the evaluation as intended
- Determine roles and responsibilities
- Form a steering committee or working group for the evaluation and involve others affected by results of the evaluation

- Set up a common, agreed upon and systematic way of keeping track of all information
- Decide on timeframes

Potential Evaluation Questions

At this stage of evaluation planning, relevant stakeholders can begin to brainstorm ideas and ask questions about the program. These are not the final questions to ask when collecting data; rather, evaluation questions describe what is useful to know about the program. Possible evaluation questions could focus on how the program is operating, what outcomes are being observed, or how the program is working in different settings. Referring back to these questions to organize and select key evaluation questions will prove useful over the next few steps.

Module 3: Planning an Evaluation- Program Goals

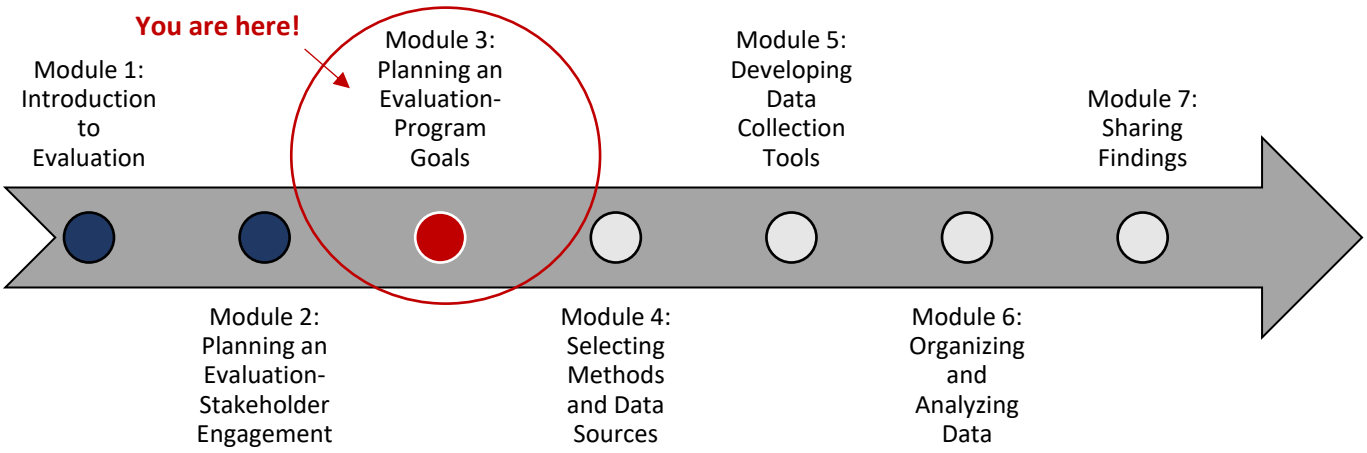
Purpose

The purpose of this unit is to identify the reasons logic models and theories of change are used in program evaluation.

Learning Outcomes:

By the end of this module you should be able to:

- Explain what a logic model and a theory of change are intended to do
- Develop logic model for program



Defining Program Goals

In this case, a goal is a broad statement that describes your program's intent. Your program may have a single goal, or several if it is more complex. A goal usually:

- is general
- provides overall direction for a program
- has no deadline or a long-term deadline; and
- is not measurable in exact terms because it often includes subjective words like "develop" and "improve".

Goal:

What a program is supposed to produce. A goal statement describes the intended consequences of the program being developed.

Goals serve as an anchor for a program. They provide clear end points, around which you can organize many strategies or activities. As the situation evolves, those strategies and activities may change; a well-stated goal will remain. Typically, you will not evaluate the program goal directly.

Theory of Change vs. Logic Model:

A Theory of Change is a tool used to design and evaluate projects by mapping out the logical sequence of an initiative from goals, inputs, activities to outcomes and is a more comprehensive methodology that depicts a larger and often muddled picture.

If you have any questions regarding Theory of Change and Logic Model, please contact the OHTN at info@ohtn.on.ca

A Logic Model is:

> "…a picture of how your program works – the theory and assumptions underlying the program. This model provides a road map of your program, highlighting how it is expected to work, what activities need to come before others and how desired outcomes are achieved."

Adapted from: W.K. Kellogg Foundation Evaluation Handbook 1998, p.35

Before planning evaluation, it is recommended to develop a program logic model. Most logic models include resources, inputs, activities or outputs and broader outcomes. Logic models help to clarify components of a program's goals, objectives and expected outcomes. Whether reviewing an existing logic model, or creating a new one, accurately describing the program through logic modeling is important because it ensures all stakeholders involved fully understand the program.

Adapted from YOUTHREX

Essentially, a logic model graphically illustrates program components with clearly identified inputs, activities, outputs and outcomes. A Theory of Change is another evaluation document that links outcomes and activities to explain HOW and WHY the desired change is expected. When developing a Theory of Change document, it is best to start with a program goal and then deciding what programmatic approaches are needed to reach that goal- "if this, then that" statements. A Theory of Change describes the way in which the desired change comes about. It outlines considerations and makes explicit the assumptions about the program and explains why new activities will lead to the outcomes. While Theory of Change and a Logic Model can be used in tandem there are some cases where one might be more appropriate than the other.

Logic Models	Theories of Change
Representation	Critical thinking
List of components	Pathway of change
Descriptive	Explanatory

Logic models require identification of program elements, which are considered inputs that inform activities which ultimately lead to outcomes While they do show causations by linking outcomes with inputs and activities, they don't show *why* the activities are expected to produce these outcomes.

Example 1:

Organization X wants to know how often participants need to attend a sex-education program in order for improvement in their 'safe sex practices' score.

A logic model will show the program activities and 'to improve test scores' is an outcome. It might show that attendance at the sex education program is an intermediate outcome. However, it would not be able to show that participants need to attend the program at least three days of the week for a minimum of 60 days, and the curriculum must to focus on safe-sex topics, in order for test scores to rise.

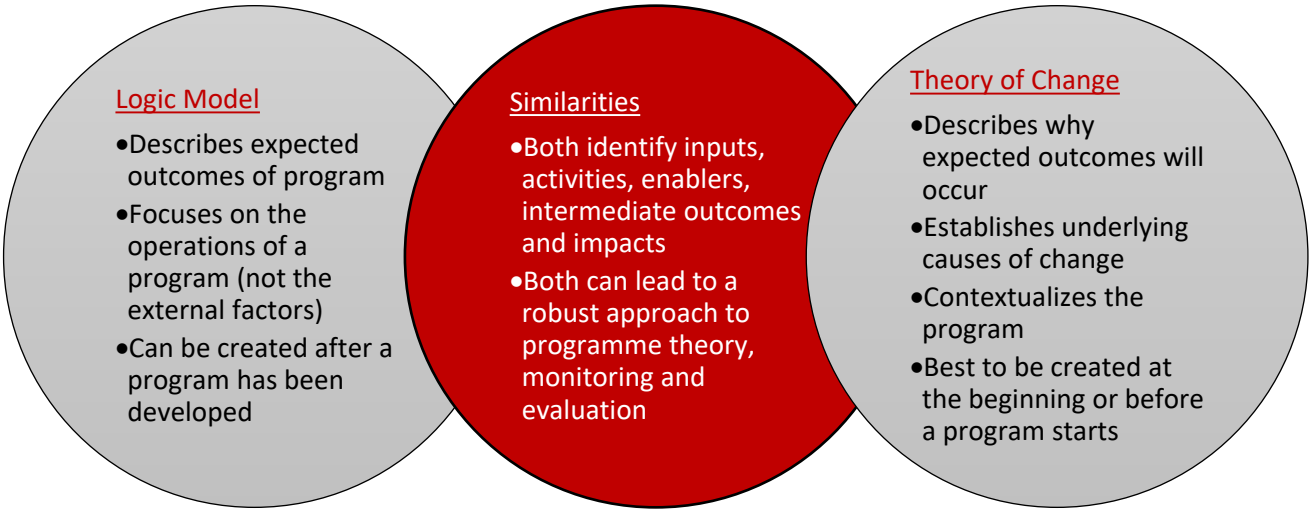
This information is only explained in the theory of change.

Example 1: Logic Model vs. Theory of Change

Example 1 shows a distinction between in theory of change and a logic model. The logic models present a simple visual representation of a program and summarize the complex undertaking of a program into its basic elements, theory of change on the other hand, explains the complex initiative.

Similarities

There is overlap between a Theory of Change and a Logic Model:



A logic model is often created after the programme has been developed, working forward from resources through activities to the end result. A Theory of Change is best created before an intervention starts, mapping backward from the end result in mind to identify the most appropriate intervention.

When to use Logic Model and Theory of Change?

Below are some considerations when deciding whether to use Logic Model or Theory of Change in addition to Logic Model:

Theory of change design a complex initiative, and rigorous plan for success evaluate appropriate outcomes explain successes/and what needs further consideration	Time and resources	-Requires more time and resources due to complexity
	Nature of invention	-Consider the amount of internal and external factors
	Stage of development	-Works best when model is used before intervention beginning, otherwise use backward mapping
	Importance of intervention	-Helps to capture and generate depth of understanding -Better for intensive, in-depth programs
Logic Model "at a glance" overview identify basic inputs, outputs and outcomes summarize complex theories into simplified categories	Time and resources	-Requires less time and resources
	Nature of invention	-Designed to capture a simplfied overview of a program
	Stage of development	-Best to be used after an intervention has been developed
	Importance of intervention	-Better for shorter more staightforward programs

Both theories of change and logic models are very important, although they have very different functions. Logic models identify the inputs, outputs and outcomes of a program by breaking down complex intitiatives into basic elements which provie a visual summary that is useful for a quick overview. Theories of change are useful when complex initiatives need a rigorous plan for success, and help to establish why certain aspects of a program work, and other aspects do not. The most important way to represent a program theory is to ensure that it represents the purpose of the stakeholder, this should be a main focus in the first few meetings with stakeholders in order to establish what works best for everyone.

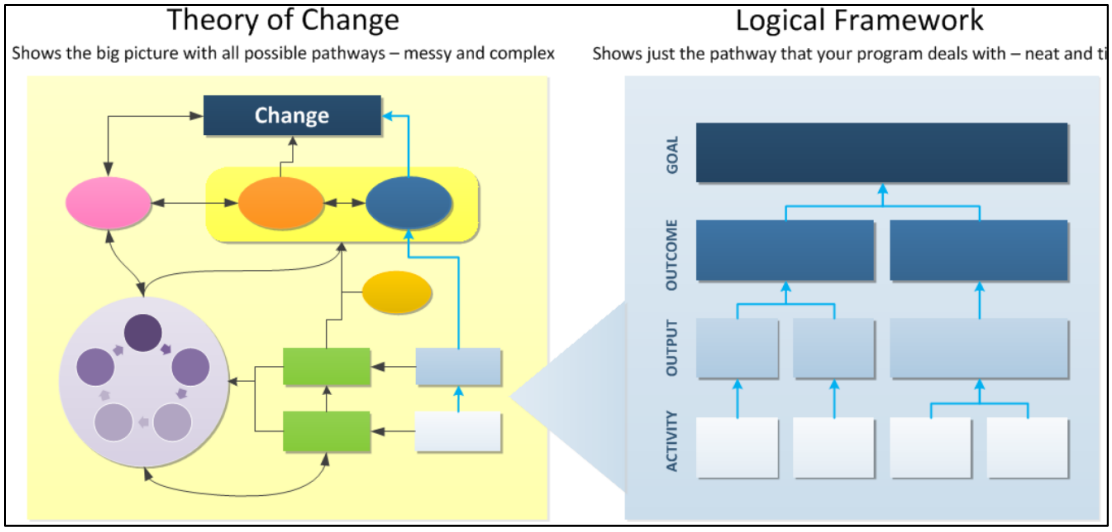


Figure 5: Theory of Change vs. Logic Model: from http://whatworks.org.nz/logic-model/

Summary of Section

A Theory of Change and a Logic Model are in many ways very similar. They both function as a way to map out the resources needed, the main activities, as well as the end results (outcomes and impact). A Theory of Change works to explain *why* a change occurs as opposed to simply what change will occur. As a result, Theory of Change is more complex, and needs to account for the context of an intervention, as well as the outside factors that can be influential. Each program is unique, so deciding between a logic model and theory of change depends on the importance of the intervention, resources, time and skills available.

Theory of Change: "If-Then" Statements

The Theory of Change uses research to illustrate the 'if-then' relationship. Program theories can often be captured in a series of 'if-then' statements—IF something is done with/for program participants, THEN something should change. A program theory should identify why elements of the program will change, and well-established connections between the supporting idea and the service outcomes or goals. The theory of change will explain the links in program inputs and activities to outcomes. This is called the chain of response, which leads to the ultimate end results.

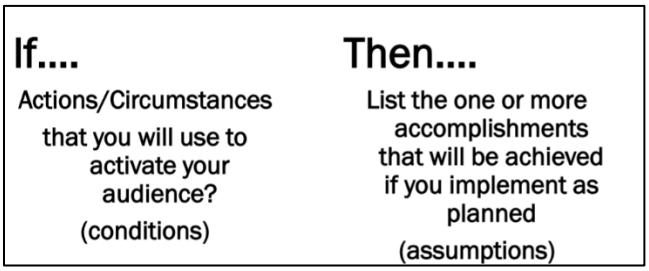


Figure 6: If-Then Statements

Steps to create Theory of Change:

1. Indentify a long-term goal	What is the long-term goal of the program?
2. Conduct "backwards mapping"	What are the outline preconditions to achieve goal?
3. Identify Interventions	What is the outline for these preconditions or what is the Outcomes Framwork
4. Develop Indicators	What will be used to assess permance of interventions?
5. Summarize	What are the various parts to in the Theory of Change

Template 3 indicates 'If-then' program theory

IF
a set of resources are available
(Strategies and Activities)

THEN
the program can provide activities and services.
(Immediate Outcomes)

IF
participants recive these services
(Intermediate Outcomes)

THEN
the participants experience specific changes
(Intended Impact)

Template 3: If-Then Template Adapted from: https://www.wilder.org/sites/default/files/imports/crimevictimservices4_10-05.pdf

These "if- then" statements are superimposed onto the logic model (colored boxes) below to illustrate how the two go together:

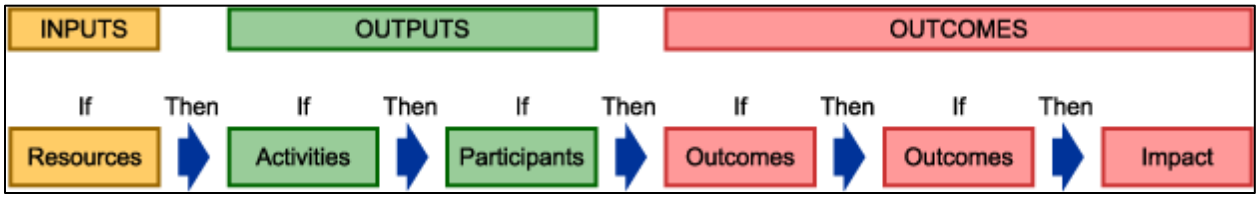


Figure 7: 'If-Then' Statements in Logic Model from https://lmcourse.ces.uwex.edu/Module_1_pages/images/LM_if-then.gif

Example 2 outlines "if-then" statements for an HIV/AIDS program. In this example, the program wants to improve the uptake, adherence and long-term retention of ART through the recruitment and retention of newly diagnosed individuals into support groups:

IF	THEN	IF	THEN	IF	THEN
peer support groups are developed	newly diagnosed HIV positive clients can engage in peer support groups	clients are engaged in support groups	they gain important information and have ongoing peer support	the clients gain information and support	they have a greater likelihood of reaminning in support, care and pre/post ART initiation

Example 2: If-Then Statements for HIV Program

If you have any questions regarding 'If-Then' Statements please contact the OHTN at info@ohtn.on.ca

Here is a sample Theory of Change video and a sample toolkit related to HIV for further exploration.

Developing the Program Logic Model

A logic model is a picture of how a program works, in a basic format. It shows the theory and assumptions underlying the program. A logic model is essentially a roadmap of a program, highlighting expected outcomes and how to achieve them. All logic models represent a logical connection between activities, outputs and intended outcomes, though there are varying methods of designing a logic model. A logic model provides a summary of the key elements of the program in a condensed format, as well as a clear rationale behind activities and prospective achievements within the program. It outlines which activities lead to specific outcomes by providing clear

A Logic Model:

- Summarizes the key elements of a program
- Explains the rationale behind program activities
- Shows the cause-and-effect relationships between activities and outcomes
- Helps identify key questions for your evaluation
- Provides an opportunity for stakeholders to discuss the program and agree on its description and intended results
- Serves as a useful communication tool
- Tests the theory of a program

descriptions of program plans. Logic models assist in identifying the key questions for evaluation.

Collaboration between internal and external stakeholders is essential to constructing a logic model in order to develop a common and in-depth understanding or description of all program elements that will be evaluated. To best achieve a deeper understanding of program elements, it is essential to define the scopes of the evaluation. Each of the components of the logic model is linked in order to logically demonstrate how one contributes to another. This is a crucial part of evaluation, providing a common understanding of the program's theory of change or how a program works, including what resources it uses, program achievements, and timelines for overall goals. Once a draft logic model has been established, components can be evaluated by all members of the team constructing it, and input can be gathered to adjust the logic model where necessary. Including stakeholders in the process of providing feedback on the draft logic model is very worthwhile as it can provide a reference point within the program evaluation, and can help to guide points of success in programming.

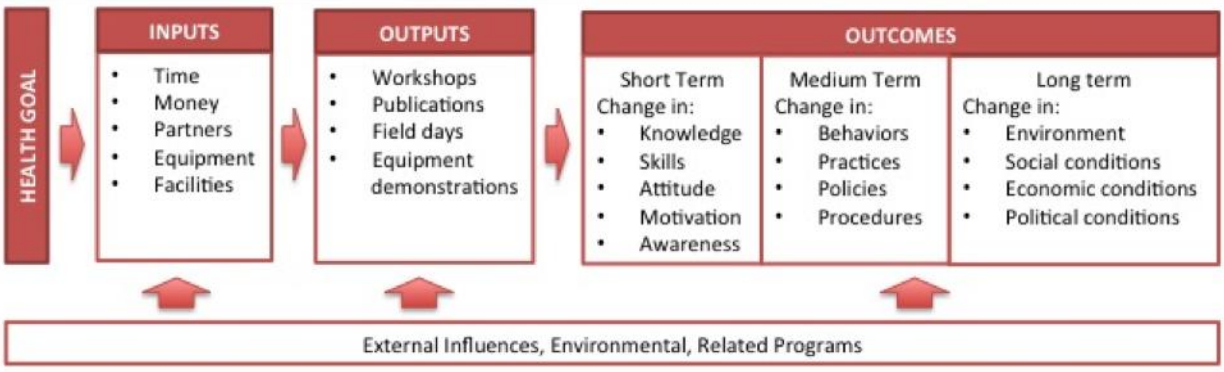


Figure 8: Sample Logic Model

Logic models allow for building consensus among staff and stakeholders about essential program activities and realistic outcomes. They help to articulate and question the beliefs and assumptions that underlie their choice of activity. Outcomes clarify the sequence of events from inputs to outputs to outcomes (Figure 8). Logic models help to identify gaps between

activities, outputs, and required outcomes and highlight opportunities for programming improvement.

See Figure 9 for key terms:

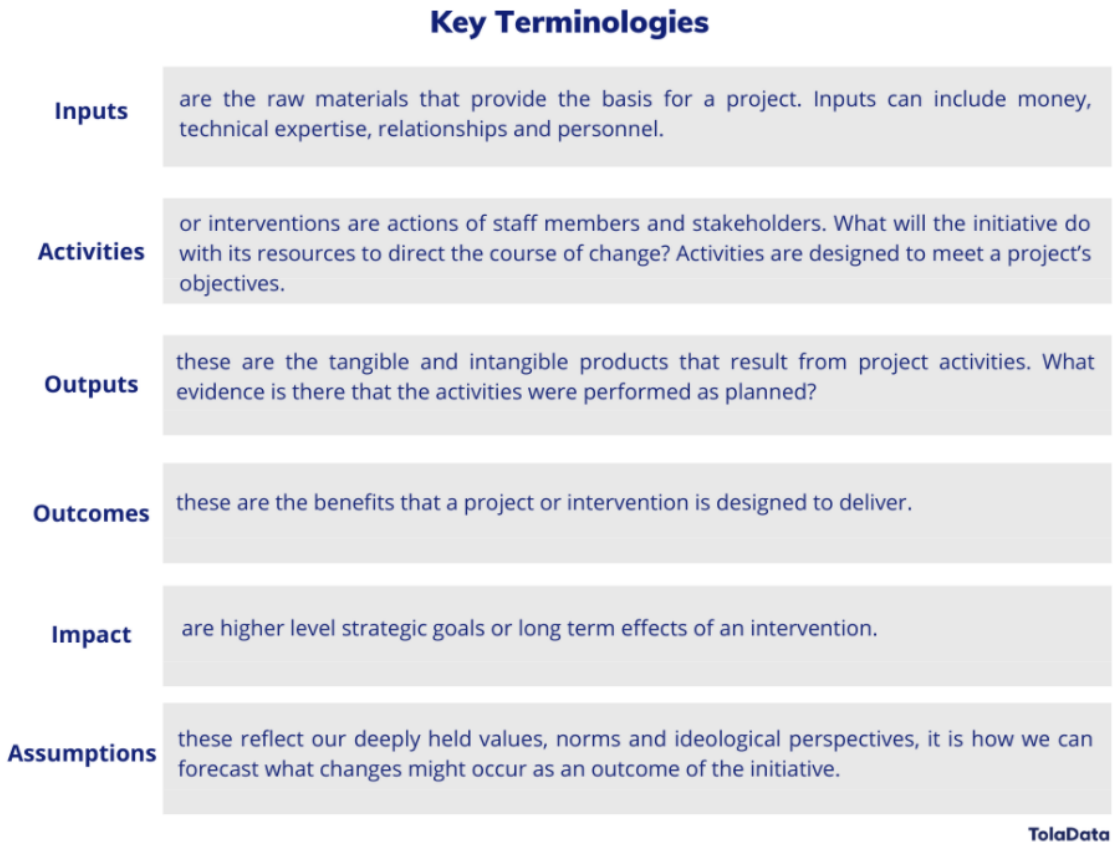


Figure 9: Key Terminologies from: https://www.toladata.com/blog/theory-of-change-vs-logic-model/

Benefits of Logic Model:

- Build consensus and clarity among staff and other stakeholders, including funders, about essential program activities and expected (and realistic) outcomes
- Identify opportunities for program improvements
- Articulates beliefs and assumptions that underlie choice of activities and intended outcomes
- Assess the program's likelihood of success and identify factors that could impact success
- Increase understanding of program performance by clarifying the sequence of events from inputs through outputs through outcomes
- Useful for determining whether planned actions are likely to lead to desired outcomes. A logic model helps to test theories underlying the program design. And this helps planners to adjust program activities while keeping focused on the desired program outcomes in the evaluation fields. Logic models play a role in targeting appropriate evaluation questions, performance indicators and measures within an evaluation plan.

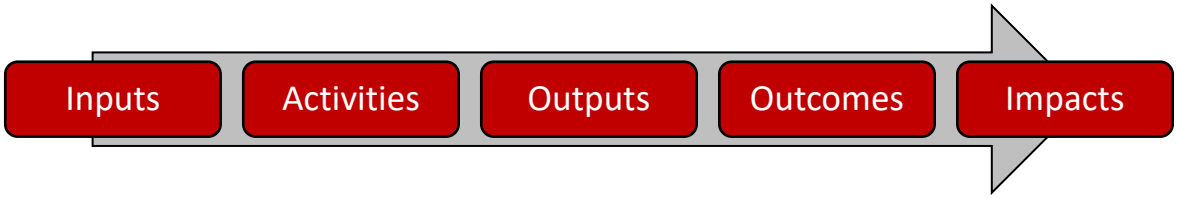
Elements of Program Description:

A program requires a clear description that is agreed upon by stakeholders:

- Overall Goal: consider the major issue that the program will address, what is the impact? What kind of change does the program address?
- Key target groups: who is the program targeting?
- Outcomes: what are the outcomes that the program hopes to achieve?

An effective program description requires clarity and agreement on:

- The overall goal the program is to address
- The key target groups(s)
- The potential outcomes of the program



A good program description requires clarity and agreement on:

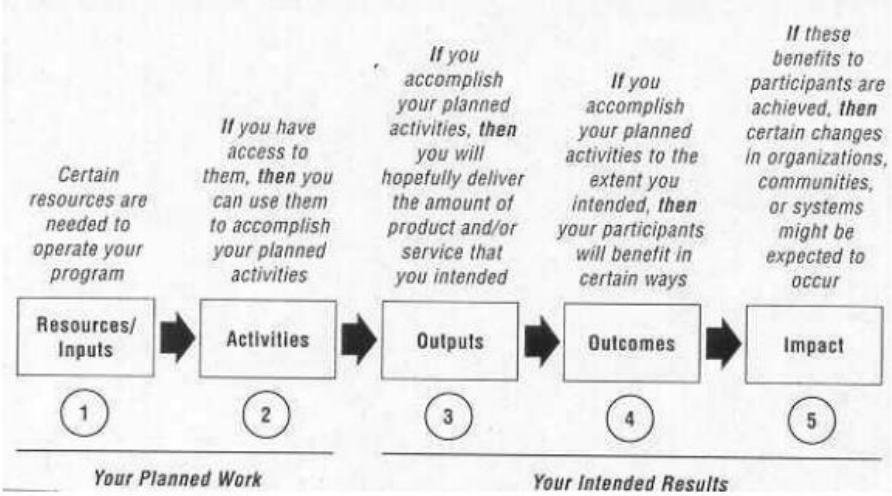
- The activities the program needs to undertake
  - The program activities that the program offers to participants that will bring about the change
- The program logic or program theory
  - The causal relationship among activities and outcomes.
- The context (surrounds) or bounds of the program.
  - The inputs and assumptions

In a logic model, the causation puts an emphasis on "why I think this is going to work" verses the factual or scientific understanding of causation, meaning the reason why something will happen. A logic model is one way of describing a program. The important thing is to have clear program description and developing a logic model is usually the easiest way to get there.

Logic Model Construction

There are various formats of the logic model used. The one below is a "classic" results logic model:

The 'Classic' Results Logic Model



Source: Rogers, Patricia (2006) *Using Programme Theory for Complex and Complicated Programmes* EES-UKES Conference London 2006

Figure 10: Classic Logic Model Results

There are Four key steps in developing a program logic model:

1. Identify and list
    a. Activities
    b. Intended effects or "outcomes"
2. Arrange these in time sequence
3. Elaborate
    a. Add boxes to represent inputs and outputs
    b. Consider assumptions, context and stage
    c. Draw arrows
4. Review and Refine

Figure 11 shows an example logic model made into a table or flowchart:

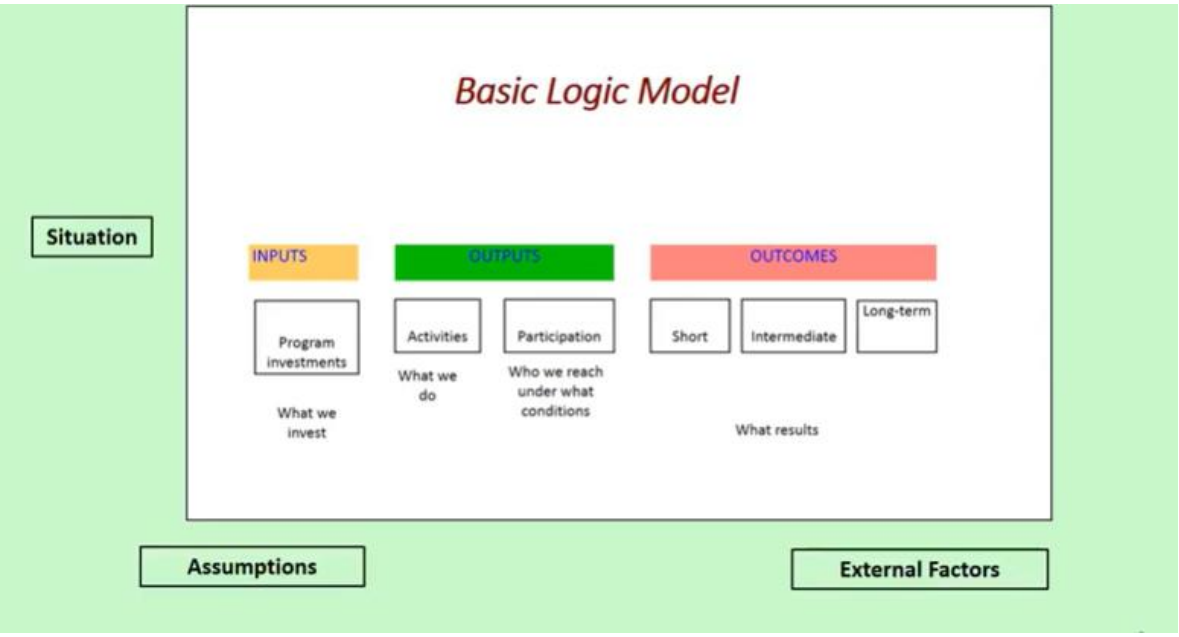


Figure 11: Basic Logic Mode- The 6 Elements of a Logic Model

Here is an example of a Logic Model that has been filled in:

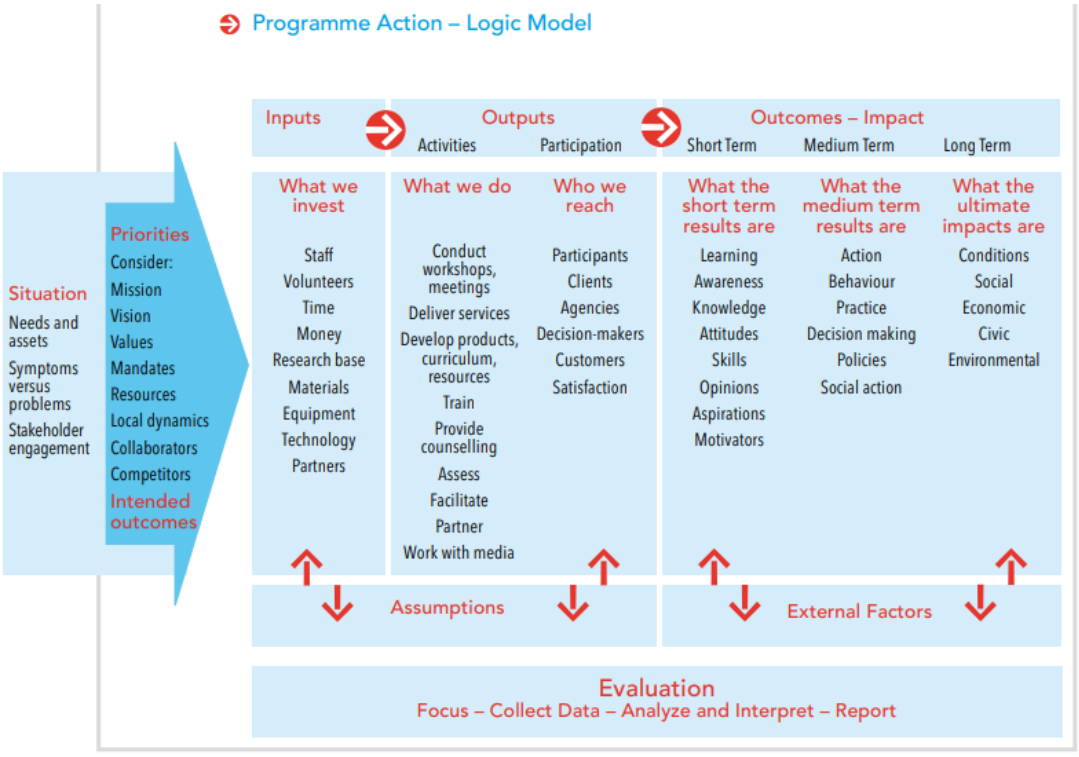


Figure 12: Completed Logic Model

Important Distinctions

A ‘sphere of control’ consists of inputs, activities and outputs that a program regulates on a day to day basis. The sphere of control is measured against the ‘sphere of influence’ which regulates outcomes or the program.

An example of this could be, “I really want to do a good job at my activity. And if I do a good job, my aspiration is that it'll move me specific priorities in the direction that I want and will allow me to take this action”. We call these outcomes. Generally, these come in short, intermediate and long-term outcomes. That's the core of a logic model. Much of the value comes from understanding that big distinction between “what do I control” and “what do I influence”.

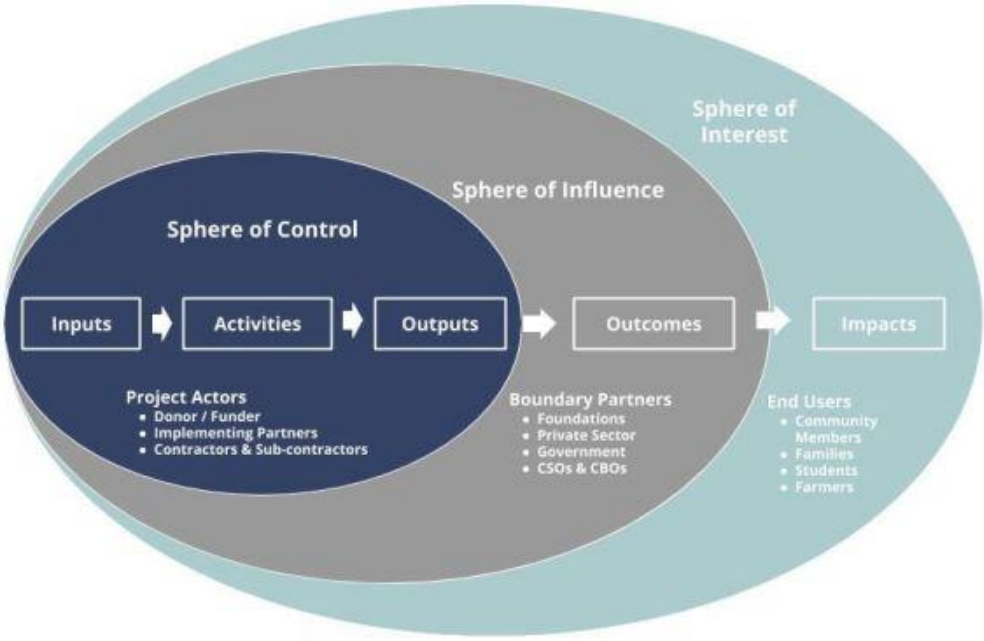


Figure 13: Sphere of Control, Sphere of Influence and Sphere of Interest https://www.rootchange.org/2018/12/19/volume-3-participatory-monitoring-evaluation-and-learning-in-complex-adaptive-environments/

For example, a program that offers training which is considered an activity. The fact that people learn something from the training allows them to gain knowledge which will then be why their behavior might change. In this way my activity is impacted the sequence of outcomes. So first and foremost, the first thing to do is to establish a clear idea of the sequence of events. Often this is one of the biggest challenges when planning evaluation. This video provides further insight into Evaluations. For a deeper understanding about the difference between outputs and outcomes, click here.

Before constructing a program logic model, please use the below chart for a guide:

Logic Model Components

Components	Examples
Need (community need) • Brief description of community and problem being addressed	• *GBMSM have lower rates of STI screening in HIV care settings compared to other populations*
Program Goals • One or two short sentences outlining the main goal and purpose if the program	• *To increase the rate of STI testing in GBMSM*
Rationale • One or two sentences that summarizes the set of beliefs, based on a body of knowledge, about how change occurs in the field with the specific clients (or audience)	• *Research shows that routine STI screenings can be effective in reducing risk of accquiring STI*
Inputs (Resources Required) • This refers to the resources that are required to deliver the program activities. Resources may include staff, materials and supplies, in-kind donations, volunteers, etc.	• *2 FTE coordinators* • *1 FTE manager* • *Evaluation team* • *Budget: $8,000*
Activities • This refers to how a program is delivered (e.g., workshops), and to the program content (e.g., module topics)	• *Implementing targetting training around testing protocol for staff in the clinic* • *Developing a social media campaign to increase testing among GBMSM population*
Outputs • This refers to the products of the activities or the volume of a program's actions, such as products created or delivered, number of people served, number of patients treated or tested or attending sessions etc. It is important to highlight that satisfaction/quality of program would be an output but is commonly mistakenly thought of is an outcome. If individuals are satisfied with the service, it doesn't mean that they have changed/improved. For example, they might want to come again and again but doesn't mean they've changed/benefited in any way/gained anything therefore it is an output and not an outcome.	• *Number of staff trained* • *Number of participants (GBMSM tested)* • *Number of people reached* • *Number of GBMSM reached*
Target population	• *GBMSM living in Toronto*

• This refers to the population served by the program or by each of the components of the program. It can be specified in the 'activities' section if not included elsewhere in the logic mode	
Short-term outcomes • This refers to the immediate or short-term changes that should occur as a result of the program activities. These often include changes in awareness or knowledge.	• *Increased awareness among GBMSM about testing services*
Medium-term outcomes • This refers to the medium-term changes that should occur as a result of the program activities. These often include changes in behaviours or attitudes.	• *Increased testing among GBMSM*
Long-term outcomes • This refers to the long-term changes that should occur as a result of the program activities. These often include changes in social conditions or other long-term effects.	• *Decreased incidence of STD among GBMSM*
Assumptions • A brief list of the facts or conditions that are assumed to be true, enabling change to happen.	• *We are making the assumption around our target population, GBMSM, being best reached out to through social media as opposed to other delivery modes*

Table 3: Sample

Below is a sample of the logic model using the case study above. The first two headings (green and red) include inputs, activities, outputs, target group, short term outcome, mid-term outcome, and long term outcome. We will be covering the aspects under "measurment plan" in the next module.

Program Plan: GBMSM and Testing				**Outcome Plan**			**Measurement Plan**		
Inputs	**Activities**	**Outputs**	**Target Group**	**Outcome Statements**			**Success Indicator** ***(Short-term outcomes)***	**Measurement Tools**	**Evaluation Design**
Resources Budget	*Activities, Tasks, Strategies*	*Deliverables*	*Client, Group*	*Short-Term (Program completion)*	*Mid-Term (Impact) (6-12 mths post program)*	*Long-Term (Impact) (2 yrs + post program)*	*Evidence of Success* ***(at end of program)***	*Surveys, Tests; Other Measures*	*Data Design*
2 FTE coordinators 1 FTE manager Evaluation team Budget: $8,000	Develop training for staff Implement training for staff Create social media content to promote HIV-testing Promote social media content via all social media platforms available	# of staff trained # of GBMSM tested # of social media posts # of social media views/ likes # of GBMSM reached via social media <u>Administrative</u> - # hrs meetings - # hrs training - # hrs coordination - # days evaluation	All GBMSM and transgender clients who are over the age of 16	*Outcome 1: Increase the rate of HIV testing among GBMSM within the clinic*					
				increased awareness among GBMSM about testing services Increase HIV awareness and knowledge regarding safe sex practices Awareness of resources in the community	Increased HIV screening Increased proportion of newly tested/never been tested Increased positive HIV outcomes including linkage to care, antiretroviral therapy (ART) uptake, and viral suppression	Reduced new HIV infections Reduced new HIV diagnoses	<u>Clients Serviced:</u> Year 1= ~800 diagnostic tests Year 2= ~700 diagnostic tests 100% of clients who met the program inclusion criteria were connected to program	<u>Client Measures</u> - Ease of process - Engagement/ Satisfaction - number of tests/ diagnoses conducted <u>Service Provider Measures</u> - Ease of process - Engagement/ Satisfaction	-File review - Pre/post surveys collected in person and online - Focus Groups - 3 to 6 month follow-up Interviews

Table 4: Completed Logic Model Sample

When to develop a Logic Model?

The best time to develop a logic model is early on in the planning stages of evaluation, in order to identify which activities must be included if the desired outcomes are achieved. During evaluation, a logic model should be developed as a first step so that it can serve as a framework and guide for evaluation questions. However, this does not always happen, so even if a program is already implemented, or evaluation has already begun, it is important to develop a logic model as soon as possible in order to maintain focus. It is also important to review an already developed logic model as it is not unusual for a program to shift or change throughout implementation (e.g. Target demographic may include less or more populations, which will shift the logic model). A logic model should be reviewed every six to 12 months in order to stay current.

Determining Evaluation Questions

Determining evaluation questions is a key activity in the evaluation planning stage to identify learning from the program. This is a team engagement activity, that needs strong leadership and facilitation in order to reach a consensus. Evaluation questions are broad in nature, and reflect the priorities of the evaluation team. Each question is either linked to the activities/outputs or target groups identified in the logic model which is a process evaluation, or linked to the outcomes which is an outcomes evaluation (see Figure 14) and these sample evaluation questions for more information.

PLANNING YOUR EVALUATION
IDENTIFYING EVALUATION QUESTIONS – EXAMPLES

	Examples of Evaluation Questions
	Activities (PROCESS)
Think about which activities contribute towards the program's outcomes. Are there any activities you are particularly concerned about?	Were activities implemented as planned? (how often, when, where, duration) To what extent was there program fidelity (adherence to the intended model of practice)?
	Did the activities vary from one site to another? Or one staff person to another?
	Were required resources in place and sufficient?
	Did staff think they were able to implement the activities as planned? If not, what factors limited their implementation?
	Did staff and community partners think the partnership was positive?
	Did community partners think the activities were implemented as planned?
Think about who the program is designed for. What do you need to know about who you are reaching and who you are not?	What activities worked well? What activities did not work so well?
	What was the cost of delivering the activities?
	What are best practices in relation to program delivery?
	Target Groups (PROCESS)
	How many children/youth and/or families were reached?
	What are the program participants' characteristics? (including presenting issues and demographics) Did the program reach the intended target group?
	To what extent did activities reach children/youth and/or families outside the target group?
	What proportion of children/youth and/or families were reached?
	Were potential participants (non-participants) aware of the program?
	Were participants satisfied with the delivery of the program?
	How do staff, community partners and referring agencies feel about the program?
	How did participants find out about the program?
Think about which outcomes are most crucial. Which outcomes are the most difficult to achieve?	How many children/youth and/or families completed the program?
	Outcomes
	Have the short-term outcomes been achieved? (List the short-term outcomes of the program from the logic model.)
	Have the medium-term outcomes been achieved? (List the medium-term outcomes of the program from the logic model.)

Adapted from,: The Public Health Agency of Canada Program Evaluation Toolkit, Nancy Porteous, Barbara Sheldrick and Paula Stewart (1997): http://www.phac-aspc.gc.ca/php-psp/toolkit-eng.php

Figure 14: Identifying Evaluation Questions

Reviewing the Evidence

> "Another highlight about developing the [evaluation] framework was that it gave [the agency] the chance to research other more effective ways to do consultations which opened the door to a potential of an entirely new model to implement the [evidence-informed practice]." — Evaluation Grant Recipient, 2008/09

Reviewing literature in specific areas relating to program outcomes is an important step to further developing, reviewing and implementing an evaluation framework. At the planning stages, it can help to identify other evaluations of similar programs that have been conducted including key evaluation questions, outcomes being assessed, measures used and barriers or challenges encountered. This is important information that can help inform development of the evaluation framework. At the implementation stage, it is important to investigate evidence and informed practices as they relate to the program as this will help to inform optimum program delivery.

Module 4: Selecting Methods and Data Sources

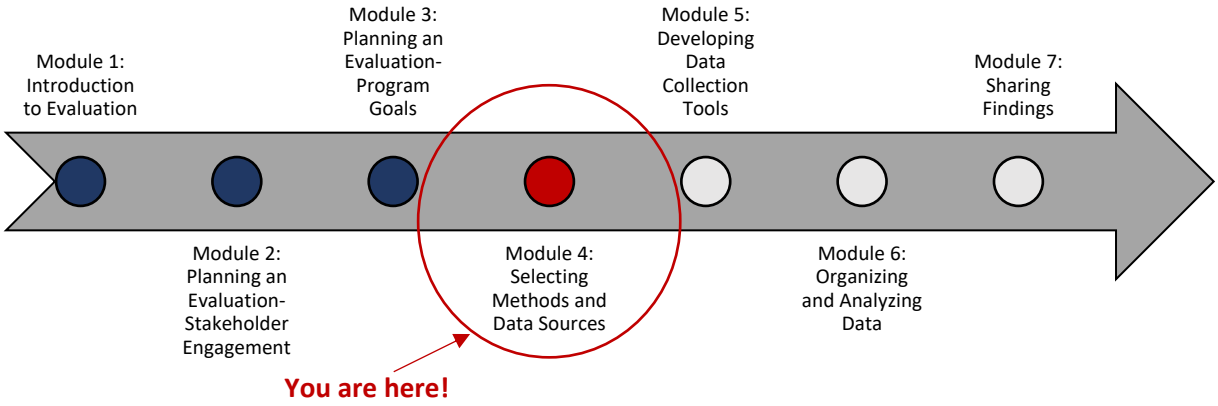
Purpose

The purpose of this unit is to identify the appropriate data collection methodology.

Learning Objectives:

By the end of this module you should be able to:

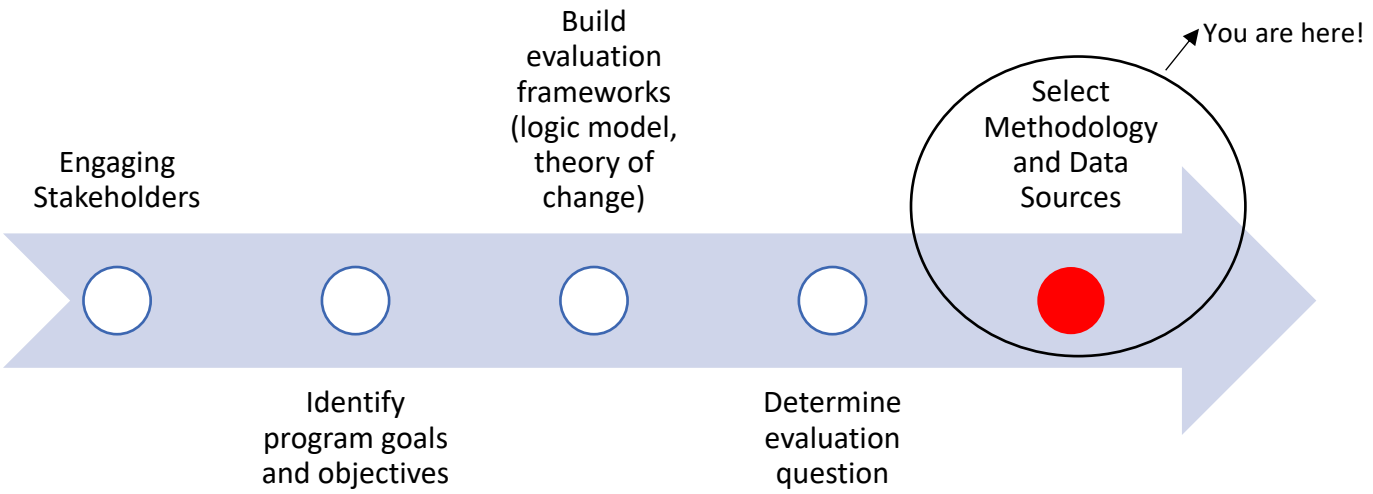
- Identify your appropriate data collection methodology, data sources, and indicators specific to your evaluation question



Selecting Data Collection Methodology for Specific Evaluation Questions

This section involves collecting stories and other data to answer process and outcome evaluation questions through measuring outcomes. This step will also lay the groundwork for conducting outcome

evaluation which assesses the effects or program interventions.



As the evaluation questions have been established and prioritized, the next step is to select methods. Some evaluations require a multi-method approach, in order to understand if the intervention worked, and *why* the intervention worked. In most cases, quantitative and qualitative data must be collected to understand how the program has been implemented (process evaluation), and the changed the participants are experiencing (outcome evaluation). Both process and outcome evaluation are important because documenting implementation is directly relevant to understanding the outcomes. Having an in depth understanding of program components that have been implemented, and to what degree provides a deeper understanding of what is successful.

Adapted from*: CIHR and YouthRex*

Identifying Data Sources

The process of identifying data sources is often interwoven with that of selecting methods. For example, if quantitative program data is not available to inform a specific evaluation question, there may be a need to select qualitative methods. In planning a research project, a researcher may decide to remove a particular question from the study. In evaluation, this is rarely acceptable—if the question is important, there should be an effort to answer it. The best data sources in many cases are individuals and participants. Organizations have formal approval processes to access program data, for both staff or internal reports.

Identifying Appropriate Indicators

Indicators provide information that will show how successfully a program is achieving its intended activities and outcomes. While outcomes are often stated as the intended impacts of a program, indicators will show tangible, measurable and observable information about the program. More than one indicator can be assessed to more accurately respond to a particular evaluation question. An indicator can be defined as a summary statistic used to give an indication of a construct that cannot be measured directly. For example, quality of care cannot be measured directly, however, particular processes such as adherence to best practice guidelines, and outcomes such as change in participant knowledge are known to be related to quality of care.

Questions to consider:

- What is the best way to measure program's positive effect on participants?
- What changes are to be expected in participants as a result of their participation?
- What features of the program are important in achieving intended effects and therefore need to be monitored?
- What indicators are there that the program is not reaching intended effects?

Good indicators:

> "…. should actually measure what they are intended to (validity); they should provide the same answer if measured by different people in similar circumstances (reliability); they should be able to measure change (sensitivity); and, they should reflect changes only in the situation concerned (specificity). In reality, these criteria are difficult to achieve, and indicators, at best, are indirect or partial measures of a complex situation"
>
> -Alberta Heritage Foundation for Medical Research (1998: 5).

Some examples of indicators are:

- participation rates
- efficiency of referral process
- wait times
- number of referrals
- improved scores on a standardized measure or feedback from program participants

Essentially, trustworthy indicators are **S.M.A.R.T. indicators** – that is, they are **Specific, Measurable, Attainable, Relevant, and Trackable**. They can be quantitative/numeric (e.g., the number of participants who complete a program) or qualitative/non-numeric (e.g., responses to an interview question about perceptions of well-being).

Identifying Data Collection Methodology

After selecting indicators, determine which data collection processes are most suitable for the organizational and evaluation needs. Deciding on which method(s) to use depends on what is being measured, the purpose of the evaluation, available resources, and other factors unique to the agency (e.g. the culture of the agency). Wherever possible, use standardized measurement tools to increase reliability and validity of data such as Outcome Measurement Tools.

Adapted from: *OntCentre of Excellence+ document on data collection methods*

Tips to avoid pitfalls

- Determine what you want to know. Don't start with the data (and indicators) that are readily available.
- In selecting indicators, evaluate them for validity, robustness and transferability before proposing them. Don't just use an indicator because it's available.
- Understand what the indicator is really telling you – and what it isn't.
- Limit the number of indicators, focusing resources on the strongest ones.
- Choose indicators that cannot be easily gamed.
- Ensure that those who gather and analyze the data (and are aware of what an indicator is actually measuring, data quality, etc.) are included on your team.
- Remember that there may not be an appropriate indicator for many of the evaluation questions you hope to address (Bowen & Kriendler, 2008).

Choosing your Evaluation Design

Most program evaluation designs in the non-profit sector are non-experimental/descriptive in nature. The type of design determines the claims related to research findings. For example, in order to make a claim that a program affected youth in outcomes, is to use the experimental research design where participants are randomly assigned to either a treatment condition, or a control group. If the design does not include random assignment to conditions, then a causality cannot be drawn., which is important to report in the findings. Non-experimental and quasi-experimental designs are very common in grassroots program evaluations, and especially appropriate because random assignment and control groups are usually not feasible.

Evaluation Designs include:

- Non-experimental
- Quasi-experimental
- Experimental designs

Consider the following when selecting data collection method:

- **The purpose of evaluation:** will this method gather information that can be analyzed and presented in a way that will provide enough feedback to answer evaluation questions?
- **Participant characteristics**: factors such as respondent availability, access, literacy levels, and cultural context must be considered
- **Available Resources:** Ensuring adequate resources available (e.g. Time, funding, staff to design, implement and analyze information)

- **Type of information needed:** Examples of information needed are numbers, percentages, comparisons, stories
- **Interruption to participants:** which method will be least intrusive?
- **Program timeline:** when will the program begin? Is the program already running? Has the program finished?
- **Participants involved:** are there are least 10 participants in the program? Are there more?

Here are some examples of source for evaluation data:

Document Review	• Intake forms, activity reports, progress Reports • Contact logs • Meeting Minutes • Survey/Interviews with participants, clients or staff
Quantitative/Numeric Data Sources	• Pre-interim-post or pre-post • Post-only • Retrospective post-then-pre
Qualitative Data Sources	Qualitative data is non-numerical and is especially useful for gathering rich, in-depth, descriptive data from a small sample. • Focus groups • In-depth Interviews • Observations and Field Notes • Arts-based Methods • Mixed-Methods

Table 5: Sources for Evaluation Data

Ethics

All evaluations should consider ethics. It is important to review ethical guidelines and ensure these are being followed, especially if this is a research project and not just an evaluation project. Research projects undergo research ethics clearance procedures, so it is particularly important.

Five Key Ethical Principles

1. Do no harm
2. Voluntary Participation
3. Informed Consent
4. Parental/Guardian Consent for under 16 years
5. Confidentiality
6. Anonymity

It is essential to develop and include a consent page as part of any data collection process, which will outline rights of confidentiality and anonymity of participants. Prior to administering, inform program participants in writing of the purpose of the evaluation. That letter should include their rights to confidentiality and anonymity should they decide to participate, and if they should refuse participation in the evaluation, it does not affect their services in any way.

Assess the agency's interest and ability to conduct ethical evaluation with participants by answering these questions:

- How will the agency explain the purpose of the evaluation to participants?
- How will the agency involve and meaningfully engage participants?
    - Is there a mechanism for participants to contribute to the evaluation design and methods used?
    - Are there supports during and after evaluation research?

Identifying Outcome Measurement Tools

Outcome evaluation focuses on measuring the intended effects of the program on the targeted population – short and/or intermediate outcomes such as changes in knowledge, skills, attitudes and behaviour. Although an important part of evaluating a program, measuring outcomes can be complex and time consuming. When planning an evaluation, it is important to focus on key outcomes that are important to stakeholders in order to ensure feasibility of the evaluation.

To narrow the list of outcomes that may be measured, it is helpful to ask the following:

Importance to Stakeholders	Different outcomes may have different levels of importance to different stakeholders. It will be important to arrive at some consensus.
Sphere of Influence	For example, a sexual health educational program to improve sexual health-related outcomes for youth cannot be held accountable for outcomes related to a drug cessation program to which some of the youth are referred.
Stage of Delivery	Ensure that the intended outcomes are achievable within the timelines of the evaluation.
Measurable Outcomes	There are many standardized measures with strong validity and reliability that are designed to measure specific outcomes. The challenge will be to ensure that the selected measure is appropriate for and easy to administer to the target population (e.g., not a heavy time burden, not too complex).

When selecting measures, it is important to consider their validity and reliability as well as practicality. Where possible, it is useful to employ standardized tools and measures that can be

adapted to the evaluation and have already been tested for validity and reliability. This has been briefly explained below:

Validity

A measure is valid to the extent that it measures or captures what it was intended to measure both within the program and in the greater population. This is necessary in order for the results to be accurately interpreted and applied.

Questions to consider for ensuring validity:

- With what target populations has the measure been used?
- With what additional measures has this measure been correlated?
- What outcomes have been assessed using this measure?
- How accurate a prediction of significant outside criteria does the measure provide?
- How closely do the measures' reported objectives correspond to the objectives?
- What have reviewers and critics said about the measure?

Reliability

A measure is considered reliable in any given situation when it produces the same results repeatedly. Inconsistent data collection methods can affect the reliability of measures; for example, changing the wording of questions or asking interview questions in a different sequence to different respondents.

Questions to consider for ensuring reliability:

- Do the authors indicate the size and nature of groups for which data is reported?
- Do they indicate the type of reliability coefficient computed?
- Do they give the mean and standard deviation for the groups?
- Do they report reliability for each type of group that may be included in the evaluation?

Additional questions to consider when identifying potential measures:

- General Reference Information?
- What is the name of the measure?
- What is the date of publication?
- What is the cost?
- How long does it take to administer?
- It may also be important to identify the author and publisher directly to obtain more specific information about the measure (ex: directions around publication)

Here is a list of practical considerations before deciding on a tool:

- Are the instructions and procedures suited to the population? (equity considerations)
- Are the time requirements reasonable for the purposes?
- Is the measure sensitive to change?
- Is the format that is to be used legible, attractive and convenient?
- How much time is required in scoring the measure?
- Does the staff have the skills to administer and score the instrument? If not, are there funds available to hire someone?
- Were the norms for the measure developed on a similar population?
- How much does the measure cost?

Identifying Process Measures/Tools

Process evaluation focuses on the services that were delivered to the targeted population, and is based on a comparison of the intended program implementation or delivery and intended target population (reach) with the actual implementation, delivery and reach. A process evaluation is useful for monitoring program implementation, for identifying changes to enhance program delivery, and improving access and participation of the program's targeted population. In other words, a process evaluation tells us whether the program is being delivered as intended and what is working well.

Process measures are often collected from the moment of program entry, while programming is underway, and at program completion. Process measures are essential to document who is being served and what services they are receiving. If a program is not being implemented as intended it cannot be expected to affect later measures of outcomes. Process measures monitor the amount and quality of a specific type of activity and output. The most common type of process measure is a counting system that keeps track of how much of something is being administered. For example, if an organization attempts to increase client engagement by creating a client feedback system, recording the number of clients who give their feedback can be one measure of program delivery. Other types of process measures are more complex because they require more than a tallying system. Examples are the characteristics, behaviors, attitudes, opinions, and beliefs of individuals who gave their feedback.

Examples of process evaluation questions, indicators and measures are shown in the table below:

Evaluation Questions	Link to activities in logic model	Indicator(s)	Data Collection Method(s)	Data Collection Tool(s)	Respondent(s)	Person(s) responsible for Data Collection	Timing of Data Collection
What were clients expereiences and impressions of social media content?	Social media posts	Clients providing feedback on social media psots	Focus Group	Focus group questions developed by the steering committee	Clients	Program Coordinator	At the end of the program (June 2022)
What are the demographic characteristics of the clients served	GBMSM and transgender clients who are over the age of 16	Demographic info (ex: age, family composition, etc.)	Survey	Survey developed by the steering committee	Clients	Program Coordinator	At the beginning of the program (January 2022)

Figure 15: Process Evaluation Framework-Example

Module 5: Developing Data Collection Tools

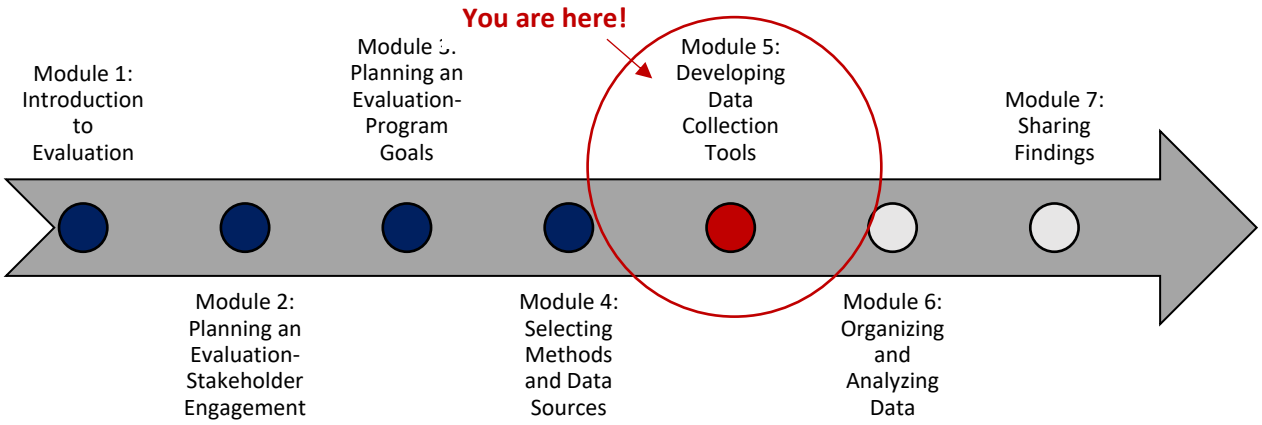
Purpose

In the previous section we went through selecting appropriate data measures and tools. However, it is possible to develop unique data collection tools.

Learning Objectives:

By the end of this module you should be able to:

- Identify and develop the appropriate data collection tool(s)



Some of the basic tools listed below are not associated with specific analysis methods. All can be analysed using a range of different techniques and approaches. Some tools, such as case studies or focus group discussions, are more often analysed using qualitative techniques, whilst others, such as surveys, tend to be analysed quantitatively. Most of the tools listed below can be used at any stage of a project or programme cycle. They are routinely used during project or programme design, planning, monitoring, review, evaluation and impact assessment.

The following steps provide useful guidance for this process.

Steps	Key question to answer
Data sample selection	Will a sample be necessary?
Data collection	How are you going to find your information : by measuring, interviewing, group discussions, observing?
Data recording	Who will use which formats to write visualise, record data and impressions
Data storing	Where will data (raw and analysed) be stored, how and by whom?
Data Collation	Who will use what methods to group data into a logically ordered overview?
Data analysis	Who will examine the data using what method to give them meaning and synthesise them into a coherent explanation of what happened and what needs to now be undertaken?
Information feedback and dissemination	At what stages and using what means will information be shared with project and partner staff, preliminary stakeholders, steering committees and funding agencies?

Adapted from IFAD Managing for Impact in Rural Development - A Guide for Project M&E,2002, section 6 page 5.

Figure 16: Guidance for Impact Assessment

Sample Size

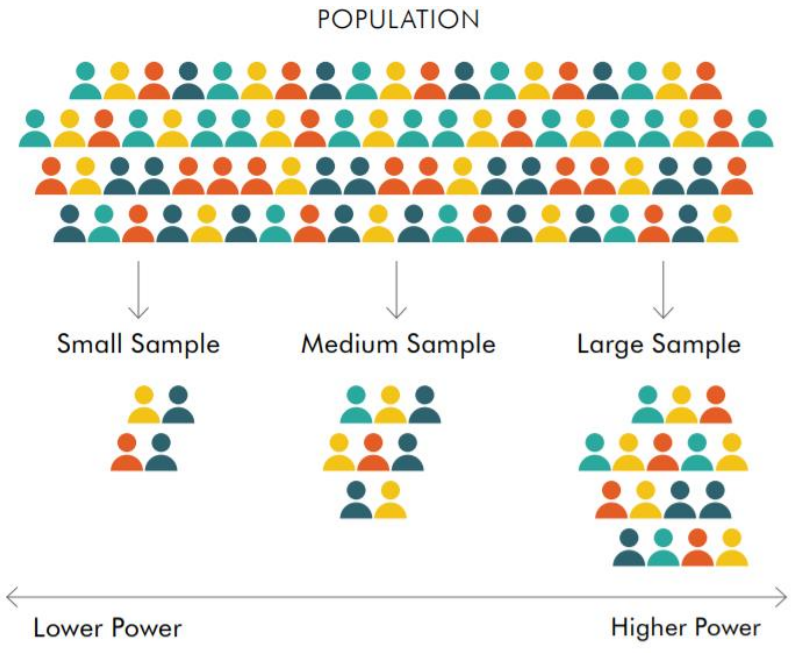


Figure 17: Population Samples

When designing an evaluation, it is essential to determine the number of participants to include in the sample, as it is rarely possible to include the entire population of interest in the study sample. The sample population is therefore the most feasible representation of the population. The study sample is a subset of the broader population, while larger samples are more likely to be representative of the original population and more likely to capture impacts that occur within the population. Larger samples increase the precision of impact estimates and the statistical power of the evaluation. It is important to consider expected levels

of attrition, as it reduces the sample size and power. Anticipating the attrition rates will effectively increase the initial sample size to ensure that there is sufficient power to detect the impact of the program at the conclusion of the intervention.

Adapted from: *https://www.povertyactionlab.org/sites/default/files/research-resources/2018.03.21-Rules-of-Thumb-for-Sample-Size-and-Power_0.pdf*

Surveys

A survey is most appropriate when evaluation questions are best answered by the participants themselves. There are aspects that cannot be directly observed and measured such as attitudes and beliefs or aspects that cannot be observed such as daily intake of drugs or alcohol. However, not all information is best collected through a survey, it may be more direct and useful to use another method. A variety of alternatives exist such as:

- Observations
- Existing data, records, documentation (see section on Secondary Data-Collection)
- Tests of abilities
- Case studies

Successful questionnaires start with thorough planning:

Planning Successful Questionairres		
	Define Objectives:	Be sure to define what information is needed, and how to use the information to answer evaluation questions. questions. This will reduce the risk of gathering unusable information.
	Numer of Participants:	Selecting the type of participants, to include is part of determining the objectives. It is necessary to determine if this should include all possible participants, or just a sample. This will depend on the number of possible participants and resources available.
	Clear Questions:	Use clear and simple wording written at the reading level of your participants. Avoid using abbreviations, jargon, or colloquial phrases.
	Type of Questions:	Decide when to use closed-ended versus open-ended questions. Keep in mind that open-ended questions are more time-consuming to analyze. Refer to The Question Appraisal System (QAS-99) is a method for identifying and fixing communication problems (see Appendix: *Helpful Resources*).
	Demographics:	Include demographic questions such as sex, race, age, education, and where the participant works or lives. The purpose of these questions is to describe subgroups of respondents. Limit the demographic questions to only those that are important for analysis.
	Logical Order:	Place questions in a logical order that flows well. Start with less sensitive questions and end with more sensitive questions. Order the questions in a way that makes sense to the participant, such as by topic area.
	Pilot Test:	Test the questionnaire before it is administered. It will assist with determining if participants will understand the questions, if it provides the necessary data and how long it takes to complete. Test the questionnaire with a small group who are similar to the intended participants.

Table 6: Planning Successful Questionnaires

Adequate response rate

Response rate is the number of participants that responded to the questionnaire divided by the total number of participants included in the evaluation. Higher response rates strengthen the evaluation results.

Tips to achieve an adequate response rate:

- Communicate the value of the questionnaire to participants
- Communicate the purpose of the questionnaire, how the data will be used, and how the results will help the participants
- Follow-up: if the questionnaire is administered by mail or electronically, a team member will need to contact, and re- contact the participants, perhaps a few times. The more follow-up contacts, the higher the response rate.
- Provide incentives: providing modest financial or other incentives to participants increases the likelihood that they will complete your questionnaire.

Method of Delivery

Surveys can be administered in many different ways, which are commonly divided into two categories: interview-based and self-administered. Common interview-based mechanisms include face-to-face interviews and telephone surveys. Self-administered survey instruments commonly include mail back surveys, hand-delivered questionnaires, and Web surveys. The following table is a brief synopsis of each survey type and various positive and negative aspects of each.

	Description	*Positives*	*Negatives*
Face-to-Face Interview	A directed, one-on-one conversation ranging from casual to highly structured	+ Obtain great level of detail + Ability to observe non-verbal communication along with verbal responses	- Analysis of results can be cumbersome and time consuming - Limited generalization to a greater population
Telephone Survey	A directed one-on-one telephone interview ranging from casual to highly structured	+ Highly effective in generating timely responses + Large numbers of surveys can be acquired in a short time period	- Skilled interviewer is needed to help guide respondents through the survey - A representative sample can be a challenge - Respondents can end the call at will
Mail-Back Questionnaire	A collection of questions presented on paper in a sequential, systematic order that is received by mail, completed, and then mailed back to the researcher	+ generally less expensive than telephone surveys + Participants have a greater understanding of the questions since they are read firsthand	- Potential low response rate - No opportunity for clarification if a respondent doesn't understand a question
Hand-Delivered Questionnaire	Method where surveys are hand-delivered to respondents and mailed back to the researcher following completion	+ Generally greater response rate compared to mailback + Provides an opportunity for face-to-face interaction with respondents	- Limited opportunity for clarification if a respondent doesn't understand an item - High level of engagement required from the researcher
Web Survey	A collection of questions presented in a sequential, systematic order completed via the Internet	+ Allows great speed and flexibility to respondents + Little-to-no cost and minimal supplies required	- Requires technical expertise by researcher - Respondents can easily terminate survey before completion - Can be confused as SPAM

Figure 18 from: https://coast.noaa.gov/data/digitalcoast/pdf/survey-design.pdf

While there are multiple ways to deliver a survey, using one delivery method to standardize the data collection methodology will organize the data easier. Offering multiple ways to complete the survey increases survey response rate, however it is important to include a record of how each participant completed the survey. This will be useful to report in the data analysis sections, and may be interesting to note if any differences exist once the populations are stratified.

How long should the survey be kept open?

In some cases, surveys need to be kept open for the duration of the program length. Aside from those instances, determining when to close a survey can be difficult, an effective guideline is to check on three markers daily to take stock of the progress being made against the sample quota. Make a simple graph of your daily response rate by tracking:

- Good Completes: How many respondents successfully finish the survey?
- Screen Outs: How many respondents did not qualify to take the survey?
- Abandons: How many respondents qualified for the survey but abandoned before finishing?

For an email invite, expect to see almost half of all respondent activity within the first 3 days of invitation. For social media invitations the bulk of responses will come within the first 24 hours of posting. There may be more responses after these estimates, however it will begin to slow down

Due of this law of diminishing returns, it is beneficial to change methods after 3 or 4 days, and use other tactics, new or additional approaches to recruiting and new incentives that will increase survey response rate. It is best to keep the survey open for a maximum of 3 weeks.

Language

Surveys can be simple and still capture rich data. Using simple and direct language will minimize the risk of misinterpretation and limit confusion for participants. When drafting questions, consider the audience and remember that some concepts may hold different meaning for different people.

Be as specific as possible when posing questions: "do you exercise regularly?" might hold different meaning for different people, whereas "how many times a week, on average, do you exercise?" is a very clear way to ask the question. The revised version of this question is more precise and will give objective answers. By using simple phrasing, participants will know exactly what the questions means.

Lastly, to help participants focus, avoid asking compound or double-barreled questions. It is recommended that you break down complex ideas into several questions. For example, when asking "Do you exercise regularly and eat well?" participants may answer "Yes!", however this does not outline which question they are answering yes to.

When conducting self-administered surveys consider the literacy level of the respondents. Respondents with low literacy levels will have greater difficulty completing a self-completion or postal questionnaire. In this case a face-to-face or telephone interview survey would be advisable. If that is not possible, assess the literacy level needed to complete the survey is by assessing the document's readability statistics on *Microsoft Word* using the Flesch-Kincaid Grade level test. This will ensure that the questions are simple, and use words that are easily understood by everyone.

The Flesch Reading Ease Score computes readability based on the average number of syllables per word and the average number of words per sentence. Scores range from 0 (zero) to 100. Standard writing usually scores between 60 and 70. The higher the score, the greater the number of people who can easily understand the document. (The Flesch Reading Ease Score along with other readability statistics, is automatically calculated when using Microsoft Word software)

A Matrix Grid is useful when answering multiple related questions along the same scale. Rather than asking each question individually, it will conserve space and create a more enjoyable participant experience.

Adapted from: https://www.sogosurvey.com/blog/survey-language-101-say-what-you-mean/

Timing of Survey

Survey timing can vary, for example, when following up after a group event (conference, webinar, etc.), it is recommended to send a survey within a day or two after the event. Creating the survey in advance and scheduling it to send the day after the event can be useful and time saving.

Adapted from: https://www.surveymonkey.com/curiosity/when-to-send-your-surveys-for-the-best-results/

Online Survey Tools and Data Storage

Online surveys are a great way to engage clients and receive feedback. Some available resources are:

- Survey Monkey
- Google forms

If you have questions regarding Online Survey Tools, please contact the OHTN at info@ohtn.on.ca

Information to consider:

- Cost of premium membership
- Availability of free resources
- Online tools that translate information into multiple languages
- How and where data is stored
- How the data can be downloaded (*Microsoft Excel* or other analysis software)

Usually the paid versions offer added capabilities like:

Survey logic. Survey logic uses information from previous answers to dictate the following questions. For example: *Do you have a dog?* If the user answers yes, the next question might ask *what breed?* If the user answers no, the breed question would be skipped.

Export data. Many tools won't let you export your data unless you use the paid version.

Custom logo. Paid versions let you get rid of the tool's logo and instead add your own.

More question types. Most free survey creators offer plenty of question options, like drop downs, rating scales, etc. Usually paid versions offer even more options, like the ability to select multiple options in a dropdown, star rankings, grids, etc.

Some online survey tools have options to translate to multiple languages which might also be an important factor to include in your decision making depending on your audience. It is also important to consider how and where the data will be stored on your preferred online survey platform. You can usually find this information under data management or security. For research studies, this information might be important to include in any research ethics applications. Once you are ready to import your data for analysis, most survey platforms will allow you to do so onto Excel or other analysis software such as SPSS.

Developing Survey Questions

Developing questions that accurately assess the opinions, experiences, and behaviors of respondents is a critical aspect of survey methods. Before launching into any survey effort make certain you know the purpose of the survey. To determine this, ask

- Why conduct a survey? Is conducting a survey the best way to collect the information for evaluation? Check for existing data sources (see section Secondary Data)
- Who will be surveyed? Staff, partners, recipients, employers, providers, etc.
- What information needs to be determined? It is important to dedicate time to determine if each question is absolutely essential.
- How will the survey be administered (i.e., telephone, in-person, Internet)? Survey modes may have implications for question wording, type, placement, and survey length.

Common pitfalls to avoid when constructing your survey questions. Creating well-structured, simply written questions will help collect accurate and meaningful survey responses. The goal is to create survey questions that read well and are easy to answer. While there are no set rules on the wording of survey questions, avoiding some common pitfalls will improve the overall quality of your survey questions. The table below highlights a few of these.

Pitfall	Description	Example	Revision
Double-barreled questions	Double-barreled items contain two or more things that are being asked in a single question. It is a question that touches upon more than one issue, yet allows for only one answer.	"Do you have high blood pressure and high cholesterol?"	Separate into two questions: 1. "Do you have high blood pressure?" 2. "Do you have high cholesterol?"
Introducing bias	Leading items introduce bias and may influence the way a respondent answers a question. Also, check to make sure that a previous question does not influence how a respondent answers a later question.	"Exercising every day is important—do you exercise every day?" □ Always □ Sometimes □ Never	"Do you exercise every day?" □ Always □ Sometimes □ Never
Balanced question and response	Not including an adequate range of response categories may require respondents to choose answers that do not accurately reflect their experiences or may cause respondents to be frustrated and skip the question.	"In a typical year, how often do you visit your doctor?" □ Weekly □ Monthly	"In a typical year, how often do you visit your doctor?" □ Once per week □ One time each month □ Two times each year □ One time each year □ Never
Negative items	Answering negative questions can be confusing to your respondents.	"Do you typically **not** eat vegetables every day?" □ Always □ Sometimes □ Never	"Do you typically eat vegetables every day?" □ Always □ Sometimes □ Never

Figure 19: Survey Pitfalls from https://www.cdc.gov/dhdsp/programs/spha/docs/constructing_survey_questions_tip_sheet.pdf

The wording of the questions is important since it has a direct impact on the outcome.

- Avoid jargon, for instance, participants may misinterpret the word 'drug', use 'prescribed medicine' instead.

- Carry out the readability tests such as the Flesch Reading Ease Score. It is important to ensure that questions are not too long and that they don't contain several questions in one sentence, which will only confuse the respondent. For example: "Does having asthma restrict the type of work and sporting activities that you can do?" If the answer were "Yes", we would not know what would it mean since we are asking if it restricts the type of work AND the sporting activities. We wouldn't be able to identify which part of the question the "yes" is referring to or whether it refers to both.
-
- Avoid using ambiguous words and questions. Try not to assume anything about the respondent and avoid asking leading questions. "We know that cigarette smoking can make asthma worse. How many cigarettes do you smoke a day?" or "Do you think the fumes from car exhausts are the main cause of asthma?

Types of survey questions	Description	Examples
Open-Ended Questions	• Allow respondents the freedom to answer in their own words • Allow client's to discuss needs that may be unknown to service providers and can outline areas for improvement that may not have been considered. • Useful at the beginning of surveying to highlight potential issues moving forward Limitations: • People may be likely to respond as it takes more time and effort to answer • Multiple open-ended questions in a row, can get tiresome for respondents to answer; answers might become less and less descriptive • Data from open-ended questions will take longer to analyze	This question allows people to provide fuller answers. *Please explain why you enjoy working from home:* _____ _____ _____ _____ _____ _____ _____
Close-Ended Questions	• Simple and user friendly, as the questions require little time and effort for people to answer. This is called the foot-in-the-door principle: once someone commits to answering the first question, they may be more likely to answer the open-ended questions that follow. • Responses are easy to tabulate and use as benchmarks in graphs and trends. Limitations: • May limit user's response options to a set of pre-selected choices.	This question provides no opportunity for respondents to expand their answer of what they did or did not enjoy about a program *Did enjoy your experience in the program today?* ☐ *Yes* ☐ *No*

Nominal Questions	• Presents people with multiple answer choices; the answers are non-numerical in nature and do not overlap (unless it includes an 'all of the above' option). • Effective when there are a limited number of categories for a given question. • User friendly and simple to create graphs and trends from Limitations: • may not be offer enough categories for people to reply	Adding an open-ended response option for nominal questions allows users to give unique but relevant responses: *Which browser are you using?* 1. *Chrome* 2. *Safari* 3. *Firefox* 4. *Explorer* 5. *Other (*allows open-ended response)*
Likert Scale Questions	• Typically a 5- or 7- point scale that evaluates a respondent's level of agreement with a statement or the intensity of their reaction towards something. • The scale develops symmetrically: the median number (e.g., a '3' on a 5-point scale) indicates a point of neutrality, the lowest number (always a '1') indicates an extreme view, and the highest number (e.g., a '5' on a 5-point scale) indicates the opposite extreme view. • Also know as ordinal questions, as the answers are presented in a specific order • Useful when there is a sense of what the respondents are thinking (e.g. Reflecting on an organizational change that all respondents are aware of).	*How strongly do you agree with the following statement: The service I received was culturally appropriate for my race/ethnicity:* *1 - Strongly disagree* *2 - Somewhat disagree* *3 - Neither agree nor disagree* *4 - Somewhat agree* *5 - Strongly agree*
Rating Scale Questions	• Rating scale questions are questions where the answers map onto a numeric scale (such as rating customer support on a scale of 1-5, or likelihood to recommend a service/product from 1 to 10). • When using a rating question in a survey, explain what the scale means (e.g., '1' for 'Poor', 5 for 'Great). • Useful when assigning numerical values to surveys to visualize and compare trends	Ratings answers: *On a scale of 1 to 7, rate your experience:* 1. *Very dissatisfied* 2. *Dissatisfied* 3. *Somewhat dissatisfied* 4. *Neither agree or disagree* 5. *Somewhat dissatisfied* 6. *Satisfied* 7. *Very satisfied*
Demographic Questions	• Provide some context about respondents • Can be used to segment or stratify the responses during analysis. • From an ethics point of view, do not collect data that is not useful for the evaluation question(s) Limitations: • Demographic questions are only useful if there is a need to know the information—do not ask for the information if it is not relevant.	Demographic Question: *Please indicate your age range:* ☐ *16-24* ☐ *25-34* ☐ *35-44* ☐ *45-54* ☐ *55-64* ☐ *65+*

Table 7: Types of Survey Questions Adapted from https://www.hotjar.com/blog/survey-questions/

Focus Groups/ Interviews

A focus group is a type of interview that involves a number of participants and a facilitator who asks questions and guides the conversation. It involves bringing a small group of people together to share their thoughts, ideas and experiences related to a particular subject. The participants are typically a group of people who share some common experience or characteristic (e.g., parents of youth, people who work in a particular type of job). While this section is written with a focus group in mind, the same knowledge can be applied for an interview as a focus group is a type of interview. For purposes of the interview, only one person should be in mind as opposed to multiple in the focus group.

Adapted from: *Ontario Centre of Excellence for Child and Youth Mental Health*https://iknow-oce.esolutionsgroup.ca/api/ServiceItem/GetDocument?clientId=A1B5AA8F-88A1-4688-83F8-FF0A5B083EF3&documentId=65df67c7-472b-4a91-b1b8-30ced3f354c8

What is a focus group interview?

A focus group interview…

- involves bringing together a small group of people to share their thoughts, ideas and experiences related to a particular subject.
- is a type of interview that involves a number of participants; a facilitator asks questions and guides the conversation. The participants are typically a homogenous group of people who share some common experience or characteristic (e.g., parents of teenaged children, people who work in a particular type of job). A total of five to eight people works best (more than this can become challenging to manage).
- typically lasts from 1 - 2.5 hours.

Tips for Developing an Interview Guide:

- Use a script or interview guide to keep the interview focussed and to ensure topics are not skipped
- Less is more! Six to eight questions can broaden the focus, and extend time
- Start with general questions, and leave more specific questions to the end
- Scripts and interview guides are simply guidelines to follow. If other topics arise, or some questions are skipped, the discussion can me modified to fit group needs.
- Questions should be open-ended in order to generate more discussion
- Questions that require 'yes/no' answers will limit discussion, and should be avoided

When to use this method:

- To collect in-depth, qualitative information on a particular topic
- To explore an area about which is little known, or limited prior research has been done
- To identify variables, outcomes and/or processes that may be of interest in a broader, quantitative study

- To complete or corroborate findings obtained through other methods (e.g. surveys, case studies)
- To facilitate the free flow of ideas

How to start:

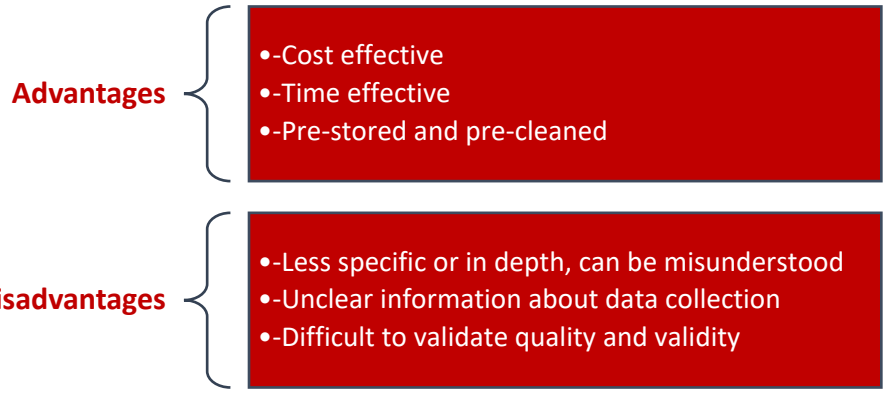
- Begin by reviewing the literature on a particular topic to help narrow the focus and identify key questions to explore
- Brainstorm (with a team) a number of issues/questions to pose to potential participants.
- Select six to eight questions that would be most useful in helping to meet the overall goals of the project
- Recruit participants by using an advertisement or poster inviting them to take part in the project, or by word of mouth

How do I conduct a focus group interview?

Before
•Consider the context: location, who is attending, topics being dicussed •Consider the setting: access, comfort (temperature), free from distractions, inclusive seating (e.g. participants sit in a circle) •Consider participant needs: transportation, child care, accessibility, scheduling •Consider incentives: honorarium, travel cost coverage, light refreshments offered
During
•Welcome: thank participants for their attendance, explain the purpose of the focus group interview, offer to answer any questions •Establish groundrules: confidentiality, guidelines for participation, respect •Communicate the goal of the focus group interview, reminder that divergent views are welcome and appreciated and need to be respected •Use icebreakers and invite participants to introduce themselves •If participants steer the conversation off track, or dominate the discussion, guide the conversation back to the main topic •Audio-tape your session to ensure an accurate record of discussion (be sure to inform participants) •When possible, have a co-facilitator present to assist with taking notes and keeping the conversation on track
After
•Thank participants and check-in for final thoughts •Explain how data will be analyzed and presented •Immediately record any observations or reflections after participants leave the session--were there surpises? Were participants hesitant about responding to specific questions? •Store notes, consent forms, audio tapes and all other information in a secure location. Ensure that everything is labelled with time and date of interview, and ensure that documentation does not include indentifying information

Secondary Data Collection

Primary data is original data collected for a specific purpose. Secondary data however, is data collected by individuals or agencies for purposes other than those of our particular research study.



Factors to Consider Before Conducting Secondary Data Analysis

There are certain factors that a researcher must consider before deciding to move forward with secondary data analysis. Since the data is from outside sources, it is imperative to become familiarized with it. This process entails:

- Learning about how the data was collected
- Learning who the population of the study was
- Learning what the objective of the original study was
- Determining what the response categories were for each question displayed to survey respondents

Conclusion

Secondary data analysis is a convenient and powerful tool for researchers looking to ask broad questions at a large scale. While it has its benefits, such as its cost-effectiveness and the breadth and depth of data that it provides access to, secondary data analysis can also force researchers to alter their original question, or work with a data set that otherwise is not ideal for their goals.

Adapted from: https://www.researchgate.net/post/How_to_conduct_a_survey_research_with_a_help_of_secondary_data

Triangulating Data

Triangulation is the process of gathering and comparing data from more than two sources. These may include questionnaires, focus groups, or key informant interviews. If the data from all sources supports the same outcome or impact, the researchers' conclusions have more certainty. If different sources provide different or potentially conflicting information about program outcomes or impact, the researchers must investigate further. They may end up questioning the validity of the data from one or more sources, or they may realize that the outcome or the impact is more complex than it appeared from only one data source (Better Evaluation, 2014; USAID Asia, 2010). Especially when dealing with complex problems,

triangulation can be an important tool. Whether or not the data sources confirm one another, it leads to a deeper understanding of the situation and ultimately a greater confidence in the researchers' conclusions.

Adapted from: https://www.measureevaluation.org/resources/publications/tr-16-139/at_download/document

Module 6: Organizing and Analyzing Data

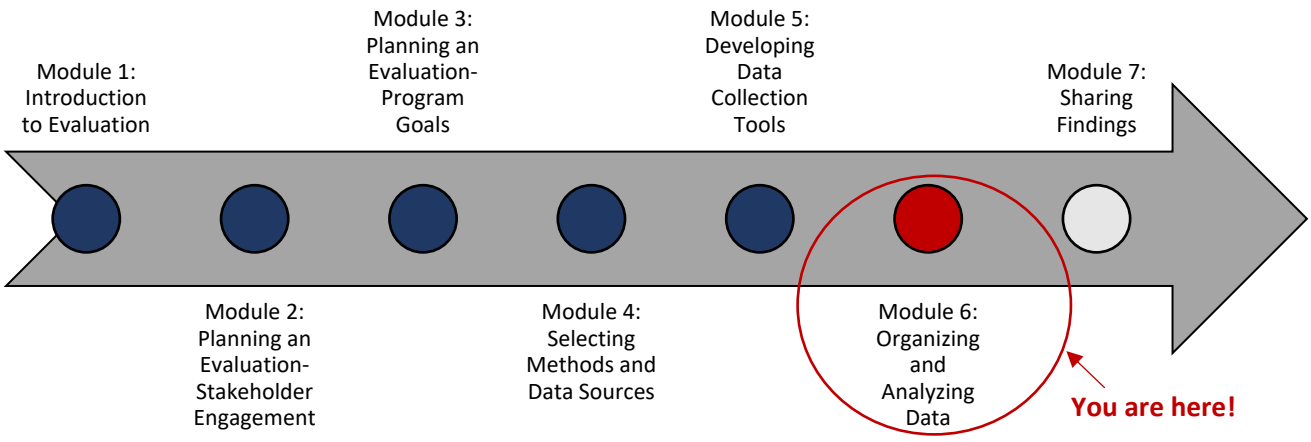
Purpose

This section outlines the methods used to organize and analyze the data that has been collected.

Learning Objectives:

By the end of this module you should be able to:

- Understand the key steps in building a database
- Clean the data you have collected
- Code the data you have collected once it has been cleaned
- Perform quantitative and qualitative analysis on your cleaned and coded dataset



It is important when identifying key evaluation questions to also determine how the data will be collected, match the analysis strategy to the type of information and types of evaluation questions that will need to be answered.

Quantitative and Qualitative Data

Quantitative data is information that has been collected in numerical form, such as rating scales or documented frequency of specific behaviors. Qualitative data is non-numerical information, such as responses gathered through unstructured interviews, observations, focus groups, or open-ended survey questions.

Choosing between quantitative and qualitative data: It is important to note that the statistical usefulness of quantitative data depends on how large the sample is. If your sample is very small, it is better to collect qualitative data instead.

When used in isolation, both quantitative and qualitative evaluation methods have strengths and weaknesses. The purpose of mixed methods is to draw on the strengths of both quantitative and qualitative approaches and integrate them to overcome their weaknesses. There are many different data analysis methods, depending on the type of research.

Data Organization

Now that you have decided on the "how" to collect the data, we will go through the ways you can categorizing and classifying data to make it more usable. Similar to a file folder, where we keep important documents, you'll need to arrange your data in the most logical and orderly fashion, so you — and anyone else who accesses it — can easily find what they're looking for. Otherwise, data can become overwhelming if there are not appropriate measures in place to keep it organized.

Depending on your needs and available resources, you may want to create a database or spreadsheet to organize your data. Readily available computer programs, such as Excel and Access, may be useful. Software is also available for quantitative and qualitative analysis (such as SPSS). Some of this software is expensive, however, and you may be able to analyze your findings without it. Before investing in software, consider seeking consultation to determine if it is needed. If you create an electronic database with your evaluation results, be thoughtful about its organization. Decisions made as you design and begin to enter information will influence how easy or difficult it will be for you to analyze your results. Tips for designing your database include:

- Assign a unique identifier to each individual in your dataset.
- Include all information about an individual in one row of your database, rather than having the same person appear in multiple places
- Limit responses so that incorrect information cannot be entered (such as not allowing numbers that fall outside of your response choices).
- Code text responses into numerical form so that they are easier to analyze (e.g., 1=yes, 2 =no) This step can also be done when you are analyzing the data depending on the time and resources you have available (see section: "Coding" for more details)
    - Enter data in a consistent format, such as always using a "1" to reflect female gender, rather than using various labels (e.g., "F," "female," "girl," etc.).

Data Cleaning

Data cleaning involves the detection and removal (or correction) of errors and inconsistencies in a data set or database due to the corruption or inaccurate entry of the data. Incomplete, inaccurate or irrelevant data is identified and then either replaced, modified or deleted.

Incorrect or inconsistent data can create a number of problems which lead to the drawing of false conclusions. Therefore, data cleaning can be an important element in some data analysis situations. However, data cleaning is not without risks and problems including the loss of important information or valid data.

Tips for Data Cleaning:

- Back up data before starting data cleaning process.
- Create a list of all variables, variable labels and variable codes
- Decide which variables are crucial to the analysis and *must* have values for the responses to be complete to avoid incomplete or missing data
- Look for coding errors, use a frequency test to identify errors
- Look for outliers that can hide or create statistical significance, use a bar graph to find outliers
- Check for logical consistency of answers, cross tabulate variables
- Decide how to deal with incorrect or missing values: remove or correct (if the value is known) missing or incorrect values; fill in missing variables from data source; set values to an average or other statistical value

Regardless of how you decide to deal with these errors, you should make a note and report all details in your analysis section

Coding

Coding refers to grouping and assigning values to responses from the survey. Wherever possible a numeric code must be assigned to each possible answer so that the answers can be entered into a computer for data analysis. It is generally easier to specify the codes in advance, and to anticipate the possible answers as in closed questions. Obviously with open-ended questions it may not be possible to anticipate all the possible answers. Therefore, as questionnaires are returned, they will need to be coded. Some questions are asking for numerical data, for instance, 'How old are you?' or 'How many times has your social worker visited you in the last month?'. Questions like this do not need to be pre-coded, simply leave a blank box to enter an exact number. The coding of other questions which include ordered categories, particularly those using bands or scales is straightforward. For instance, for the question: 'How long ago is it since you last saw a health care provider?', each possible answer has a numeric code:

Response	Code
Within the last month	1
More than a month ago but within the last 6 months	2
More than 6 months ago but within the last year	3
More than a year ago	4

Quantitative Data Analysis Methods

After these steps, the data is ready for analysis. The two most commonly used quantitative data analysis methods are descriptive statistics and inferential statistics.

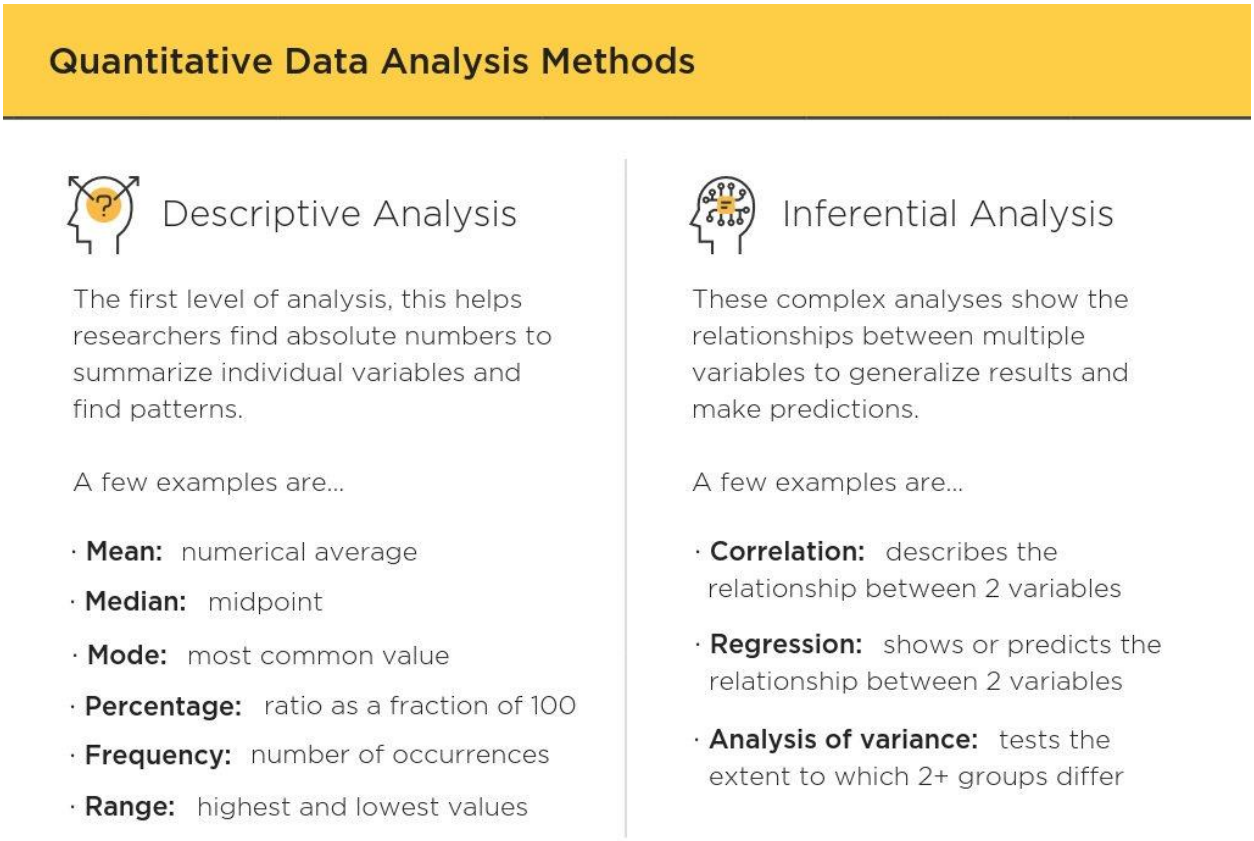


Figure 20: Quantitative Data Analysis from https://humansofdata.atlan.com/2018/09/qualitative-quantitative-data-analysis-methods/

Descriptive statistics provide absolute numbers, however, they do not explain the rationale or reasoning behind those numbers. Before applying descriptive statistics, it is important to think about which one is best suited for the research question and what needs to be shown. For example, a percentage is a good way to show the gender distribution of respondents. Descriptive statistics are most helpful when the research is limited to the sample and does not need to be generalized to a larger population. For example, if comparing the percentage of children vaccinated in two different villages, then descriptive statistics is enough. Since descriptive analysis is mostly used for analyzing single variable, it is often called univariate analysis.

Qualitative Data Analysis

Qualitative data analysis functions differently from quantitative data, primarily because qualitative data is made up of words, observations, images, and even symbols. Deriving absolute meaning from such data is nearly impossible; hence, it is mostly used for exploratory research. While in quantitative research there is a clear distinction between the data preparation and data analysis stage, analysis for qualitative research often begins as soon as the data is available.

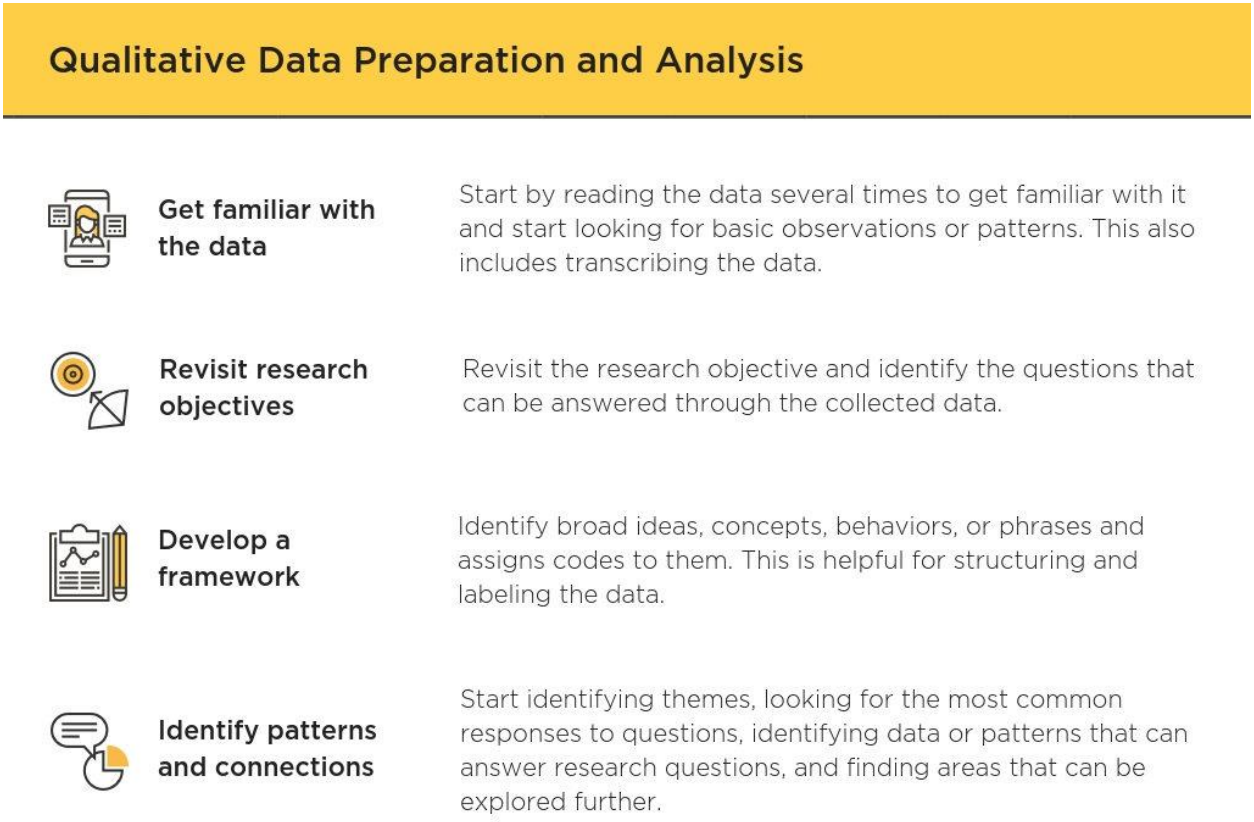


Figure 21: Qualitative Data Analysis from https://humansofdata.atlan.com/2018/09/qualitative-quantitative-data-analysis-methods/

Although several methods are available to analyze qualitative data, for the purposes of this guide, the focus will be thematic coding/analysis.

What is thematic coding?

Thematic coding, also called thematic analysis, is a type of qualitative data analysis that finds themes in text by analyzing the meaning of words and sentence structure.

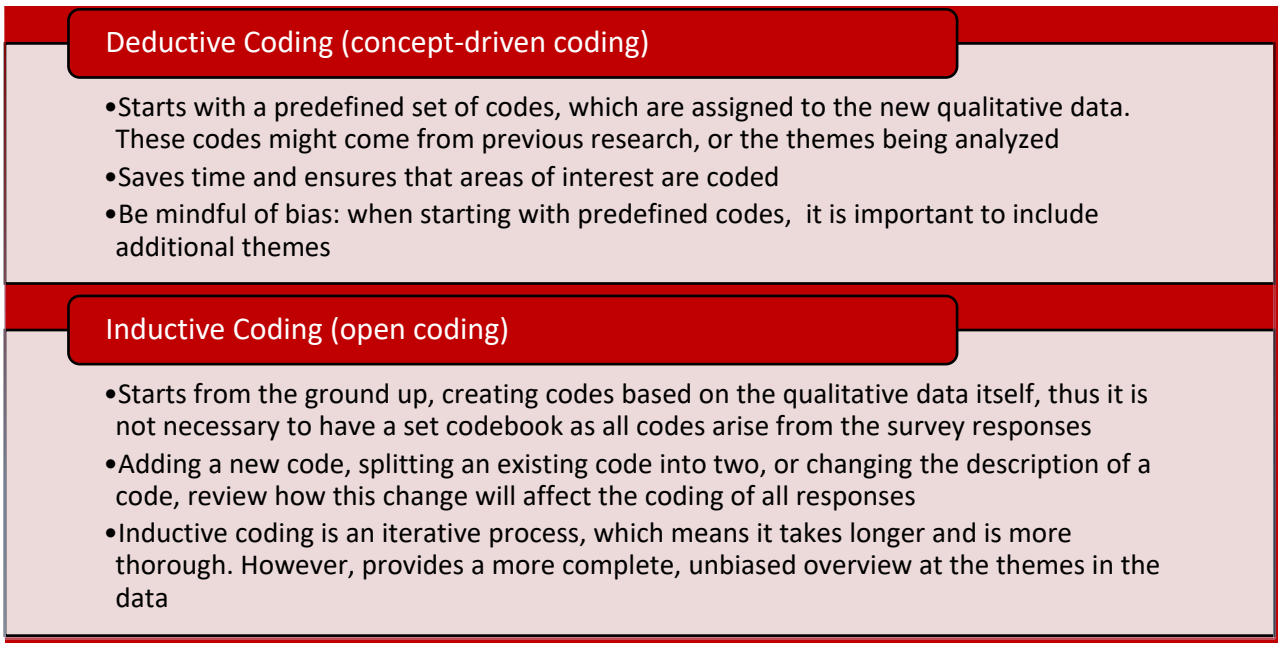
When using thematic coding to analyze customer feedback for example, it will highlight which themes are most frequent in feedback. This will help to outline what drives customer satisfaction in an accurate, actionable way.

How to manually code qualitative data

Different researchers have different processes, but manual coding usually looks something like this:

1. Choose whether to use deductive or inductive coding.
2. Read through the data to obtain a broader understanding of the information, and assign a first set of codes.
3. Go through the data line-by-line to code as much as possible. The codes should become more detailed at this step.
4. Categorize the codes and figure out how they fit into the coding frame.
5. Identify which themes come up the most — and act on them.

Deductive coding vs. Inductive coding



Here's how inductive coding works:

1. Break the qualitative dataset into smaller samples.
2. Read a sample of the data.
3. Create codes that will cover the sample.
4. Reread the sample and apply the codes.
5. Read a new sample of data, applying the codes you created for the first sample.
6. Note where codes don't match or where you need additional codes.
7. Create new codes based on the second sample.
8. Go back and recode all responses again.
9. Repeat from step 5 until all of the data is coded.

Create high-quality codes

Codes should do these four things:

1. Cover as many responses as possible	-The code should be generic and simple enough to apply multiple comments -The code should be specific enough to be useful in analysis -Example: 'Product' is a broad code that covers many responses, whereas more specific code such as 'Short product lifespan' will further benefit analysis
2. Avoid Commonalities	-Similar codes are useful as long as they serve different purposes -Example: 'Customer support' and 'customer service' have similar meanings and could be coded together
3. Capture the positives and negatives	-Create codes that contrast with eachother to track both the positives and negatives of a topic seperately -Example: Seperate codes 'useful product features' and 'unnessessary product features' would capture two different themes
4. Reduce data	-To ensure that the analysis is useful, try to find a balance between having too many codes, and too few codes. -Example: if each code applies to every response, or if there are as many codes as there are responses, coding becomes pointless

Group responses based on themes, not wording

Make sure to group responses with the same themes under the same code, even if they don't use the same exact wording. See Example 3 for sample of grouping themes:

Example 3: Grouping Responses

Having only a few codes and hierarchical framing makes it easier to group different words and phrases under one code. If there are too many codes, especially in a flat frame, the results can become ambiguous and themes can overlap. Manual coding also requires the coder to

remember or be able to find all of the relevant codes; the more codes there are, the more difficult it is to find the relevant information.

Make accuracy a priority

Manually coding qualitative data means that the coder's cognitive biases can influence the coding process. For each study, set coding guidelines and implement training to keep coding uniform and consistent. If there are multiple coders working on one team, have them check one another's coding to help eliminate cognitive biases.

Adapted from: https://getthematic.com/insights/coding-qualitative-data/

Interpreting Results

While analysis can help to identify key findings, the results will still need to be interpreted. Drawing conclusions involves considering what the results mean and to assess their implications. Some example questions include:

- What patterns and themes emerged?
- Are there any deviations from these patterns? If yes, are there factors that might explain these deviations? Do the results make sense?
- Are there findings that are surprising? If so, how do you explain these results?
- Are the results significant from a clinical or statistical standpoint? Are they meaningful in a practical way?
- Do any interesting stories emerge from the responses?
- Do the results suggest any recommendations for improving the program?
- Do the results lead to additional questions about the program?
- Do they suggest that additional data may be needed?

Involve stakeholders

While findings must be reported objectively, interpreting the results and reaching conclusions can be challenging. Consider including key stakeholders in this process by reviewing findings and preliminary conclusions with them prior to writing a formal report.

Resolve inconsistencies

In some cases, there may be contradictory information. For example, stakeholders may describe important benefits of the services, but these improvements do not appear in pre-post test comparisons. Various stakeholders may also

Tips for Analysis:

- Do not use the word "significant" to describe findings unless it has been tested and found to be true either statistically or clinically
- Keep the analysis simple
- Review and correct data before beginning analysis
- Leave enough time and money for analysis
- Identify the appropriate statistics for each key question

disagree, such as staff reporting improvements in participants that are not reported by the participants themselves. Consider the validity of each source, and remember that stakeholders can have valid viewpoints that vary based on their unique perspectives and experiences. Try to resolve discrepancies and reflect them in your findings to the extent possible.

Adapted from: https://www.wilder.org/sites/default/files/imports/crimevictimservices13_2-08Web.pdf

Module 7: Sharing Findings

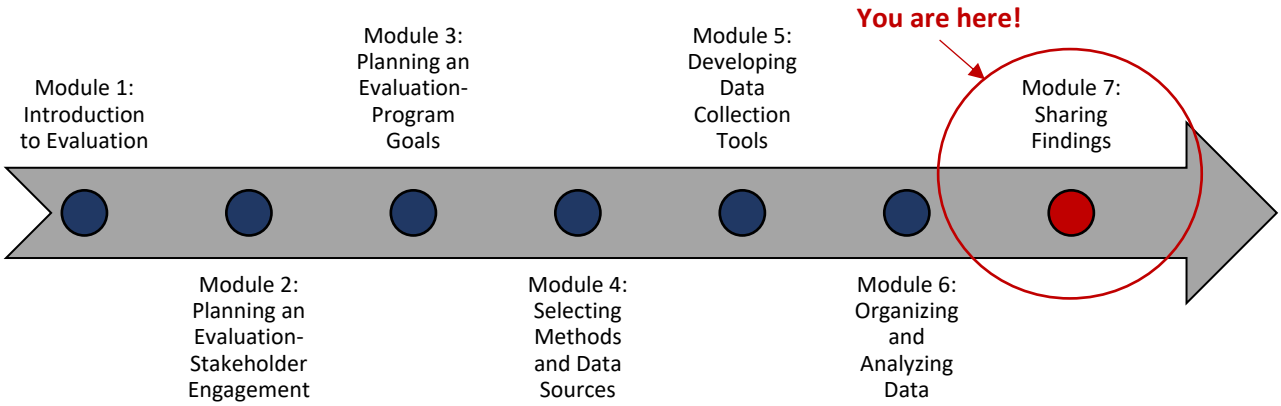
Purpose

Once the data has been analyzed, effective communication strategies help stakeholders understand the results and use the information to improve programming and guide policy enhancements

Learning Objectives:

By the end of this module you should be able to:

- Identify the reporting format that best suits your audience
- Understand the basic aspects that should be included in a written report



Defining Communication Purpose

Once the evaluation results have been obtained, the findings should be shared with key audiences. At times, there are several intended audiences, each with a different set of interests and preferences regarding the report. Before writing the report, consider the audience and what needs to be communicated. Content is not always best shared in long and complicated reports, a more concise document (for example three pages), may have more of an impact. Instead of a large document describing a complex set of ideas, consider dividing the information into several smaller reports that might be the clearest and easiest way to present the information to key stakeholders. While many evaluations result in a detailed approach, verbal presentations with supporting charts, case studies or targeted qualitative results may also be suitable. However, many evaluations will call for a report summarizing the goals, history of the program, methods of evaluation, findings, interpretations, conclusions and recommendations. Use the table below to assist in highlighting the communication purpose:

Questions About Stakeholders/Audiences	Answers
1. Do they need to be informed about evaluation decisions? If so, when and for what reason?	☐ To build awareness ☐ To gain support ☐ To show respect
2. Do they need to review interim or final findings? If so, when and for what reason?	☐ To review evaluation progress ☐ To learn and improve ☐ To promote dialogue and understanding among partners
3. Do they need to be involved in decision making? If so, when and for what reason?	☐ To assess the likelihood of future support ☐ To help develop recommendations ☐ To ensure use of the recommendations

Figure 22: Questions for Stakeholders 1.1 from: https://www.crs.org/sites/default/files/short-cuts-communicating-and-reporting-on-an-evaluation.pdf

Selecting Communication Method

After identifying the audience needs, the next step is to select the best communication methods. Start by asking the following questions of each individual or group:

Questions for Stakeholders/Audiences	Answers
1. What is their familiarity with the program or the project being evaluated?	☐ Very familiar ☐ Somewhat familiar ☐ Not at all familiar
2. What is their experiences using evaluation findings?	☐ Long experience ☐ Some experience ☐ No experience
3. What is their reading ability?	☐ High ☐ Mid ☐ Low or non-reader (illiterate)
4. What language(s) do they use to communicate?	☐ _____ for writing ☐ _____ for reading
5. How accessible are they?	☐ Easily ☐ With some effort ☐ Isolated

Figure 23: Question for Stakeholders 1.2 from: https://www.crs.org/sites/default/files/short-cuts-communicating-and-reporting-on-an-evaluation.pdf

For example, if the group has a high degree of literacy, written communication can be used. If the audience is largely illiterate, however, visual and oral communications will be better communication methods. With this assessment of stakeholder characteristics and knowledge of information needs, the next step is to develop a responsive communicating and reporting strategy. The strategy should describe who, what, when, and how to communicate

Stakeholder and audience group or individual and summary of characteristics and purpose	What information (content) do they need?	What format is best for them?	When do they need it?	Who will prepare and deliver the information?	What are the costs?
Program donor, located in Washington, D.C., needs to review final evaluation report for decision making about future funding	Findings and recommendations	Final evaluation report with executive summary Debriefing meeting to be held at donor offices to present findings, recommendations, and intended actions	June 15th June 30th	Evaluation team to prepare written reports; PVO headquarters staff to prepare debriefing meeting agenda and presentation	Printing costs for 25 copies of written report; travel costs of staff to Washington, D.C., for meeting; and time to prepare and debrief

Figure 24: Questions for Stakeholders 1.3 from: *https://www.crs.org/sites/default/files/short-cuts-communicating-and-reporting-on-an-evaluation.pdf*

Additional Formats of Reporting:

Use a variety of techniques such as visual displays, oral presentations, interim reports, and informal conversations. Ideas include:

- Making a short video presenting the results
- Sharing results with the media, through a press release and/or press conference.
- Making presentations to select groups, such as community partners or potential funders.
- Writing separate summaries and articles targeted at specific audiences or stakeholder groups.

Figure 25, below summarizes some other options.

Written Reporting	Verbal Presentations	Creative Reporting	Critical Reflection Events	Reporting Using Electronic Formats
• Final evaluation report • Executive summary • Interim or progress reports • Human interest, success and learning stories • Short communications such as newsletters, brochures, memos, e-mails, postcards • News media communications (print media)	• Debriefing meetings • Panel presentations • Broadcast media (radio or television) • Informal communication	• Video presentation • Dramas or role-plays • Poster sessions • Writeshops	• After-action Reviews • Working sessions	• Website communications • Synchronous electronic communications such as chat rooms, teleconferences, video and web conferences • Podcasts

Figure 25: Options for Reporting from: *https://www.crs.org/sites/default/files/short-cuts-communicating-and-reporting-on-an-evaluation.pdf*

What should be included in a written report?

Evaluation reports are written from multiple approaches. However, the following outline provides a common framework for presenting evaluation results.

- Description of the program, including its goals, target population, and activities
- Overview of the evaluation questions.
- Description of the evaluation participants (such as sample size and strategies used to obtain consent)
- Explanation of the methods and the procedures used to collect and analyze data.
- Outline of the strengths and limitations of the evaluation methodology,
- Presentation of evaluation findings, including:
    - Characteristics of the participants, such as their demographic background or other relevant information
    - Services provided by the program, including the amounts and types of services provided
    - Results for each major evaluation question.
- Conclusions and recommendations
    - Strengths of the program as revealed by the evaluation findings
    - Recommendations for improving the services that are provided
    - Other implications of the findings, such as policy implications
    - Suggestions for improving the future evaluation activities

Appendices

A: *Types of Evaluation*: Table 1-Determining which type of evaluation to use

TYPE OF EVALUATION	PURPOSE	Ideas
FORMATIVE		
1. Needs Assessment	• Determines who needs the program, how great the need is, and what can be done to best meet the need. • A needs assessment can help determine which audiences are not currently served by programs and provide insight into what characteristics new programs should have to meet these audiences' needs. • A needs assessment helps to determine whether there is a need for a program to address this issue and is typically conducted before implementing a program. The overarching evaluation question in this domain asks: Is there a need for this type of program in this context?	
2. Process or Implementation Evaluation	• Examines the process of implementing the program and determines whether the program is operating as planned. • Can be done continuously or as a one-time assessment. • Results are used to improve the program. A process evaluation of an HIV/AIDS program may focus on the number and type of participants reached and/or determining how satisfied these individuals are with the program.	

	The overarching evaluation question in this domain asks: Was this program implemented properly and according to the plan?	
SUMMATIVE		
1. Outcome Evaluation	• Investigates to what extent the program is achieving its outcomes. • These outcomes are the short-term and medium-term in program participants that result directly from the program. • For example, HIV/AIDS outcome evaluations may examine improvements in participants' knowledge, skills, attitudes, intentions, or behaviors. The overarching evaluation question in this domain asks: Did this program achieve its desired outcomes and have an impact on its intended targets?	
2. Impact Evaluation	• Determines any broader, longer-term changes that have occurred as a result of the program. • These impacts are the net effects, typically on the entire school, community, organization, society, or environment. EE impact evaluations may focus on the educational, social, or human health impacts of HIV/AIDS programs.	

B: *Stakeholder Engagement*: Template 1-Purpose of Engagement

Purpose of Engagement	Your Ideas
What is the purpose of engagement?	
What are the engagement objectives?	
What are the project objectives?	
What is the scope of engagement?	
What are the risks of engagement?	
What are the benefits for stakeholders?	
What engagement has already occurred?	
What are the negotiable and non-negotiable elements?	
What are the limitations? (e.g. time, staff, resources, etc.)	
What obligations should be considered? (e.g. ethics, privacy, cultural responsiveness etc.)	

Will more than one stage of engagement be required? Is it necessary to engage using multiple methods?	
What can be implemented to ensure a diverse group of stakeholders?	
Who are the critical stakeholders to project delivery?	

C: *Stakeholder Engagement:* Template 2-Stakeholder Identification

Stakeholder Identification	***Your Ideas***
Who are the stakeholders? Who will be impacted by the project?	
What does each stakeholder bring to the evaluation? (diverse perspectives, expertise, buy-in and support, responsibility, other)	
Who has an interest in the project?	
Who are the project owners and partners?	
What is the prior history of the engagement with stakeholders?	
Who are the stakeholders that have been traditionally excluded from decision making?	
What can be implemented to ensure a diverse group of stakeholders?	
Who are the stakeholders that are critical to project delivery?	
Motivations to participate (Commitment, personal stake, professional development, personal concerns, other)	

D: *Stakeholder Engagement:* Template 2.1-Types of Stakeholders

Types of Stakeholders	Possible Stakeholder groups	Communication plan
Program Staff	-Program staff -Program leadership -Other accountable for program/project	
Organizational Leadership	-Executive Director -Program Manager -Board of Directors -Advisory Boards & Steering committee	
Program Beneficiaries	-Families -Youth -Children	
Researchers and Evaluators	-Researchers -Evaluators -Graduate Students	
Volunteers		
Funders	-Funders, Donors -Other funders and co-funders -Collaborating organizations	
Community	-Community service groups	
Groups	-Referring agencies -Schools -Policy Groups	

Local policy makers and advisors	-Advocacy organizations	
Other	-Staff from similar programs and/or initiatives -Professional associations	

Adapted from: Preskill, Hallie and Jones, Natalie (2009) A Practical Guide for Engaging Stakeholders in Developing Evaluation Questions, Robert Wood Johnson Foundation

E: *Stakeholder Engagement:* Template 2.2-Stakeholders

Who are your stakeholders?	What does each stakeholder bring to the evaluation?	How important is it to have their Perspectives and experiences represented?	What may motivate the stakeholders to participate?
Stakeholder	(Interest, diverse perspectives, expertise, buy-in and support, influence, responsibility, other)	(Necessary, important, somewhat important)	(Commitment, personal stake, professional development, personal concerns, other)

F: *Stakeholder Engagement:* Template 3-'If-Then' Statements

IF

the set of resources are available

(Strategies and Activities)

IF_____

THEN

the program can provide activities and services.

(Immediate Outcomes)

THEN_____

IF

participants recive these services

(Intermediate Outcomes)

IF_____

THEN

the participants experience specific changes

(Intended Impact)

THEN_____

IF_____

THEN_____

IF_____

THEN_____

IF_____

THEN_____

G: *Logic Model Construction:* Template 4-Components to build a Logic Model

Components	Examples
Need (community need) • Brief description of community and problem being addressed	• *GBMSM have lower rates of STI screening in HIV care settings compared to other populations*
Program Goals • One or two short sentences outlining the main goal and purpose if the program	• *To increase the rate of STI testing in GBMSM*
Rationale • One or two sentences that summarizes the set of beliefs, based on a body of knowledge, about how change occurs in the field with the specific clients (or audience)	• *Research shows that routine STI screenings can be effective in reducing risk of accquiring STI*
Inputs (Resources Required) • This refers to the resources that are required to deliver the program activities. Resources may include staff, materials and supplies, in-kind donations, volunteers, etc.	• *2 FTE coordinators* • *1 FTE manager* • *Evaluation team* • *Budget: $8,000*
Activities • This refers to how a program is delivered (e.g., workshops), and to the program content (e.g., module topics)	• *Implementing targetting training around testing protocol for staff in the clinic* • *Developing a social media campaign to increase testing among GBMSM population*
Outputs • This refers to the products of the activities or the volume of a program's actions, such as products created or delivered, number of people served, number of patients treated or tested or attending sessions etc. It is important to highlight that satisfaction/quality of program would be an output but is commonly mistakenly thought of is an outcome. If individuals are satisfied with the service, it doesn't mean that they have changed/improved. For example, they might want to come again and again but doesn't mean they've changed/benefited in any way/gained anything therefore it is an output and not an outcome.	• *Number of staff trained* • *Number of participants (GBMSM tested)* • *Number of people reached* • *Number of GBMSM reached*
Target population	• *GBMSM living in Toronto*

• This refers to the population served by the program or by each of the components of the program. It can be specified in the 'activities' section if not included elsewhere in the logic mode	
Short-term outcomes • This refers to the immediate or short-term changes that should occur as a result of the program activities. These often include changes in awareness or knowledge.	• *Increased awareness among GBMSM about testing services*
Medium-term outcomes • This refers to the medium-term changes that should occur as a result of the program activities. These often include changes in behaviours or attitudes.	• *Increased testing among GBMSM*
Long-term outcomes • This refers to the long-term changes that should occur as a result of the program activities. These often include changes in social conditions or other long-term effects.	• *Decreased incidence of STD among GBMSM*
Assumptions • A brief list of the facts or conditions that are assumed to be true, enabling change to happen.	• *We are making the assumption around our target population, GBMSM, being best reached out to through social media as opposed to other delivery modes*

H: *Logic Model Construction*: Logic Model Sample

Program Plan:				**Outcome Plan**			**Measurement Plan**		
Inputs	**Activities**	**Outputs**	**Target Group**	**Outcome Statements**			**Success Indicator** ***(Short-term outcomes)***	**Measurement Tools**	**Evaluation Design**
Resources Budget	*Activities, Tasks, Strategies*	*Deliverables*	*Client, Group*	*Short-Term (Program completion)*	*Mid-Term (Impact) (6-12 mths post program)*	*Long-Term (Impact) (2 yrs + post program)*	*Evidence of Success* ***(at end of program)***	*Surveys, Tests; Other Measures*	*Data Design*
				Outcome 1: Increase the rate of HIV testing among GBMSM within the clinic					

I: *Developing Data Collection Tools:* Template 6-Survey Questions

Types of survey questions	Description	Ideas
Open-Ended Questions	• Allow respondents the freedom to answer in their own words • Allow clients to discuss needs that may be unknown to service providers and can outline areas for improvement that may not have been considered. • Useful at the beginning of surveying to highlight potential issues moving forward Limitations: • People may be likely to respond as it takes more time and effort to answer • Multiple open-ended questions in a row, can get tiresome for respondents to answer; answers might become less and less descriptive • Data from open-ended questions will take longer to analyze	
Close-Ended Questions	• Simple and user friendly, as the questions require little time and effort for people to answer. This is called the foot-in-the-door principle: once someone commits to answering the first question, they may be more likely to answer the open-ended questions that follow. • Responses are easy to tabulate and use as benchmarks in graphs and trends. Limitations: • May limit user's response options to a set of pre-selected choices.	
Nominal Questions	• Presents people with multiple answer choices; the answers are non-numerical in nature and do not overlap (unless it includes an 'all of the above' option). • Effective when there are a limited number of categories for a given question. • User friendly and simple to create graphs and trends from Limitations: • may not be offer enough categories for people to reply	

Likert Scale Questions	• Typically, a 5- or 7- point scale that evaluates a respondent's level of agreement with a statement or the intensity of their reaction towards something. • The scale develops symmetrically: the median number (e.g., a '3' on a 5-point scale) indicates a point of neutrality, the lowest number (always a '1') indicates an extreme view, and the highest number (e.g., a '5' on a 5-point scale) indicates the opposite extreme view. • Also know as ordinal questions, as the answers are presented in a specific order • Useful when there is a sense of what the respondents are thinking (e.g. Reflecting on an organizational change that all respondents are aware of).	
Rating Scale Questions	• Rating scale questions are questions where the answers map onto a numeric scale (such as rating customer support on a scale of 1-5, or likelihood to recommend a service/product from 1 to 10). • When using a rating question in a survey, explain what the scale means (e.g., '1' for 'Poor', 5 for 'Great). • Useful when assigning numerical values to surveys to visualize and compare trends	
Demographic Questions	• Provide some context about respondents • Can be used to segment or stratify the responses during analysis. • From an ethics point of view, do not collect data that is not useful for the evaluation question(s) Limitations: • Demographic questions are only useful if there is a need to know the information—do not ask for the information if it is not relevant.	

J: *Facilitating Focus Groups*: Do's and Don'ts

Facilitating a Focus Group: Do's & Don'ts

Do:	Don't:
• Include up to 8 questions • Respond to group needs • Consider the population • Use prompts! • Reflect back what is being said • Remain impartial • Adhere to Ethical Guidelines • Ensure each participant has a chance to engage • Use software to assist in gathering the data such as audio recording software	• Ask mulitple questions at the same time • Expect a consensus • Single out specific participants • Focus on qualitative data

Keep in Mind….

- The most common approach to analysis is content analysis. This involves looking through the data for common themes or patterns.
- Analysis can be inductive (where the person doing the analysis discovers themes or patterns in the data) or deductive (where data are analyzed according to a pre-determined framework, like the program's logic model).
- Qualitative analysis provides "thick description"—this means that the reader gets a full, in-depth sense of the situation being described.
- There are software programs that can help to analyze qualitative data, like QSR NVivo. These tools are typically used only with large samples.

Key Terms

Activities: or interventions, are actions of staff members and stakeholders; interventions that describe what the program or initiative will do with its resources to direct a course of change; they are designed to meet the program's goals or project objectives.

Assumptions: these reflect deeply held values, norms, and ideological perspectives; forecasts what changes might occur as an outcome of the initiative.

Chain of response: outlines well-established connections between the supporting idea and the service outcomes or goals; explains the links in program inputs and activities to outcomes; leads to the ultimate end results.

Closed-ended questions: questions that limit a user's response options to a set of pre-selected choices. This broad category of questions includes Linkert scale questions, Nominal questions, and Rating scale questions.

Coding: grouping and assigning values to responses from the survey; using allocated numeric codes to each possible answer for organizational purposes.

Communication method: various methods of communications with a stakeholder group, including oral, visual or written to gather information about the audience.

Communication purpose: report or findings about a stakeholder group; sharing the findings with key audiences, in the clearest and most concise way to represent the findings of the research.

Data cleaning involves the detection and removal (or correction) of errors and inconsistencies in a data set or database due to the corruption or inaccurate entry of the data. Incomplete, inaccurate or irrelevant data is identified and then either replaced, modified or deleted.

Data triangulation is the process of gathering and comparing data from more than two sources. These may include questionnaires, focus groups, or key informant interviews.

Deductive coding (concept-driven coding): a predefined set of codes assigned to the new qualitative data. These codes might come from previous research, or predetermined themes of analysis

Descriptive analysis: absolute numbers to summarize individual variables and patterns: ie mean, median, mode, percentage, frequency, range

Descriptive statistics (univariate analysis): absolute numbers that do not explain or detail rational and reasoning; helpful when research is limited to the sample and does not need to be generalized to a larger population (e.g. distribution of gender in respondents).

Engagement plan: addresses engagement objectives and meet stakeholder needs and expectations through a tailored approach and design; include mechanisms to ensure proper

documentation is maintained to demonstrate equitable processes for stakeholders and transparent decision making; a live/iterative document that describes how you will engage with the stakeholders.

Evaluation: the systematic assessment of the design, implementation or results of an initiative for the purposes of learning or decision-making. (Canadian Evaluation Society, 2015)

Focus group/interview: a small group of people to share their thoughts, ideas and experiences related to a particular subject for research analysis.

Formative Evaluations: used to refine or improve a program; conducted during program development and implementation; indicates direction on how to best achieve goals or improve a program.

Formats of reporting: techniques used to report the information obtained such as visual displays, oral presentations, interim reports, informal conversations, videos, media, press, community presentations, or funder presentations

Goal: what a program is supposed to produce; describes the intended consequences of the program being developed; a goal is a broad statement that describes your program's intent.

Impacts: higher level strategic goals or long-term effects of an intervention

Impact evaluation: determines any broader, longer-term changes that have occurred as a result of the program; the net effects, typically on the entire school, community, organization, society, or environment.

Inductive coding (open coding): newly created codes based on the qualitative data itself; all codes arise directly from the survey responses.

Inferential analysis: shows the relationship between multiple variables to generalize results and make predictions (e.g. correlation, regression, analysis of variance)

Inputs- raw materials that provide the basis for a project (e.g. money, technical expertise, relationships and personnel)

Interview-based survey methods: common interview-based mechanisms (e.g. face-to-face interviews and telephone surveys)

Interview guide: script that assists the facilitator to keep the conversation on track and ensures the topics under study are addressed; does not need to include all of the questions that will be asked, nor does the conversation need to align exactly with the guide, the discussion can be modified based on responses from participants.

Likert scale questions: typically a 5- or 7- point scale that evaluates a respondent's level of agreement with a statement or the intensity of their reaction towards something; the scale develops symmetrically: the median number (e.g., a '3' on a 5-point scale) indicates a point of

neutrality, the lowest number (always a '1') indicates an extreme view, and the highest number (e.g., a '5' on a 5-point scale) indicates the opposite extreme view.

Logic Model: "…a picture of how your program works – the theory and assumptions underlying the program. This model provides a road map of your program, highlighting how it is expected to work, what activities need to come before others and how desired outcomes are achieved." - W.K. Kellogg Foundation Evaluation Handbook 1998, p.35

Needs Assessment: determines who needs the program, how great the need is, and what can be done to best meet the need.

Nominal questions: is a type of survey question that presents people with multiple answer choices; the answers are non-numerical in nature and don't overlap, unless an 'all of the above' option is included.

Open-ended questions: survey questions that allow respondents the freedom to answer in their own words, instead of limiting their response to a set of pre-selected choices (such as multiple-choice answers, yes/no answers, 0-10 ratings, etc.).

Outcome evaluation: investigates to what extent the program is achieving its outcomes (short-term, medium-term outcomes); determine whether and to what extent the expected changes in outcomes occurred and whether these changes can be attributed to the program or program activities.

Outcomes: these are the benefits that the project or intervention is designed to deliver.

Outputs: are tangible and intangible products that result from project activities.

Primary Data: is original data collected for a specific purpose**.**

Process evaluation: focuses on the services that were delivered to the targeted population, based on a comparison of the intended program implementation or delivery and intended target population (reach) with the actual implementation, delivery and reach; is useful for monitoring program implementation, for identifying changes to enhance program delivery, and improving access and participation of the program's targeted population; each question is either linked to activities/ outputs or target groups identified in the logic model.

Project Lead: works closely with the evaluation team including program managers, program staff and other stakeholders; tasks include clarify roles and responsibilities, identify why the evaluation is being done, identify who the end users will be, and develop an agreement on what is to be evaluated.

Qualitative data: non-numerical information, such as responses gathered through unstructured interviews, observations, focus groups, or open-ended survey questions.

Quantitative data: information that has been collected in numerical form, such as rating scales or documented frequency of specific behaviors

Quantitative Analysis Methods:

Rating scale questions: the answers map onto a numeric scale (such as rating customer support on a scale of 1-5, or likelihood to recommend a service/product from 1 to 10). When you use a rating question in a survey, be sure to explain what the scale means (e.g., '1' for 'Poor', 5 for 'Great

Secondary data: is data collected by individuals or agencies for purposes other than those of a particular research study.

Self-administered survey methods: instruments commonly include mail back surveys, hand-delivered questionnaires, and web surveys.

Smart Goals: are indicators that can be quantitative/numeric, qualitative/non-numeric; smart goals are: **S**pecific, **M**easurable, **A**ttainable, **R**elevant, **T**rackable.

Sphere of Control: program assets and resources that fall under inputs, activities and progress outputs; examples include funding, program activities; includes donors/funders, implementing partners, contractors and subcontractors etc.

Sphere of Influence: program outcomes measured by short, intermediate (medium) and long-term influence; includes foundations, private sector, government, CSOs and CBOs, etc.

Sphere of Interest: program impacts, and sequence of outcomes; includes community members, families, students, farmers etc.

Stakeholder: a stakeholder is any person or group who has an interest in the program being evaluated or in the results of the evaluation; may include funders, project staff, administrators, project participants or clients, community leaders, collaborating agencies, and others with a direct or even indirect interest in program effectiveness.

Stakeholder engagement: the process to clarify the purpose of the engagement project and maximise the impact of project activities.

Summative evaluation can be broken down into two categories, outcome and impact evaluation; should be completed once a program is well established and highlight the program is achievements.

Survey: a survey is a questionnaire that people can fill in themselves (online, in person); it is important to remember that sometimes people's answers will vary in self reporting, so survey questions must be as clear as possible to properly gather information.

Survey questions: develop survey questions that accurately assess the opinions, experiences, and behaviors of respondents is a critical aspect of survey methods; the wording of the questions is important since it has a direct impact on the outcome

Thematic coding (thematic analysis): is a type of qualitative data analysis that finds themes in text by analyzing the meaning of words and sentence structure.

Theory of change: links outcomes and activities to explain how and why the desired change is expected; uses "if this, then that" statements; describes the way in which the desired change is established; assists in outlining the assumptions about the program and explains why new activities will lead to the outcomes.

Additional Resources

Logic Models

Basic Monitoring and Evaluation Concepts (video)

3 Ways to tell the difference between an Output and an Outcome (video)

DIY toolkit: Theory of Change (video)

Survey Tools:

Survey Monkey

Google Surveys

Program Evaluation Tip Sheet: Constructing Survey Questions

Checklist to Evaluate the Quality of Questions

General Online Resources:

National Council on Ethics in Human Research

SMART Goals

Writing SMART Objectives

Checklist to Evaluate the Quality of Questions)

Group Games

Canva- Graphic Design Platform

PodBean

Evaluation Resources:

Better Evaluation: Specify the key evaluation questions

Program Evaluation Tip Sheet: Constructing Survey Questions

Compendium of Evaluation Tools to Measure Outcomes for Community Based Projects funded under the HIV & Hepatitis C Community Action Fund

Performance Monitoring and Evaluation Tips: Conducting Focus Group Interviews

MEASURE Evaluation - HIV and AIDS Tools

OHTN Resources

OHESI

OHTN Cohort Study

OHTN Endgame Funding Program

OHTN Rapid Response Service

If you have any questions regarding this Resource Guide or would like support with an evaluation you are working on, please contact the OHTN for further information.

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