



# Evaluating health promotion programs: introductory workbook



#### **Public Health Ontario**

Public Health Ontario is a Crown corporation dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, frontline health workers and researchers to the best scientific intelligence and knowledge from around the world.

Public Health Ontario provides expert scientific and technical support to government, local public health units and health care providers relating to the following:

- communicable and infectious diseases
- infection prevention and control
- environmental and occupational health
- emergency preparedness
- health promotion, chronic disease and injury prevention
- public health laboratory services

Public Health Ontario's work also includes surveillance, epidemiology, research, professional development and knowledge services. For more information, visit <a href="https://www.publichealthontario.ca">www.publichealthontario.ca</a>

#### How to cite this document:

Ontario Agency for Health Protection and Promotion (Public Health Ontario), Snelling S, Meserve A. Evaluating health promotion programs: introductory workbook. Toronto, ON: Queen's Printer for Ontario; 2016.

ISBN: 978-1-4606-8317-0

All or part of this document may be reproduced for educational purposes only without permission.

Public Health Ontario acknowledges the financial support of the Ontario Government.

© Queens Printer for Ontario, 2016

#### **Authors**

Susan Snelling
Evaluation Specialist
Health Promotion Capacity Building
Public Health Ontario

Allison Meserve Health Promotion Consultant Health Promotion Capacity Building Public Health Ontario

## Special thanks

Laura Bellissimo
Health Promotion Coordinator
Health Promotion Capacity Building
Public Health Ontario

Kim Bergeron Health Promotion Consultant Health Promotion Capacity Building Public Health Ontario

Kara DeCorby
Senior Product Development Advisor
Health Promotion Capacity Building
Public Health Ontario

Shawn Hakimi Product Development Advisor Health Promotion Capacity Building Public Health Ontario

Gobinaa Manoharan Product Development Advisor (former) Health Promotion Capacity Building Public Health Ontario

Gloria Mensah Product Development Advisor Health Promotion Capacity Building Public Health Ontario

Jodi Thesenvitz Senior Product Development Advisor *(former)* Health Promotion Capacity Building Public Health Ontario

Areeta Bridgemohan Health Promotion Field Support Specialist *(former)* Public Health Ontario

## Acknowledgements

Public Health Ontario wishes to acknowledge and thank THCU staff and the many partners who contributed to earlier versions of this document. THCU (originally known as The Health Communication Unit) started in 1993 at the University of Toronto and moved to Public Health Ontario's Health Promotion, Chronic Disease and Injury Prevention Department in 2011.

## Disclaimer

This document may be freely used without permission for non-commercial purposes only and provided that appropriate credit is given to Public Health Ontario. No changes and/or modifications may be made to the content without explicit written permission from Public Health Ontario.

# Contents

Introduction	1
About program evaluation in health promotion	1
Step 1: Clarify program	3
What is Step 1 about?	3
Why is Step 1 important?	
How do I do Step 1?	
Questions for reflection	
Summary	9
Worksheet	10
Step 2: Engage stakeholders	11
What is Step 2 about?	11
Why is Step 2 important?	
How do I do Step 2?	12
Questions for reflection	16
Summary	17
Step 3: Assess resources and evaluability	
What is Step 3 about?	18
Why is Step 3 important?	18
How do I do Step 3?	19
Questions for reflection	20
Summary	21
Worksheet	21
Step 4: Determine your evaluation questions	21
What is Step 4 about?	22
Why is Step 4 important?	22
How do I do Step 4?	22
Questions for reflection	27
Summary	28
Worksheet	29
Step 5: Determine appropriate methods of measurement and proce	dures 30
What is Step 5 about?	30
Why is Step 5 important?	30
How do I do Step 5?	31
Questions for reflection	40
Summary	40

Step 6: Develop evaluation plan	
What is Step 6 about?	42
Why is Step 6 important?	42
How do I do Step Six?	43
Questions for reflection	44
Summary	44
Worksheet	45
Step 7: Collect data	46
What is Step 7 about?	46
Why is Step 7 important?	46
How do I do Step 7?	47
Questions for reflection	50
Summary	51
Step 8: Process data and analyze results	52
What is Step 8 about?	52
Why is Step 8 important?	53
How do I do Step 8?	53
Questions for reflection	55
Summary	55
Step 9: Interpret and disseminate the results	57
What is Step 9 about?	57
Why is Step 9 important?	57
How do I do Step 9?	58
Questions for reflection	61
Summary	61
Worksheet	61
Step 10: Apply evaluation findings	62
What is Step 10 about?	62
Why is Step 10 important?	63
How do I do Step 10?	63
Review your recommendations and brainstorm actions	63
Questions for reflection	65
Summary	65
Worksheet	65
Conclusion	66
References	67

## Introduction

To ensure the effectiveness of health promotion efforts, you need to have the right information. This workbook provides an overview of key concepts and strategies to help you conduct program evaluations, taking you through 10 steps (Figure 1).

Each chapter describes the step, why it is important and how to do it. The chapters also include helpful worksheets, resources to consult and questions for reflection. By using this workbook, you will be able to apply systematic methods to your evaluations. That can help you to conduct everything from one-time studies to ongoing program monitoring.

While this workbook focuses on health promotion programs, you can also use the 10-step model to evaluate other efforts. That includes healthy public policy and health communications. You'll find an evaluation plan template in Step 6; start to use it to document your work from the beginning.

This workbook uses a goals-based approach to evaluations. It emphasizes planning for, and measuring the achievement of, pre-set goals. Michael Scriven defines it as: "any type of evaluation based on...the goals and objectives of the program, person, or product." This type of evaluation, upon which process and outcome evaluations are based, relies on having sufficient information about the program. You can apply that for accountability and program improvement, evaluating both processes and outcomes.

## About program evaluation in health promotion

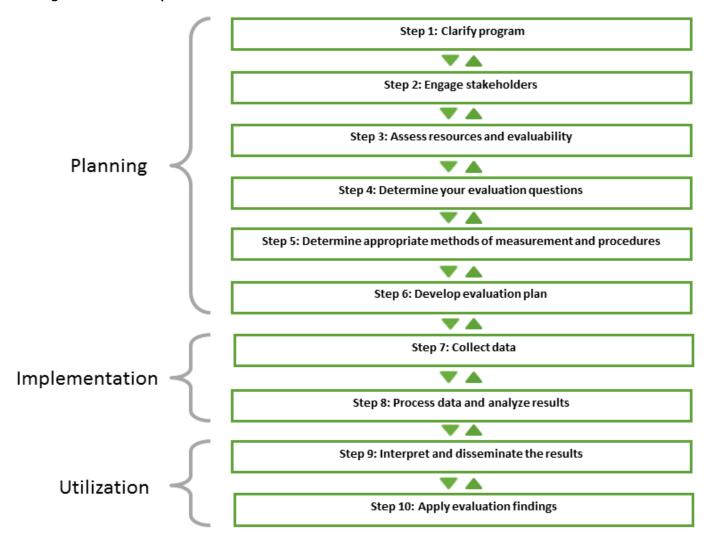
Practitioners can use any number of structured programs to arrive at desired health outcomes. Take an effort to improve the nutritional status of low-income families. Possible activities include community gardens, shopping skill classes and healthy cooking demonstrations. Those may be the appropriate elements. But do you know:

- the best way to design and deliver the program;
- the optimal use of time and resources;
- whether the program is meeting the needs of participants;
- ways of improving the program; and
- how to demonstrate the effectiveness of the program to funders and other stakeholder groups.

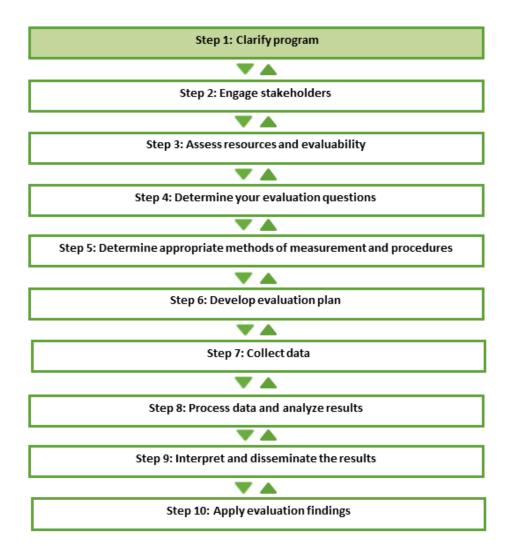
Success depends on more than the right program elements. Health promotion practitioners need to make ongoing decisions about issues like these. That requires a thorough program evaluation.

According to the Ontario Public Health Standards, "program evaluation is the systematic gathering, analysis, and reporting of data about a program to assist in decision-making. It includes quantitative, qualitative, and mixed-method approaches." Such efforts produce the information needed to design or improve the effectiveness of health promotion efforts. That is what this workbook is all about.

Figure 1: The 10-step evaluation model



# Step 1: Clarify program



## What is Step 1 about?

This step is about forming a strong foundation for program evaluation. It is important to assess whether your program is ready to be evaluated. That means gathering information about the program and sharing it with stakeholders as you begin to plan for evaluation.

## Why is Step 1 important?

To plan a program evaluation, you need clarity about the program and what it was intended to accomplish.

When groups begin evaluation planning, they sometimes realize a few things. That they lack a program plan or logic model. Or that their documentation is out of date, and no longer accurately reflects the program. Developing or revising a program plan or logic model are fundamental preparatory steps. For guidance, see <u>Planning health promotion programs: introductory workbook</u>.<sup>3</sup>

Take the time to generate a common understanding about the program, and form a general consensus on its different components. That will facilitate the rest of the program evaluation process.

Is your program ready for useful evaluation?

Part of preparing can involve a process called an "evaluability assessment". You can define "evaluability" as the extent to which the program can be evaluated given the current information and context.

Wholey (2010) identifies four standards, which we'll discuss under steps 1, 2, 3 and 5:

- program goals are defined, agreed-upon and realistic;
- information needs are well-defined (agreement on focus of evaluation);
- intended users are willing and able to use evaluation information; and
- evaluation data are obtainable.4

## How do I do Step 1?

You will need a summary of your program that includes:

- 1. program goal(s)
- 2. population(s) of interest
- 3. outcome objectives
- 4. strategies, activities, and assigned resources
- 5. process objectives or outputs

Bring this information together to create a narrative and/or a logic model.

Logic models summarize the main elements of a program. They provide a visual depiction of the relationship between these elements. A logic model illustrates the "if/then" logic – the connections between what the program does, the recipients of the program and the desired outcomes.

An evaluation can test whether the program actually works the way the logic model describes. A logic model can be a tool to create agreement with your stakeholders about the program, and a source of possible evaluation questions.

For a template showing the structure of a logic model, see Worksheet for Step 1. For more information on how to complete and use the template, see the Planning health promotion programs: introductory workbook<sup>3</sup> and the resource list at the end of this step.

## 1. Define your program goal(s)

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". 3,5

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. However, knowing it can suggest the direction for evaluation questions.

#### 2. Define your population(s) of interest

This is the group(s) that requires special attention to achieve your goal(s). There are two kinds of populations of interest.

- **Primary:** Their health is addressed through the program. The goal often mentions this group.1
- **Secondary:** They influence the primary population of interest.

A program with multiple parts and strategies may have several primary and secondary populations of interest.

Why are they important to evaluation? Because they can be key sources of data about the program. Often, these populations will also be program stakeholders who will guide or have input into the evaluation process.

## 3. Define your outcome objectives

There are two main kinds of objectives: process and outcome. Process objectives, discussed later in Step 1, relate to activities. Outcome objectives are brief statements specifying the desired changes a health promotion program causes.

Outcomes may also be called results, impacts or effects. Good outcome objectives include four components:

<sup>&</sup>lt;sup>1</sup> In the Ontario Public Health Standards this group is considered your priority population.

- **who** you want to change (audience);
- what you want to change in the audience (outcome);
- by **how much**; and
- by **when**.

In other words, an outcome objective spells out how much of what should happen to whom by when.

Sometimes, you can write objectives without stating specific change targets and/or timelines. That choices depends on:

- knowledge of the existing situation in community (i.e., "baseline");
- knowledge of what change is possible;
- confidence in how the intervention can bring about desired change; and
- ability to collect data identifying the degree of change

Being clear on what the program does and what outcomes it should produce is the first step in considering the focus of evaluation.

#### SHORT-, MEDIUM- AND LONG-TERM OBJECTIVES

Short-, medium- and long-term objectives create stepping stones to bring about sustainable changes.

For instance, you may want to create medium-term changes in health-related behaviours, or support for a healthy public policy among decision-makers. That may require changes in knowledge and attitudes. Longer-term objectives often refer to changes in community conditions, including the social, economic, and physical environments.

The steps and efforts needed to achieve the program goal will dictate your timeframes.

Do you lack a benchmark tied to your anticipated result? You can still specify the direction of the change. For example, "An increase in levels of confidence among public health practitioners after exposure to a logic model workshop, measured at two weeks after the workshop."

#### **OTHER CHARACTERISTICS OF GOOD OBJECTIVES**

Well-crafted program objectives are SMART. That acronym is an easy way to remember these key features:

- **S**pecific (clear and precise)
- Measurable (amenable to evaluation, data would be available and accessible)

- Appropriate (aligned with mandates and stakeholder expectations, theory and other evidence)
- Realistic (reasonable considering the resources and other circumstances)
- Time-limited (specific time frame provided for achievement of objective)

#### 4. Define your strategies, activities and assigned resources

It's important to define and connect three areas:

- what you want to do (specific strategies and activities);
- what you aim to achieve (goals and outcome objectives); and
- what you're working with to make that happen (available resources).

#### **STRATEGIES**

A strategy is a broad approach to facilitating change. You can choose strategies according to the typical activities they include, or intended results. In any combination, strategies should align with the health promotion and behaviour change theories that guide your program.

There are many types of strategies for health promotion. For instance, the Ottawa Charter for Health Promotion identifies five: 1) build healthy public policy; 2) create supportive environments; 3) strengthen community action; 4) develop personal skills; and 5) reorient health services. 6 Other supplemental strategies include education, health communication and self-help.

#### **ACTIVITIES**

A strategy will likely include many activities, from having meetings, to reviewing evidence, to delivering presentations. Some activities may be part of more than one strategy. For instance, a given event may be educational but also an opportunity to gather support for a policy initiative. Clarifying these strategic activities paves the way to identifying the possible focus for your evaluation.

#### **RESOURCES**

Resources include money, expertise, time, space, equipment, etc. These can come through:

- funded budgets;
- donated funds or revenue; and
- goods and services provided in-kind by partners.

Identifying resource allocation is important. That gives you a sense of whether your program plan was realistic given your resources. This may help explain the results of your evaluation, and guide resource allocation if you decide to revise your program.

By clarifying your program in this step, you will address the first step of evaluability assessment: program goals are defined, agreed-upon and realistic.

## 5. Define your process objectives or outputs

Process objectives describe what the program activities generate. Similar to outcome objectives, good process objectives include four components:

- what you will do or produce (activity);
- who you are doing or producing it for (audience);
- how much; and
- by when.

So a process objective tells you how much of what you will do or produce, for whom by when. Process objectives are sometimes called outputs - the product that comes out of the activities you plan to undertake.

TIP: Define what you mean by certain terms and be consistent in your usage. That facilitates communication. It's especially important to clarify terms with stakeholders at the beginning of the process. The chart below identifies the terms used in this workbook and a number of common equivalents.

Table 1: Common terms used in planning

OUR TERM	ALTERNATIVES
Goal	Purpose, mission
Outcome objectives	Outcomes, impacts, effects, results
Audience	Population of interest, priority population, target group, community of interest
Strategies	Components, categories
Indicator	Criteria for success, measures
Activities	Process, implementation
Process objectives	Implementation objectives, outputs
Resources	Budget, assets, inputs

## **Questions for reflection**

- Do we have general agreement on the program's nature and intention?
- Is this program operating consistently enough that we can describe it adequately?
- Is this a program, or an approach, initiative, policy, strategy, etc.? You can evaluate all of these, but might need to adapt the concepts in this workbook for broader application.

## **Summary**

Clarifying your program is a critical first step in evaluation. That creates the foundation for other decisions about evaluation that will come in the next steps.

At the end of this step you should have:

- clearly articulated program goal(s), populations of interest, outcome and process objectives, strategies, activities, and resources;
- a logic model or narrative program description; and
- agreed-upon terminology.

You can incorporate your work on Step 1 into the evaluation plan you will pull together in Step 6.

#### Additional resources:

Davies R. Planning evaluability assessments: A synthesis of the literature with recommendations. Available from:

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/248656/w p40-planning-eval-assessments.pdf7

Centers for Disease Control and Prevention, CDC Division for Heart Disease and Stroke Prevention, State Heart Disease and Stroke Prevention Program. Evaluation guide: Developing and using a logic model. Available from:

http://www.cdc.gov/dhdsp/programs/nhdsp program/evaluation guides/docs/logic model. pdf<sup>8</sup>

Wholey JS. Exploratory evaluation. In Wholey JS, Hatry HP, Newcomer KE. Handbook of practical program evaluation.4

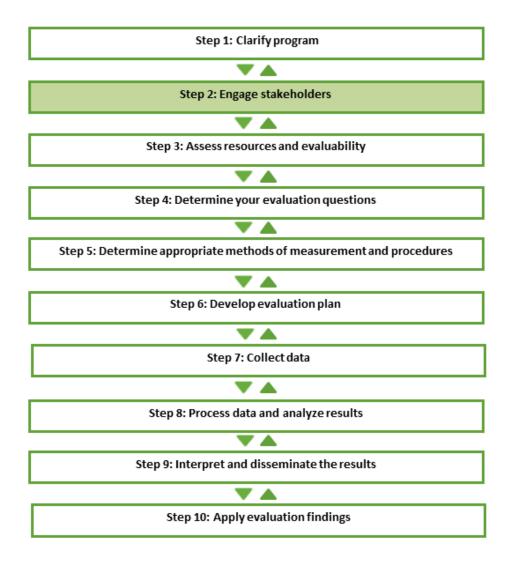
W.K. Kellogg Foundation. W.K. Kellogg Foundation logic model development guide. Available from: http://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundationlogic-model-development-guide9

## Worksheet

## Get Worksheet for Step 1: Program Logic Model Template

For a full list of worksheets, please visit <u>www.publichealthontario.ca/HPevaluation</u>.

# Step 2: Engage stakeholders



## What is Step 2 about?

Stakeholders are anyone – people, groups or organizations – that the program or evaluation could affect.

In this step, consult stakeholders about their interest in, and needs from, an evaluation. Some stakeholders will participate throughout the planning, implementation and/or use of the evaluation. You may consult others just at key points.

To use evaluation findings best, it's critical to get input from the stakeholders who are decision makers. Otherwise, stakeholders could end up overruling, delaying, challenging or questioning evaluation recommendations.

Step 2 is part of the process to define information needs and intended uses of the evaluation (the evaluability assessment).

## Why is Step 2 important?

Many health promotion efforts are complex. So stakeholders take on particular importance, providing perspectives that may not be clear from a single vantage point. It's vital to solicit these opinions, interests, concerns and priorities early in the evaluation process. That way, results are more likely to address stakeholders' information needs.

Your stakeholders' level of involvement may change throughout your program evaluation. It happens as new knowledge and insights arise. Think clearly about stakeholder engagement up front. That will help you make informed decisions about who to involve.

## How do I do Step 2?

Stakeholder engagement will carry through your evaluation, but in this early step, you will:

- 1. Identify potential stakeholders to consult about the evaluation.
- 2. Identify their interests and roles in the evaluation.
- 3. Engage the stakeholders in reviewing your program and its logic model.
- 4. Engage stakeholders in brainstorming key areas of your program evaluation, including its principles, uses and questions.

## 1. Identify potential stakeholders

Identify potential stakeholders for the program evaluation. Be clear on:

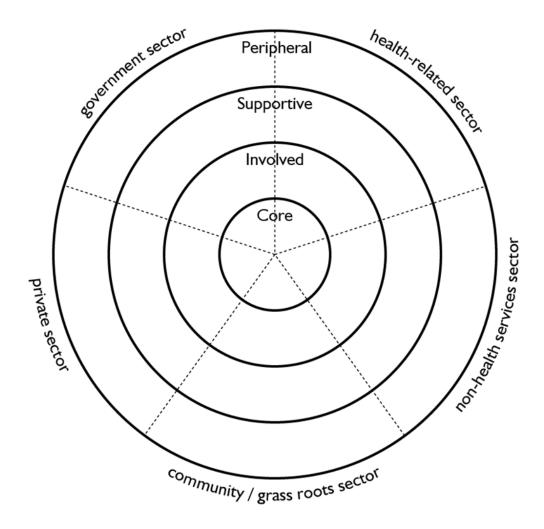
- Who are the key, participating stakeholders?
- Who are the primary intended users of the evaluation findings? (You may need to come back to this question once you have identified the evaluation's purpose.)
- What are stakeholder expectations about their level of participation? (Who should be involved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

There are four levels of stakeholder involvement in evaluations:

- 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. 10

The stakeholder engagement wheel is a tool for thinking about and categorizing your stakeholders systematically 10. Use it to gauge stakeholders' ideal level of involvement in your evaluation.

Figure 2: Stakeholder wheel



Worksheet 1.2 in PHO's Online Health Program Planner (OHPP) provides direction for identifying possible stakeholders and the nature of their involvement in your evaluation.<sup>11</sup>

Evaluations in health promotion can feature a range of involvement from stakeholders, from being consulted periodically to full participation in all aspects of the evaluation. Not all members from each sector shown in the wheel will be involved in the evaluation. Assess desired input by looking at your needs, e.g., knowledge about the program, leadership of the program, evaluation expertise or decision-maker perspectives.

## 2. Identify stakeholder interests and roles in evaluation

Once you've determined your stakeholders, ask them about their interests and roles in your evaluation. They should have a meaningful opportunity to contribute their expertise and

perspectives. You should make the best use of their time and maximize their benefit to the evaluation process.

For example, someone with experience developing a similar program might be most valuable in the early stages of evaluation development. By contrast, someone with data analysis skills might best be involved when you're determining your sample size, creating your data collection tools and analyzing your data.

You may wish to draw on some stakeholders to form an evaluation committee, to oversee or actively participate in the process. This committee can provide guidance and continuity of purpose throughout. You can call on other stakeholders as needed at key points in the process.

A Project Charter can be a valuable tool. That's particularly true if you're taking a participatory approach, with involvement from several people/groups throughout the project's lifespan. Such a document:

- describes the purpose of a given project and concepts;
- outlines roles and responsibilities; and
- describes the engagement and decision-making processes, timeframes and expectations.

Many evaluation participants also find it helpful to have a reference document to share with their organizations, to describe the nature of the project and their anticipated role.

## 3. Engage stakeholders to review your program and logic model

Once you have identified stakeholders, they can provide feedback on your logic model and/or program description (developed in Step 1).

A logic model often helps to focus an evaluation. It makes a program's assumptions and expectations explicit, and increases stakeholders' understanding about the program or initiative. This can lead to an informed discussion about what aspects of the program to evaluate.

## 4. Engage stakeholders in brainstorming

At this stage, your stakeholders can begin to generate ideas to form the foundation of your evaluation. These include: the evaluation principles, your evaluation purpose and uses, and the evaluation questions.

#### **EVALUATION PRINCIPLES**

You'll confront many options during an evaluation. Your evaluation principles will serve as a guide. Developing these principles with your stakeholders will also make future decisions more manageable.

In 2012, the Canadian Evaluation Society adopted program evaluation standards, <sup>12</sup> developed by the Joint Committee on Standards for Educational Evaluation. These five clusters may serve as principles for your evaluation:

- 1. **Utility** will the evaluation provide relevant and useful information?
- 2. Feasibility are the planned evaluation activities realistic given the time, resources, and expertise at hand?
- 3. **Propriety** does this reflect a responsible use of evaluation?
- 4. Accuracy will the evaluation produce findings that are dependable and truthful, given the needs of those who will use them?
- 5. **Accountability** will the evaluation be adequately documented?<sup>12</sup>

If you are engaging in a participatory evaluation, you may wish to include related principles; for example, shared ownership of data or consensus decision-making approaches. See Paloma-Wellesley for more detail on participatory approaches in evaluation.<sup>13</sup>

#### **EVALUATION PURPOSES AND USES**

You can conduct evaluations for learning and/or accountability. To clarify, consider the following questions:

- Why do you want to evaluate your program now?
- How will the results of your evaluation be used?

For example, if you are at the initial stages of your program development process, you may be interested in learning about:

- The issue your program is trying to address, and the best strategies to address it.
- The operations of a program (including which activities take place, who conducts them and who they reach).
- Whether the activities are being implemented as planned.
- The strengths and weaknesses of your program, and areas for improvement.

Use this information to fine-tune your program, to enhance the chances it will produce the intended outcomes.

You may also need to conduct your evaluation for accountability reasons. For example, to:

- provide a report to your funder about the program's effectiveness.
- inform community leaders about program results, so they can more effectively support it.
- discover whether the program is producing the desired progress on outcomes.

It is important to plan your evaluation based on your intended uses. Too often, teams do not use evaluation results to guide decisions about what to do next or differently. Consider that up front. It can strengthen your evaluation process, and how you engage stakeholders to address potential threats.

It is particularly important to understand the views of the people who could use the evaluation results – what do they want to know, what data would they find persuasive, and how might they use the findings to make decisions? By knowing this ahead of time, you can design the evaluation to maximize its usefulness.

Evaluations have a number of potential uses, for various groups:

- program managers will use the findings to develop a program; improve their thinking on how change is occurring; and consider improvements.
- **decision-makers** will determine whether to continue the program.
- stakeholders will increase their understanding of each other's values, perspectives and experiences as it relates to the program.
- program staff and partners will understand more about the program implementation, and some of the challenges and enablers.
- **clients or participants** will be engaged in reflecting on and improving a program.
- similar organizations will learn from innovations so they can adapt and apply success factors and approaches.
- **policy-makers** will be influenced in developing or adapting their policies.

#### **EVALUATION QUESTIONS**

At this stage of evaluation planning, you can begin to get ideas from all relevant stakeholders about their questions regarding your program. These are not the final questions to ask when collecting data; rather, evaluation questions describe what's useful to know about your 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.

In Step 4, you will come back to this list to organize and select the key evaluation questions. Then in Step 5, you will develop the questions to use for data collection (i.e., to go in the survey or interview guide).

By completing Step 2, you will address two more standards for evaluability:

- information needs are well-defined (agreement on focus of evaluation); and
- intended users are willing and able to use evaluation information.

## **Questions for reflection**

Are there stakeholders outside the usual program contacts to engage in the evaluation? What new perspectives might they bring?

- How could you further engage your stakeholders in the evaluation? What's in it for them?
- Do you need to address any concerns about evaluation before you proceed? Sometimes stakeholders feel that evaluation is about judging their performance, or about justifying program cuts. What can you clarify so people will trust the evaluation process, and understand the implications of doing an evaluation now?
- Is a participatory approach right for your evaluation? Consider the benefits and the challenges of increased participation across stakeholders and sectors.

## **Summary**

By the end of this step you will have:

- identified your stakeholders;
- categorized them by their level of involvement in your program evaluation;
- formed your evaluation committee and/or developed a Project Charter;
- reviewed and clarified your program logic model with stakeholders;
- brainstormed the purpose(s) and uses of your evaluation;
- developed principles to guide your evaluation; and
- brainstormed possible evaluation questions.

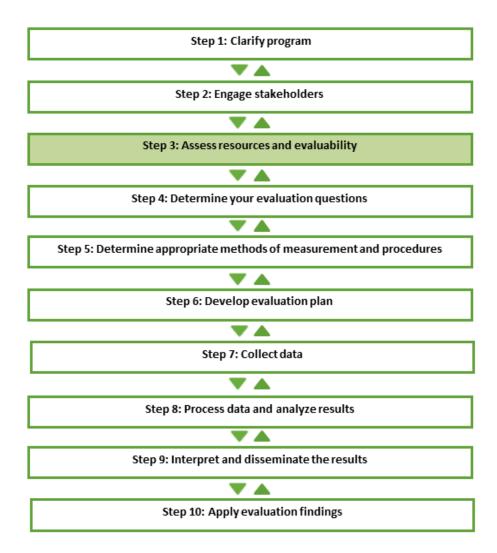
You can incorporate your work on Step 2 into the evaluation plan you will pull together in Step 6.

#### Additional resources:

Preskill H, Jones N. A practical guide for engaging stakeholders in developing evaluation questions. Available from: http://www.rwjf.org/content/dam/webassets/2009/01/a-practical-guide-for-engaging-stakeholders-in-developingevalua<sup>14</sup>

Patton, M. Q. (2008). Utilization-focused Evaluation. 4th Edition. Thousand Oaks, CA: Sage. 15

# Step 3: Assess resources and evaluability



## What is Step 3 about?

Now is the time to clarify the resources available for your evaluation. At this stage, you and your stakeholders should have a general sense of the evaluation, and of questions that would be of interest. Information about available resources will help you in two ways. It defines the scope of the evaluation, and feeds into decisions when selecting your evaluation methods.

## Why is Step 3 important?

Evaluations can be time-consuming and expensive. Some people cannot complete their evaluation due to constraints. You can avoid that by assessing available resources. This step will also help to clarify and build commitment from stakeholders, if you ask them to contribute resources to the evaluation.

## How do I do Step 3?

There are two main tasks:

- 1. identify resources available for the evaluation.
- 2. determine whether evaluation is appropriate for your program now.

#### 1. Identify resources available for the evaluation

Consider all the types of resources you might need for an evaluation:

- staff salary and benefits the time staff members can spend on evaluation and level of expertise required; data entry; travel expenses; volunteers.
- consultants people who can provide outside expertise or other perspectives. The 2010 <u>Kellogg Foundation Evaluation Handbook</u> has useful information and a checklist for outlining the role of an external consultant.<sup>16</sup>
- data collection possible costs associated with accessing data from large databases; collecting new data through surveys or interviews; or hosting focus groups and group meetings.
- supplies and equipment a computer with the relevant software (e.g., quantitative or qualitative analysis software); photocopier; voice recorders; online survey subscription.
- communications costs for writing a report and designing materials for distribution; conference fees.
- **time** how much you have to complete the evaluation.

The Kellogg Foundation reports that evaluations generally cost 5-7 per cent of a program's budget. Some small evaluations cost less, and larger-scale evaluations can cost 10 per cent or more of a program's budget.16

## 2. Determine whether evaluation is appropriate for your program

The questions below can guide your decision as to whether, and to what extent, to evaluate your program. These are adapted from Peersman et al's framework, <sup>17</sup> to correspond to Wholey's four principles<sup>4</sup> discussed in Step 1. You have already answered some of these concepts in Steps 1 and 2.

#### Agreed-upon goals

- Are program goals and objectives clearly defined and measurable?
- Is there a theory of change or logic model that documents the program?
- Do program activities clearly link to the intended outcomes?
- Are stakeholders interested in conducting an evaluation?
- Is there an understanding of the main purpose of the evaluation?

#### Well-defined information needs

- Are stakeholders interested in conducting an evaluation?
- Is there an understanding of the main purpose of the evaluation?
- Have evaluation questions been chosen and are they appropriate for the evaluation type?
- Is there agreement around the evaluation questions?
- Are questions realistic based on the information and data available to answer them?

#### Intended users willing and able to use results

- Are stakeholders invested and motivated to be involved in the evaluation process?
- Do intended users have specific needs the evaluation should meet?
- Will decision-makers use results to influence and shape the program?

#### Obtainable data

- Are sufficient resources available to undertake an evaluation?
- Are important documents available and accessible?
- Are there existing and relevant data sources of good quality?
- Do evaluators and staff have the skills and competencies to conduct the evaluation?
- Is the timing right?
- Are there ethical issues or major risks to the evaluation to consider?

If there is significant doubt about some of these areas, you may want to pause the evaluation process. You can then invest more time and effort to: 1) build a supportive environment for the evaluation; 2) look for additional resources; or 3) revisit and edit the program description and documentation.

By looking at the feasibility of an evaluation you will have a more realistic sense of what it will likely accomplish.

Data limitations can also influence whether it is feasible to conduct an evaluation. In Step 5, we'll assess the availability of the necessary data.

## **Questions for reflection**

- If you could only pursue one evaluation question, given your time and other resources, what would it be? Would your stakeholders all agree?
- If you could obtain more resources (time, expertise, money), what would you add to the evaluation?
- If your resource limitations mean that you have to drastically scale back the scope of your evaluation, will the results still be valuable? Would it be better to delay the evaluation until the timing or resources are adequate to meet your needs?

## **Summary**

At the end of this step, you should have a sense of the resources to put towards your evaluation. You should also be able to determine the feasibility and scope of your evaluation, given those resources and what you want to explore.

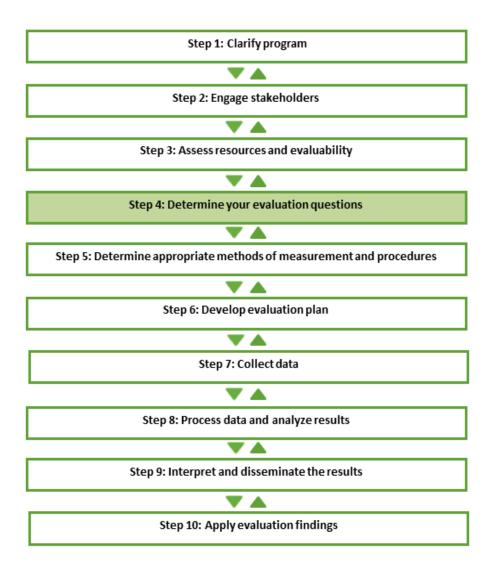
You can incorporate your work on Step 3 into the evaluation plan you will pull together in Step 6.

#### Worksheet

#### **Get Worksheet for Step 3: Evaluation budget**

For a full list of worksheets, please visit <u>www.publichealthontario.ca/HPevaluation</u>.

# Step 4: Determine your evaluation questions



## What is Step 4 about?

At this stage, you and your stakeholders should have a clear understanding of the program. You will have considered many aspects of assessing an evaluation. This step is about focusing that evaluation by selecting the most important questions, and identifying evaluation approaches that best suit those questions.

## Why is Step 4 important?

Narrowing down the most pressing evaluation questions will give you a systematic process and rationale for determining the focus of your evaluation. That can help you to decide on the best uses of your resources (which are often limited). Creating the short list of questions can be useful too when communicating the evaluation to others.

## How do I do Step 4?

You will need to complete two main tasks:

- 1. select and refine your evaluation questions.
- 2. determine appropriate evaluation approaches.

Start by compiling the information that you've gathered to this point: the program description, your stakeholder expectations and interests, evaluation questions, and a list of available resources.

## 1. Select and refine your evaluation questions

You'll select your evaluation questions from those broad areas of interest identified by stakeholders. To do so, consider a number of factors:

- the program logic model;
- the program stage of development (e.g., planning, implementation, winding down);
- evaluations already completed; and
- stakeholder decisions to make based on the results.

#### The program logic model

You can divide logic models into two parts. The process section describes the program's resources, activities and outputs. The outcome section describes the program's intended effects. Figure 3 illustrates the relationship between the type of evaluation, the logic model component and the evaluation questions.

Develop or revisit the logic model at the outset of your evaluation. That can clarify questions the evaluation can answer. For example, your logic model might have a knowledge change outcome, but do your program activities actually lead to knowledge change? That is an obvious priority for an evaluation question.

Are resources adequate to implement the program? Is the program implemented as planned? How many, how much was produced? Indicators: Change in knowledge, policy, what will be environment? measured Intermediate outcome Change in behaviour, system? Long-term outcome Change in health status? Change in population health status?

Figure 3: Mapping evaluation questions and indicators

Adapted from: CDC Division for Heart Disease and Stroke Prevention, State Heart Disease and Stroke Prevention Program. 18

#### The program's stage of development

Avoid evaluating aspects of your program prematurely. Your evaluation questions should reflect your program's stage of development. For example, it would not be appropriate to measure outcomes for a program that only started recently. At this stage, resources could be used for a needs assessment or process evaluation (see later in this section).

#### **Evaluations already completed**

Build on previous work. In the first year, evaluation resources may have focused on conducting a situational assessment and developing a logic model for your program. Later, you may want to focus on an outcome evaluation. If you've never conducted needs assessments or process evaluations (for a program running many years), consider it.

#### Stakeholder decisions to make based on the results

Understand what information or evidence stakeholders need to make informed decisions. By asking questions that stakeholders care about most, you increase engagement in the evaluation and the chances that people will use the findings.

Obtaining consensus isn't always possible. Some stakeholders might try to avoid questions they see as a threat to the program, or to those governing or working in it. Still, these discussions can be revealing.

You also need to understand the timeframes for decisions, and when to make the evaluation results available to influence those decisions.

#### **CRITERIA FOR SELECTING YOUR EVALUATION QUESTIONS**

<u>Worksheet for Step 4</u> shows possible criteria. Consider a simple priority ranking system for completing this worksheet: 1 = low; 2 = moderate; 3 = high. The totals will not definitively say which questions to retain. Some lower-priority questions may provide descriptive information or context for the key questions. If you don't have enough information, plan to get the answers before you proceed.

It's helpful to have evaluation questions that address areas of uncertainty. Those questions would actually provide new information that will help in making decisions.

#### 2. Determine the appropriate evaluation approaches

Many kinds of questions can be part of a program evaluation. Organize them to determine the most appropriate approaches. Typically, you can categorize evaluation questions into three types. See Table 2 for sample questions for each type.

**Needs assessments** are used mostly in the development and planning stages of a program.<sup>2</sup> They have several applications: situational assessment, evaluating options to guide program design decisions, pre-testing materials, and usability testing.

**Process evaluations** help you understand if the intervention is being implemented as planned and reaching intended participants.<sup>2</sup> The questions here often examine outputs, fidelity to the intervention being replicated, recruitment, reach and context. When combined with outcome questions, process questions help us understand why a program was or was not successful.

#### How does monitoring fit in?

Monitoring systems are widely used in the public and non-profit sector. They do two things. First, they track selected measures of a program, agency or system performance at regular intervals. Second, they report these measures to managers, policy-makers or other specified audiences. This information improves decision making (strengthening performance) and provides accountability to stakeholders. On their own, monitoring systems cannot address "why" and "how" questions. But they can suggest when it might be time to conduct an evaluation, or raise red flags around program implementation.<sup>1</sup>

Outcome evaluations measure changes produced by program activities. For example, for interventions aimed at individuals, you could be looking for changes in knowledge, attitudes, skills and behaviours. 19 For interventions at the community level, changes might mean neighbourhood participation, social cohesion and perceived control. <sup>19</sup> Other outcomes relate to the interpersonal, organizational and public policy levels.

Through these evaluations, you can estimate the success of a program, and gain data to provide evidence that your program accomplished its goals. Usually, to demonstrate a change as a result of your program you need a baseline measurement, or some pre-program status to compare to the post-program status. So plan ahead to collect that information.

Can you attribute the observed changes in program participants to the program itself or to other causes? That's a common concern in outcome evaluations. Programs operate in complex social environments. Many factors are at play - socioeconomic, environmental, political and cultural - in addition to the program's activities.

How can you link your activities to outcomes? Sometimes, you can determine causal results in a relatively small period. Beyond this point, think in terms of contribution rather than attribution. Your program may not, in itself, be responsible for an observed change. However, together with other influences the program may have contributed to the change.<sup>20</sup>

**Table 2: Sample evaluation questions** 

<b>Evaluation type</b>	Sample questions	Best suited for
Needs assessment	What possible solutions, interventions and actions can you take to address the situation?	Programs in early stage of development.
	Are the communication materials understandable and convincing to our target audience?	Programs that are developing new materials and want to pre-test them (e.g., new website, social media application, curriculum development).
	Who are the priority populations for our services?	
	Are resources adequate to implement the strategy?	cumculani developinenti.
Process	What was the quality of the program's content/design?	Programs at any stage.
	To what extent did the program follow established best practices?	Programs seeking to understand how the program works.
	How close was implementation to the original design?	
	What barriers and facilitators were experienced during implementation?	
	Do partners feel comfortable with the way conflict is handled in this project?	
Outcome	What behaviour changes did participants make?	Programs that are well- established.
	What was the direction of the change, i.e., did levels of an outcome increase or decrease?	
	What results link to the program activities?	
	What were unintended consequences and outcomes?	

Many evaluations incorporate elements of one or more of these evaluation types. Be guided by the evaluation questions of greatest interest for you.

#### How do developmental evaluations fit in?

The approach in this workbook is known as goal-based evaluation. That's based on a linear cause-and-effect model (typically logic models).

Developmental evaluation is another approach. It provides rapid feedback about what is and isn't working to inform decision-making. This is particularly useful for initiatives that have low control over their outcomes, and are situated in unpredictable contexts. 21 The purpose is to inform ongoing innovation. That can often mean changing goals and measures throughout the program or project lifecycle.<sup>22</sup>

## **Questions for reflection**

- Is your program in a state of change?
- Would a developmental or a realist evaluation approach be appropriate?
- Are you interested in understanding how context contributes to your outcomes?
- Is it useful to consider qualitative approaches?
- Is your evaluation honing in on something you do not know, to do things differently or make good decisions?
- If you are interested in outcome evaluation, do you have a baseline measure?
- How can you assess whether change has happened as a result of your program?
- If you discover change, will you have enough process information to identify how your activities enabled that outcome?

#### How do realist evaluations fit in?

Focusing on "does it work?" can be simplistic. Realist evaluations, a term coined by Pawson and Tilley (1997), are based on the idea that you need to identify "what works, under what circumstances, for whom?"23

These evaluations explain how the outcomes are caused, and how context comes into play in determining the outcomes. That's a more complex and perhaps labour-intensive approach. But it's perhaps more valuable, if the program is developed enough to invest resources into understanding the mechanisms behind its outcomes.

## Summary

By the end of this step you should have:

- gathered the evaluation questions that you and your stakeholders generate;
- selected the highest-priority evaluation questions; and
- identified the most appropriate evaluation approaches needs assessment, process, and/or outcome – to answer your evaluation questions.

You can incorporate your work on Step 4 into the evaluation plan you will pull together in Step 6.

#### Additional resources:

#### For further information on needs assessments:

- PHO. Focus On: Six strategic steps for situational assessment. Available at: https://www.publichealthontario.ca/en/eRepository/FocusOn-Situational Assessment 2015.pdf<sup>24</sup>
- Altschud J. Bridging the Gap Between Asset/Capacity Building and Needs Assessment: Concepts and Practical Applications.<sup>25</sup>
- University of Kansas. Chapter 3. Assessing Community Needs and Resources in the Community Toolbox.<sup>26</sup>

#### For further information on process evaluation:

Saunders RP, Evans MH, Joshi P. Developing a process-evaluation plan for assessing health promotion program implementation: a how-to guide.<sup>27</sup>

#### For more information on developmental evaluation:

- Patton MQ. Developmental evaluation: Applying complexity concepts to enhance innovation and use.<sup>21</sup>
- Gamble JA. A developmental evaluation primer. Available from: http://www.mcconnellfoundation.ca/assets/Media%20Library/Publications/A%20Devel opmental%20Evaluation%20Primer%20-%20EN.pdf<sup>22</sup>

#### For more information on realist evaluation:

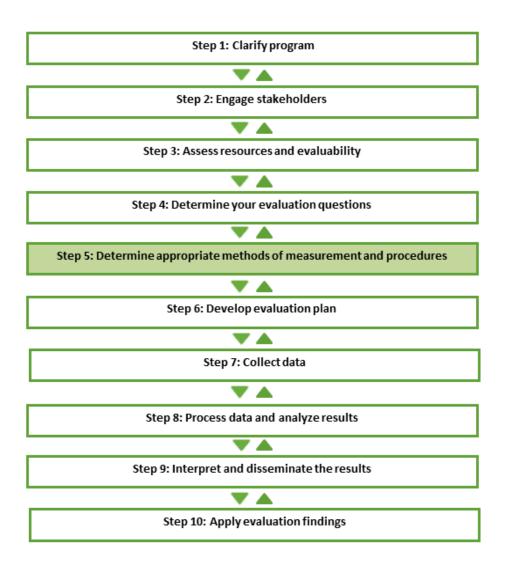
- Realist evaluation. Available from: http://betterevaluation.org/approach/realist\_evaluation<sup>28</sup>
- Pawson R, Tilley N. Realistic evaluation.<sup>23</sup>

## Worksheet

## **Get Worksheet for Step 4: Evaluation question priority setting**

For a full list of worksheets, please visit <a href="www.publichealthontario.ca/HPevaluation">www.publichealthontario.ca/HPevaluation</a>

# Step 5: Determine appropriate methods of measurement and procedures



## What is Step 5 about?

In this step you will decide what to measure and what procedures to use. That includes how, when and from whom you will collect data. This helps ensure that your methods are credible and appropriate for your questions – and ultimately that the evidence your evaluation gathers is credible too.

## Why is Step 5 important?

To answer your evaluation questions, you need the right data. This step focuses on three key areas:

1. Select the most appropriate indicators for your program. Having ones that match

- your resource availability, and your program's key activities and outcomes, will greatly assist you in drawing conclusions about your program.
- 2. Collect your data at the right time in the right way. This will ensure that you won't over- or underestimate program results. For example, if you're doing a smoking cessation program, the relapse rate of smoking might be much higher three months after than the day after. Certain methods also lend themselves better to certain evaluation questions. Interviews or focus groups might be best to get rich and detailed feedback on, for example, a website.
- 3. Consider where to collect data. Without proper planning, you might obtain data that do not represent all program participants, or you might unnecessarily burden respondents.

# How do I do Step 5?

You need to make four key decisions to complete this step:

- 1. How will you collect data?
- 2. What will you measure?
- 3. When will you collect data?
- 4. From whom will you collect data?

Before answering these questions, consider the information that you've gathered already.

Start with the purpose of your evaluation and your evaluation questions. You should only collect data that relates to these questions. For example, if a question asks about program outputs, you would likely gather quantitative information about the program (e.g., number of workshops delivered or workshop attendees). If a question asks how participants feel about the impact of the program, you might gather qualitative information. So you could do that through focus groups, for instance, then use the information to develop quantitative data collection tools (e.g., a survey).

Thinking about who will use the data and how they will use it will help you decide on your evaluation methods. This has implications for the design. For example, you might initiate an evaluation as part of a requirement to be accountable to funders. Understanding how they would use evaluation results might guide your decisions about the type of data to collect.

Your stakeholders' expectations about the evaluation, and what constitutes credible and feasible information, will also affect your evaluation design. Stakeholders have particular information needs. Engaging with them and considering their perspectives can make an evaluation more relevant. It can also spur them into action once the evaluation results are available.

Before you decide on the data to collect, review the information already being captured. Useful data and information systems might already exist in your program or setting, or from partners. For example, you could collect data from program documents, log books, meeting minutes, attendance lists or workshop evaluations. Ideally, your evaluation questions should drive the methods for data collection. Your resources, including time and budget, will also influence your data collection methods. Drawing on existing data can be a resource-effective approach.

Finally, the resources available for data collection play a critical role. Some data collection methods require more resources to plan, collect and analyze.

## 1. Decide how to collect your data

Selecting your data collection methods. You can often categorize these as quantitative or qualitative. Quantitative methods gather numerical data that you can summarize through statistical procedures. Qualitative methods collect non-numerical data that can provide rich details about your project. Each approach has strengths and weaknesses; Table 3 compares them.

Table 3: Characteristics of qualitative and quantitative methods

Qualitative methods	Quantitative methods
Detailed, in-depth information	Structured data collection from large numbers of stakeholders
Cannot always generalize data to entire population	Results may be generalized to a similar population
Provides language, context, relationships of ideas	Provides concrete, quantifiable findings

Often, qualitative and quantitative data together can provide a multifaceted understanding of an issue. Using both methods might also help you increase the certainty of your conclusions, i.e. if the various methods provide similar results (also called "triangulation").<sup>29</sup>

There are four common groups of evaluation methods:

- review existing data or documentation (e.g., tracking sheets, meeting minutes);
- talk to people (e.g., interviews and focus groups);
- obtain written responses (e.g., surveys); and
- observe and track (e.g., noting participant behaviours).

Review existing data or documentation. Before you decide to collect new information, review what's already available. For example, minutes of meetings could provide data on progress toward certain goals, or identify barriers to program implementation. Or participant registration could describe the population your program is reaching.

You may need to design a form or table to capture the information that is relevant to what you want to extract. For meeting minutes, it could be useful to have a form with a space for date, nature of discussion and decision reached about a program. If you are reviewing completed satisfaction forms, a simple tally of those results would work.

**Talk to people.** Qualitative data allow the evaluator to hear the participant in their own words.

Focus groups allow a small group, usually 6-10, to learn and discuss an issue from multiple perspectives. A skilled facilitator can elicit comments from various participants, manage group dynamics and capture necessary information.

Interviews give privacy for people to express views they might not in a focus group or other open forum. A skilled interviewer can establish rapport and maintain a neutral stance. Interviews are time-consuming to conduct and analyze, so weigh the benefits and drawbacks.

Another participatory method for gathering narratives is Photovoice.<sup>30</sup> This involves talking to research participants about photos they have taken to respond to a question or issue of interest.<sup>30</sup>

Obtain written responses. You can do this via surveys or questionnaires. Open-ended questions can gather rich information, and enable participants to share opinions and feelings. However, they are time-consuming to complete and analyze. Closed-ended survey questions, like multiple choice, are uniform and easy to analyze. However, their limited options also limit in-depth understanding.

Observe and track. Another way of collecting data is to observe the activities of program staff, participants or people in the environment. Observation can help you to:

- formulate questions to pose in subsequent interviews;
- examine the program's physical and social settings;
- identify program aspects that participants or staff may not consciously recognize; and
- learn about topics that staff or participants are unwilling to discuss.

You can do this several ways. For example, simply observe the number of times people perform a behaviour, like taking the stairs before and after a sign promoting physical activity is posted. Or staff could record observations of changes in an elderly person's mobility as an outcome. Another form of observation is monitoring blogs and social media (e.g., Twitter and Facebook comments).

Be systematic about your observation data. So define the phenomenon of interest, and use a form or spreadsheet to record observations. If multiple people are recording, pilot your approach to ensure all data collectors are watching for the same thing. For example, you may observe if people use a designated smoking area less often when the weather is bad. If so, you need agreement on "bad" weather. A light drizzle? Clouds? A cold wind? Don't leave anything to interpretation.

Consider that observation may carry ethical risks, like confidentiality of participants. Furthermore, observation might affect the events if those being observed are aware, e.g., if you are observing doctors' interactions with their patients.

#### Availability of data

The final question of evaluability assessment – are the data you need to answer your questions obtainable? You may have any number of evaluation questions. But are there logistic concerns or resource constraints to getting the data. Assessing how well your program can be evaluated ensures that you will be able to move forward.4

#### 2. Decide what to measure

Your measurements depend on the data collection method. Qualitative evaluation questions seek to understand peoples' experiences or the context in which a program happens. Quantitative methods result in numerical indicators.

By creating SMART objectives when planning your program, you have already facilitated some of the work of developing your indicators. Indicators:

- Describe what you will measure, as a sign that something happened or changed.
- Help to make global or abstract statements more concrete and measurable.
- Provide summary information, describing as much as possible in as few points as possible.
- Suggest only they can never completely capture the richness or complexity of a program or system. 5,31

Objectives can have several indicators. For example, for "increased knowledge" possible indicators include: self-reported improvement; improved scores on a post-test; or ability to model a new skill. You might choose one indicator, or many to represent different aspects of the same objective.

Your objectives and evaluation questions also play a role in determining your indicators. Often, you need to define terms used. An evaluation question might ask "How effective was the partnership?" Clarify the definition of "effective", e.g., accomplishing goals, producing the desired changes, etc.

Discuss indicators with stakeholders, especially the primary intended users of the evaluation. They may have different ideas about what indicators to use for a particular evaluation question.

TIP: To help you determine your indicators, ask yourself:

- How will you know if you accomplished your goal?
- What is considered effective?
- What is a sign of success?

#### PROCESS AND OUTCOME INDICATORS

Indicators – like objectives and evaluation questions – can be thought of as process or outcome.

Process indicators help us understand how a program is performing or meeting an agreed standard. These indicators measure things like design, systems development, and functioning or implementation.

**Outcome indicators** help us understand whether the program is achieving the desired change. Even if you can't measure the ultimate outcome, you might use indicators that signal you are on the right track. For example, "intent to change" can be a predictor of actual behavior change. It helps to state your outcome indicators as percentages or proportions of change (such as "a 10 per cent increase in test scores"). This allows you to compare achievements to the initial state.

Table 4: Evaluation question, type of program activity, outputs and process indicators

Evaluation question	Program activity	Outputs	Process indicators
Have we implemented the program as planned?	Hold breastfeeding coalition meetings	12 breastfeeding coalition meetings by the end of the year	number of meetings held
	Develop and disseminate promotional posters	5 unique versions of breastfeeding posters, created within 6 months, encouraging breastfeeding 500 copies of the 5 unique posters, distributed to work sites in our community within 6 months	number of posters created  number of posters distributed number of work sites receiving posters
	Produce guidelines on developing breastfeeding- friendly policies for work sites	1 guideline resource document, created for work sites within 6 months, on developing breastfeeding- friendly policies	number of guidelines created
	Conduct advocacy with MPPs	2 meetings held with MPPs in our community, by the end of the year, related to breastfeeding-friendly policies	number of meetings held with MPPs in our community

Table 5: Evaluation question, outcome objectives and possible outcome indicators

Evaluation question	Outcome objectives	Outcome indicators
What program outcomes have we accomplished through our program?	80 per cent of program participants will increase knowledge about the benefits of breastfeeding after workshop participation	Per cent of program participants who answer question about the benefits of breastfeeding correctly on workshop post-test
	60 per cent of grandmothers will encourage their daughters to breastfeed by the end of the calendar year	Per cent of program participant grandmothers reporting intention to encourage their daughters to breastfeed
	40 per cent of work sites in our community will have a breastfeeding friendly policy within 5 years	Per cent of work sites in community with a written breastfeeding-friendly policy
	Increased support for a provincial breastfeeding strategy among MPPs in our community	# MPPs from our community supporting a provincial breastfeeding strategy

#### **CRITERIA FOR SELECTING INDICATORS**

You can use varied criteria to assess the overall quality of an indicator, depending on your context. In this workbook, we present four key criteria for selecting indicators.

- 1. Importance. Tracking indicators takes time. Select indicators that are important and meaningful to achieving a successful program and having a health impact.31
- 2. Accessibility. This refers to the ease of obtaining data on the indicator. Consider resource constraints (e.g., do you have the staff, expertise, time or money to get data); availability (the process of locating and extracting data); and frequency (if the indicator is gathered annually by an external party and you require quarterly data, that isn't accessible).<sup>31</sup>
- 3. Reliability. Indicators should measure the issue or event consistently. This will help you minimize the chance of skewed results due to error in measurement.<sup>31</sup>
- 4. Validity. Indicators should accurately measure the concept or event, i.e. provide the most direct evidence of the condition or result. Due to data collection or time constraints, you may need proxy measures.<sup>32</sup> For example, average commute time is often a proxy for traffic congestion.

Selecting your indicators, and the data to populate them, usually involves a trade-off. What is convenient and possible, versus what you ideally want for your measurements? Ensure the indicator is important and relevant (based on your objectives), and that your audiences will likely understand it.

TIP: To support your indicator selection, involve those who will: 1) collect the data; 2) use the data; and 3) have the technical expertise to understand the strengths and limitations of specific measures.

#### DEVELOPING YOUR OWN INDICATORS VERSUS DRAWING ON EXISTING INDICATORS

In general, it is better to choose from the existing lists and sets of indicators, <sup>31</sup> available for many health promotion concepts. Some advantages of existing indicators:

- they have been pre-tested for relevance and accuracy;
- they define the best data sources for collecting;
- there are many potential indicators for each activity or outcome; and
- you can compare your performance across programs, if many use the same indicator. 31,33

If there are no existing sets of indicators or proxy indicators, you may have to develop indicators that are specific to your program. If so, plan additional time for experts to review if the chosen indicators are accessible, reliable and valid.

## 3. When will you collect data?

You need to decide when to collect data (i.e., before, during or after the program) and the frequency of data collection. See Table 6 for types of questions and when to plan to collect it.

For example, your focus might be developing and testing program activities (needs assessment). In that case, you should conduct your evaluation before the program begins, or in an early stage of program implementation. If your focus is learning about your program while it's underway (process), you would collect data during the implementation. To learn about the changes in participants due to the program (outcome), you could measure before, during and after the program. Some baseline data that's already collected might serve as the "before" program data.

TIP: In an outcome evaluation, write objectives that use the SMART criteria, which are timebound. That will help determine when you should measure to determine any change for the participants. Using available data will help to inform the timeframes for the objectives, and plan your data collection.

Table 6: Type of evaluation questions and program phase to collect data

Type of evaluation question	Evaluation question	Program phase to collect data
Needs assessment	What program intervention should we develop?	While the program is being developed, in draft or early stages
Process	Is the program being implemented according to plan?	Ouring program implementation or In combination with an outcome evaluation, once the program is well-established
Outcome	Is there a measurable difference in participant knowledge compared to before the program?	Before participant involvement in the program and After participant involvement

## 4. From whom will you collect data?

To produce results that are reliable, valid and truly represent the target population, you need a large enough group to provide the information.

If your target population is relatively small, consider including everyone. Sometimes it is impossible to collect information from all program participants due to a large volume. In fact, if your target population is very large – like a school district, municipality or region – you won't improve the accuracy of your results by gathering data beyond a certain threshold.

Sampling enables you to collect a smaller amount of data that represents the whole group. That will save you time, money and other resources, with a minimal impact on the quality of the information gathered.

If you aim to generalize from your sample to the larger population, sampling can be complicated. In these cases, a statistics expert at a local university or a research institute can help you develop a sampling frame for your evaluation.



Sample size calculators are available for free online to determine the sample size needed for your evaluation question.

Regardless of the method of measurement (e.g., survey, focus group, in-depth interviews, etc.) the main questions involved in selecting your sampling design are:

- How many people will you include?
- How will you select them?
- Do you need to look at any sub-groups?

#### SAMPLE SIZES IN QUALITATIVE METHODS

What is an adequate sample size? That depends on your method.

For quantitative methods, sample size refers to the number of participants from whom you need to collect data for your evaluation findings to detect a statistically significant difference (if one exists).

For qualitative methods, sample sizes differ. They tend to be relatively small but are usually selected purposefully.<sup>34</sup> Here, the logic and power in methods for sampling revolves around getting rich information. You might be able to capture variation with more participants and less deep data collection. Or you could capture more depth by studying fewer people.

Sample size in qualitative research depends on many factors:

- what you want to know;
- the purpose of the inquiry;
- what's at stake;
- what will be useful;
- what will be credible;
- finding the most illustrative or typical cases;
- finding individuals or organizations that fit pre-determined categories (e.g., rural and urban, young and old, in school and out of school);<sup>34</sup> and
- what you can do with available time and resources.<sup>34</sup>

#### **DEVELOP YOUR DATA COLLECTION TOOLS**

Tools are anything to guide the data collection process: survey; interview or focus group guide; tracking forms for observing human behaviour; or any other structured set of questions, prompts or processes for data collection. Your tools should correspond to your methods and evaluation questions.

There are many excellent guides to tool development. Ensure that your tools are clear, easy to use, and will provide the data you require to answer your evaluation questions. See resources below.

## Questions for reflection

- Do your program evaluation methods answer your evaluation questions with sufficient depth and rigour?
- Will your program evaluation methods provide compelling and useful information?
- When developing your indicators, have you considered data that you're already collecting?
- Could you combine ways you are already collecting data with your evaluation measures? For example, instead of creating a new survey, can you add questions to an existing survey?
- Have you looked at existing instruments used to evaluate your program or similar ones?
- Does the timing of data collection enable you to capture the information that you need to answer your evaluation questions?
- Have you considered staff resources involved in collecting and analyzing data?
- Can you combine data collection for the evaluation with the collection of routine data, to minimize the burden on respondents?
- Do your indicators provide answers to your evaluation questions?
- How do the users of the evaluation data feel about the indicator selection? Will the indicators be useful to them?

# **Summary**

At the end of this step you should have:

- chosen your methods of measurement;
- selected your indicators;
- determined the frequency of data collection;
- determined your sample;
- developed your data collection tools; and
- considered ethical issues and developed procedures to ensure ethical practice.

You can incorporate your work in Step 5 into the evaluation plan you will pull together in Step 6.

#### Additional resources:

To help you design and use qualitative methods, consider these:

- Ontario Centre of Excellence for Child and Youth Mental Health. Method mini-toolkit: focus group interviews. Available from:
  - http://www.excellenceforchildandyouth.ca/sites/default/files/docs/minikit focus gr oup primer.pdf<sup>35</sup>
- Ontario Centre of Excellence for Child and Youth Mental Health. Method mini-toolkit: qualitative interviewing. Available from:
  - http://www.excellenceforchildandyouth.ca/sites/default/files/docs/minikit\_qualitati ve interviewing.pdf 36
- Photovoice: www.photovoice.org 30
- Michael Quinn Patton. Qualitative Research and Evaluation Methods. 34

#### Some resources available on designing surveys:

- CDC. Data collection methods for program evaluation: questionnaires. Available from: http://www.cdc.gov/healthyyouth/evaluation/pdf/brief14.pdf37
- Taylor-Powell E. Questionnaire design: asking questions with a purpose. Available from: http://learningstore.uwex.edu/Assets/pdfs/G3658-02.pdf<sup>38</sup>
- Ontario Centre of Excellence for Child and Youth Mental Health. Method mini-toolkit: collecting information using questionnaires. Available from:
  - http://www.excellenceforchildandyouth.ca/sites/default/files/docs/minikit\_question naires.pdf<sup>39</sup>
- CPHA. Guide to questionnaire construction and question writing. 40
- Don A. Dillman, et al. Internet, phone, mail, and mixed-mode surveys: The tailored design method.41

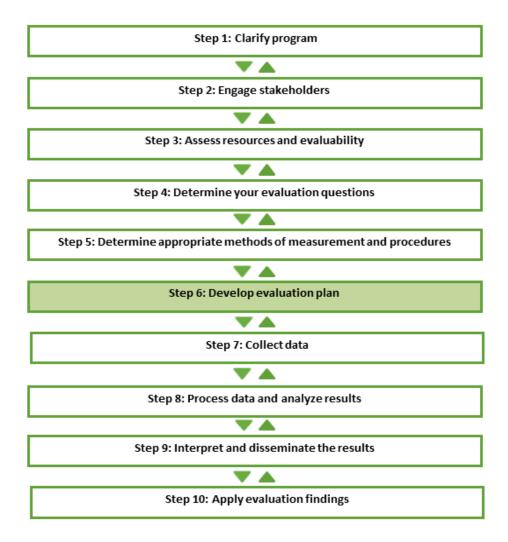
#### For further resources on observation, see:

- Taylor-Powell E, Steele S. Collecting evaluation data: direct observation. Available from: http://learningstore.uwex.edu/Assets/pdfs/G3658-05.pdf 42
- CDC. Data collection methods for program evaluation: observation. Available from: http://www.cdc.gov/healthyyouth/evaluation/pdf/brief16.pdf 43

### Resources on developing indicators:

- APHEO. Core Indicators. Available from: http://www.apheo.ca/for-users-alternativestructure 44
- NHS Institute for Innovation and Improvement. The Good Indicator Guide. Available from: www.apho.org.uk/resource/view.aspx?RID=44584<sup>31</sup>

# Step 6: Develop evaluation plan



# What is Step 6 about?

An evaluation plan is a written document. It details how you will monitor and evaluate your program, and use evaluation results for program improvement and decision-making. 45 This plan pulls together the description of your program and how its activities link with the intended results. It also includes how to address your questions concerning the program.

A data collection matrix is an important part of the plan. It helps you to align evaluation questions with data collection methods, indicators, measures, data sources, roles and responsibilities.

# Why is Step 6 important?

Developing an evaluation plan is collaborative. That creates a shared understanding of the purpose, use and users of the evaluation results. It creates buy-in from your stakeholders for the changes you hope to implement after your evaluation. A written evaluation plan will also provide

transparency. 46 Doing a budget check-in now will ensure that you have the necessary resources to execute your plan.

# How do I do Step Six?

This step consists of three main tasks:

- 1. Create an evaluation plan by building on information from previous steps.
- 2. Create an evaluation data collection matrix.
- 3. Finalize your budget.

## 1. Create an evaluation plan

An evaluation plan includes much of the information that you will have created and gathered in steps 1 to 5. The evaluation plan includes detailed information about the purpose and methodology of the evaluation. Typical components of an evaluation plan are:

- Program description
- Purpose of the evaluation
- Evaluation questions
- Methodology
- Informed consent process and documentation (if applicable)
- Security/privacy measures for data (if applicable)
- Data analysis plan<sup>45</sup>

The appendices to an evaluation plan will often include the data collection matrix (described below), recruitment scripts/emails/letters, data collection tools, timelines and any other documents relevant to the evaluation.

For guidance on the project management aspect of your evaluation, consult the *Planning Health* Promotion Programs: Introductory Workbook. This resource includes basic planning steps and project management tools.3

#### 2. Create an evaluation data collection matrix

This adjunct to an evaluation plan helps you to align:

- evaluation questions (i.e., to the logic model or program description);
- indicators;
- methods;

- data sources;
- timing;
- roles and responsibilities; and
- data analysis.

Adapt the sample data collection matrix in Worksheet for Step 6 to fit your specific evaluation and its context.

## 3. Finalize your budget

In Step 3, you identified the resources to access for the evaluation. Now, you should be able to make some final decisions about how to allocate time and funds to the evaluation. Consider each aspect of the plan and the costs involved. If your resource allocations are straightforward, you can add a budget/resource column to the evaluation plan. If resources are coming from multiple sources, use Worksheet for Step 3.

## **Questions for reflection**

- After pulling your plans together, do you feel confident that you have sufficient time and resources to do what you have planned?
- Will you be able to access the data identified in your data collection matrix?
- Do you need additional people/skills to carry out the identified data collection and analyses?

# **Summary**

By the end of this step, you should have a clear idea of the roadmap to complete the evaluation. The documentation developed here will guide you and your stakeholders in conducting the evaluation.

At the end of this step you will have:

- an evaluation plan;
- a data collection matrix; and
- a budget outlining in-kind, financial and human resources.

Steps 1-6 form a cluster of evaluation planning steps, incorporated into your evaluation plan. After Step 6, you move into the *implementation* phase of your evaluation.

#### **Additional resources:**

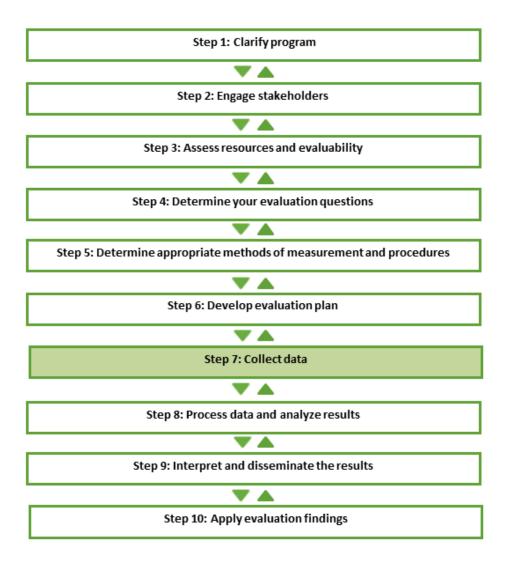
Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; Division of Nutrition, Physical Activity, and Obesity (2011). Developing an Effective Evaluation Plan. Atlanta, Georgia. <a href="http://www.cdc.gov/obesity/downloads/cdc-evaluation-workbook-508.pdf">http://www.cdc.gov/obesity/downloads/cdc-evaluation-workbook-508.pdf</a> 45

## Worksheet

**Get Worksheet for Step 6: Data collection Matrix** 

For a full list of worksheets, please visit <a href="https://www.publichealthontario.ca/HPevaluation">www.publichealthontario.ca/HPevaluation</a>.

# Step 7: Collect data



# What is Step 7 about?

To prepare to collect evaluation data, you'll specify procedures, pilot test data collection tools and train data collectors. This step also includes implementing the data collection plan. As part of this step, ensure data are accurate and in a format that makes the data easy to use.

# Why is Step 7 important?

Your results and recommendations hinge upon the quality of the data collected. To ensure that's reliable, you need to develop standard data collection procedures and properly train those collecting the data. Through pilot tests, you can identify any flaws in the procedures and

instruments before proceeding to implementation.<sup>47</sup> Together, these activities will increase the credibility of your evaluation results.

## How do I do Step 7?

- 1. Develop data collection procedures
- 2. Train data collectors
- 3. Pilot test procedures and tools
- 4. Collect data

## 1. Develop data collection procedures

Procedures are the instructions on how data will be collected. They represent the decisions made to address the evaluation questions identified. This is both an art and a science. Developing the questions is the art; the procedures are the science. 15 Establishing standardized data collection procedures will increase the quality of the collected data.<sup>47</sup>

This includes the procedural steps of how data will be collected, including decisions about recruitment and using incentives. Using your evaluation plan as a guide, determine the content to include when writing your procedures for data collection.

When collecting data from people, consider:

- How will we recruit participants?
- How will we communicate the purpose of the evaluation to potential participants?
- How will we obtain informed consent?
- Who can potential participants contact if they require more information?
- How will we safely store data?

Clearly document the recruitment process for participants, and actions to take if any procedures can't be followed.

#### **ETHICAL CONSIDERATIONS**

Each stage of the evaluation presents ethical issues. See the Canadian Evaluation Society's program evaluation standards. 12 For instance, when determining which procedures to use in your

evaluation, consider participant informed consent; confidentiality and anonymity; and cultural sensitivity.

#### Participant informed consent

Informed consent means that participants understand the project and their role in it, and how the information will be used. Some tips in obtaining consent:

- provide the form in a friendly, open and respectful way;
- encourage participants to ask questions or express concerns; and
- reassure anyone receiving service that eligibility will not be affected by participation.<sup>47</sup>

You can obtain agreement in writing through a consent form, or verbally prior to doing a telephone interview. Store your informed consent forms securely and separately from your data. Not all data collection methods involve signed consent. In many cases you will simply ask participants whether they consent to participate in the evaluation by clicking "next" on an online survey. 41

#### **Confidentiality and anonymity**

What does it take for respondents to share personal information and provide honest feedback about the program? They need to know that the information will be safely stored and will not be associated with them beyond the research team. Identifying information includes: name, addresses, employer's name or address, birth date, email address or photos.

Be clear about the anonymity and confidentiality of their responses:

- Anonymity means the evaluation and/or the staff will not be able to link information back to the individual who provided it. Online survey tools often provide instructions on how to make surveys anonymous (e.g., don't collect IP addresses).
- Confidentiality means the information can be traced back to the person who provided it, but will not be done outside the evaluation team. You can secure confidentiality by assigning code numbers to respondents.

#### **Cultural sensitivity**

Consider cultural values and traditions in your data collection methods. For example, do respondents feel more comfortable with written or oral communications? Do they prefer private conversations or small group conversations? Does the evaluator's status, position, gender or other characteristics compromise the respondent's comfort? If your program serves a diverse population, are you inviting input in the appropriate languages?

You also need procedures to guide what to do to ensure a high response rate<sup>41</sup>. Response rate refers to the number of participants who completed a questionnaire or interview, divided by the number of participants who were asked to complete it.<sup>48</sup>

Identify minimal numbers of responses during the planning stage, and the proposed strategies if the response rate is too low. To increase response rates, you could: extend time for the survey to be open; use reminder emails or phone calls; include incentives to participate; identify additional places to send the invitation to participate; and/or ask others to promote your survey.<sup>47</sup>

If offering incentives to improve response rates, decide if they will be financial (e.g., money, gift card to compensate for their time) or material (e.g., travel cup, hat, pedometer). Be sure that any incentives follow ethical considerations.<sup>47</sup>

Lastly, if you are using existing data, write a procedures guide to outline decisions made about what data to include and the steps to extract the data. This will ensure the quality of data and help when communicating your results.<sup>49</sup>

#### 2. Train data collectors

Once your procedures are written and approved, train your data collectors to ensure that they understand how to model the procedures outlined.

Training should include not only learning the procedures, but opportunities to practice them. It is a good idea to include scenarios and role playing as part of training. Major topics to address in a training session include:

- purpose of the evaluation;
- types of participants sought;
- overview of the tools (including their purpose and how the data collected contributes to the purpose of the evaluation);
- procedures to implement the tools; and
- opportunities to share their thoughts related to implementing the tools and opportunities to practice the procedures outlined.<sup>47</sup>

In the training around procedures, identify potential challenges and solutions. For example, you might be conducting qualitative interviews. If so, include prompt statements or questions to help the interviewer gather information, explain what to do if they have difficulty, and provide an overview of technical skills needed to collect data.

Ensuring consistency in data collection will enhance the validity of your results. 15 Students and volunteers are great resources, but need training and support. Consider that when developing your budget. Finally, communicate and check with your data collectors regularly, to ensure they are clear about the collection process and adhere to the agreed-upon procedures.

### 3. Pilot test your procedures and tools

You want to ensure that procedures and tools are designed to address the evaluation questions identified. Pilot testing will help you to:

- determine the acceptability of the data collection tool;
- estimate the length of the data collection; and
- provide data collectors with an opportunity to practice.<sup>47</sup>

Pilot testing usually has two phases. First, ask a colleague to review the survey for flow and clarity (usually in the earlier stage of developing a survey or focus group/interview guide). Second, choose a small number of people from your population of interest to complete the survey and provide specific feedback.

After pilot testing your tools, revise your data collection instruments based on feedback received. Train your data collectors on the revisions made.

TIP: You want to enhance the reliability of your data. That means reducing the chances of random, temporary conditions in a person, situation or set of measurements. Apply these four strategies:

- Pilot test your data collection tools.
- Check the consistency of an individual's responses by asking similar questions more than once within your data collection tool.
- Collect data at different times and check the consistency of the answers.
- Check the data you gather for inconsistencies due to errors in observation, coding or data entry.50

#### 4. Collect data

Once you are satisfied with these procedures and tools, you are ready to collect data. The length of this phase can vary – it can be fairly quick if you're using an online survey for example, or several months if you're interviewing or using multiple methods.

Follow your evaluation plan and timelines to ensure that the data are collected efficiently and in time to provide useful information.

# Questions for reflection

- Are your procedures detailed enough to ensure that different people will collect data in a consistent way?
- Have you developed decision-making flow charts for data collectors, to use if facing a low response rate?
- Have you provided effective training?

Where and how will you store your data so it is safe and confidential and meets ethical standards?

## Summary

At the end of this step, you should have:

- standardized procedures and tools to collect data;
- considered ways to obtain informed consent and increase response rates through design, collection and (possibly) incentives;
- piloted and revised data collection tools;
- trained and supported data collectors; and
- collected your data according to your established procedures.

The next step will help you implement data quality control techniques and prepare for data analysis.

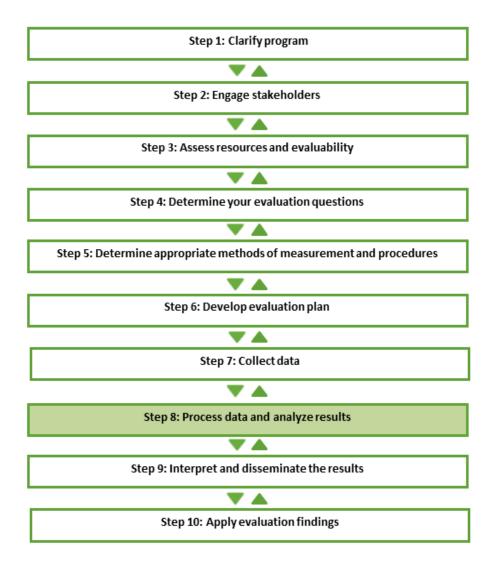
#### Additional resources:

Centers for Disease Control and Prevention. Introduction to program evaluation for public health programs: A self-study guide. Available from: http://www.cdc.gov/eval/guide/CDCEvalManual.pdf29

#### For further resources on the ethical considerations in program evaluation, please consult:

- Canadian Institutes of Health Research, Natural Sciences and Engineering Council of Canada, and Social Sciences and Humanities research Council of Canada, Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans. Available from: http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS 2 FINAL Web.pdf<sup>51</sup>
- Yarbrough DB, Shulha LM, Hopson RK, Caruthers FA. The program evaluation standards: A guide for evaluators and evaluation users. 12

# Step 8: Process data and analyze results



# What is Step 8 about?

This is a technical step that involves engaging with the data, i.e., synthesizing and interpreting information from all sources. Your data analysis techniques will depend on:

- your evaluation questions;
- the type of data that you have collected;
- the resources available to support your data analysis; and

 the types of information that your stakeholders find credible (i.e., the purposes and uses of your evaluation).

Part of this step will require you to monitor the quality of the data, as that will affect the results of your evaluation. We encourage you to seek the support of a data analysis expert to improve the quality and validity of your results.

## Why is Step 8 important?

This step allows you to make sense of the data collected, and help answer the evaluation questions. Once you have completed your analysis, start thinking about how to present it to your stakeholders (Step 9).

## How do I do Step 8?

For this step, we'll discuss how to:

- 1. Enter the data
- 2. Organize your data to enable analysis
- 3. Analyze your data
- 4. Set the stage for interpretation

## 1. Data entry

There are two main approaches to data entry:

- indirect: Re-enter previously collected data for the purposes of analysis. Examples include completed paper surveys or transcribed interviews.
- direct: Enter data directly into a computer at the point of data collection (such as online surveys).

To minimize data entry errors, automate data collection where possible. The information collected will be more uniform, and easier to sort and analyze.

#### DEVELOP AND IMPLEMENT QUALITY CONTROL TECHNIQUES FOR DATA

Quality control techniques, during and after data collection, will help you address any issues or errors that might have an impact on the evaluation results.

#### **During data collection**

- Look closely at the first wave of responses. Check to see if questions are being completed as expected. If not, they may be unreliable or invalid, despite earlier pre-testing of the tool. You may need to revise accordingly.<sup>46</sup>
- Look at the number of no-responses or refusals. If they're high enough, consider changing some conditions under which the tool is administered.<sup>46</sup>
- Connect the data collectors and evaluation project leaders. They should debrief early with each other. That will help to identify emerging issues that risk the integrity or effectiveness of data gathering, or present unforeseen opportunities to improve data-gathering. 46

#### After data collection

- Spot check: Review samples of data collected and compare it to the source for discrepancies and other anomalies. For example, an age stated as 56 with 1988 entered as year of birth, or transposed numbers (like 1.56 instead of 1.65). For discrepancies, identify patterns associated with the data entry (i.e., if specific type of data tends to be incorrect) and the possible errors (e.g., unclear coding instructions).<sup>52</sup>
- Range check: For quantitative data, every variable should have a range check (e.g., if the question asks for a percentage, you would not expect values beyond 0-100).52
- **Sort data**: For quantitative data, sort to find missing, high or low values. Identify the outliers and see whether they make sense (e.g., a participant smokes 1,000 cigarettes per day).52
- **Check content:** For qualitative data, compare samples of the transcription from a focus group to the recorded material. Ensure that the transcriptions are complete and accurate before analyzing. Move any field notes from handwritten notes into a MS Office document or qualitative analysis software.53

## 2. Organize your data to enable analysis

Data typically require some "cleaning" and organizing to be ready for analysis.

For quantitative data, you may have to decide how to handle missing values - will you include or exclude them? For many variables, you might want to collapse options into categories, e.g., display data as a range of hours rather than individual hours. If using a statistical program other than Excel, label variables and values; that will make data tables easier to understand.

For qualitative data, you should transfer transcripts into software that allows for qualitative analysis. Possibly, label transcripts with demographic details of the participant(s) or other characteristics (workplace of the participant) that may help organize the data. Qualitative data analysis can also occur in Excel.<sup>54</sup>

## 3. Analyze your data

Qualitative and quantitative data require different analysis techniques.

For many evaluations with quantitative data, simple descriptive statistics are all you need to interpret your results. This involves determining how many respondents answered a certain way for each question.

Methods include: counts/frequencies; percentages; measures of central tendency (mean, mode, and median); and measure of variability (range, standard deviation, and variance). When comparing two or more groups, you'll need additional statistics (e.g., chi-squares, t-tests and ANOVA).

In qualitative evaluations, the main goals include understanding what happened in the program and why, and understanding the program from the participants' perspective. Often, qualitative analysis methods identify themes in the data; the evaluation questions determine themes of particular interest.

There are many methods to analyze qualitative data. See some of the resources listed below.

## 4. Set the stage for interpretation

Once you have analyzed the data, prepare to engage stakeholders in interpreting the findings. Even if you use more sophisticated analyses, think creatively about how to translate those findings into straightforward and understandable statistics.

Make comparisons carefully and appropriately. Almost all data analysis ends up being comparative in some way. Numbers in isolation are difficult to interpret. For example, if you find that 30 per cent of workshop participants gained knowledge about healthy eating, is that high or low? What do other similar studies tend to find?

# **Questions for reflection**

- After doing all the analyses, what do you know now that answers your evaluation questions?
- Were there any surprises in the findings for you or your stakeholders?

# Summary

Analysis involves organizing the data, constructing appropriate statistical tables (if applicable), identifying results that are relevant to each evaluation question, and displaying or visualizing data in a usable format.

At the end of this step, you will have:

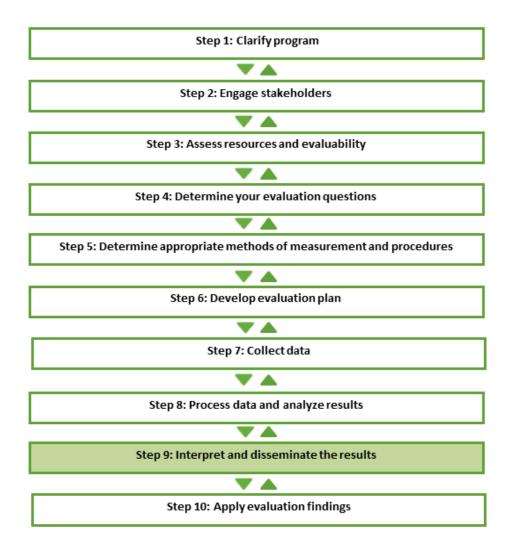
entered your data;

- reviewed the data during and after collection for accuracy;
- cleaned and organized your data;
- conducted your data analysis; and
- prepared your evaluation results for interpretation (Step 9).

#### Additional resources:

- Health System Intelligence Project. The health planner's toolkit. Module 6: evaluation. Available from: <a href="http://www.ontla.on.ca/library/repository/mon/22000/283845.pdf">http://www.ontla.on.ca/library/repository/mon/22000/283845.pdf</a> 46
- Miles MB, Huberman MB, Saldana J. Qualitative data analysis: a methods sourcebook.<sup>53</sup>
- Taylor-Powell E. Program development and evaluation: analyzing quantitative data. Available from: http://learningstore.uwex.edu/pdf/G3658-6.pdf 55

# Step 9: Interpret and disseminate the results



# What is Step 9 about?

Interpretation includes deciding what the data mean, providing explanations for the results, and attaching significance to their findings.<sup>55</sup> Dissemination is making information available and usable to various audiences, through various channels or formats.<sup>45</sup>

# Why is Step 9 important?

Sharing the findings with your evaluation team and stakeholders is an important part of creating actionable recommendations. Once you have actionable recommendations in place, a dissemination plan will be crucial in creating the foundation for using the evaluation findings – and ultimately informing decisions that improve the program.

## How do I do Step 9?

In order to do this step, you will need to:

- 1. Interpret the data
- 2. Develop recommendations
- 3. Develop a communication strategy
- 4. Create and distribute communication product(s)

## 1. Interpret the data

With your team, consider what the results tell you about each evaluation question. You can use these questions as categories for grouping information and developing themes.

Your stakeholders can be an important part of interpreting results. They often have different perspectives or insights than evaluation or program staff, which leads to more well-rounded conclusions. 15 Having your stakeholders review the results and participate in interpretation has other advantages. It can increase the validity, credibility, transparency and acceptance of your process and conclusions. 15

Give team members and stakeholders the opportunity to make their own interpretations. But do so with the evaluator's support and guidance. Keep the conversation grounded in the data. 55

## 2. Develop recommendations

Collaborating with stakeholders will assist you in defining the scope of your recommendations. 15 You will have had preliminary discussions when selecting your evaluation questions. Stakeholders can help you identify recommendations that are relevant and within the control of the evaluation users. They can also help you decide which findings to share and with which audiences. 15

When developing recommendations, make sure to:

- 1. base them clearly on the evaluation findings.
- 2. study, specify and include the benefits and costs of suggested changes, especially when making major recommendations (e.g., those that involve substantial changes in program operations or policies).
- 3. identify actions that your stakeholders can influence. To arrive at recommendations around what can change, focus the evaluation questions on those same variables.
- 4. be diplomatic. Think about how audiences will interpret recommendations in light of their responsibilities, political considerations, and personal perspectives.

5. Allow time to develop sensitive and thoughtful recommendations, and discuss/review them for clarity, comprehension, practicality, utility and accuracy. 15

## 3. Develop a communication strategy

The communication strategy defines your target audiences, objectives, communication channels and vehicles, and timeframe for dissemination.

In Step 2, you already identified stakeholders, including intended users. Now, think more about:

- who they are (e.g., their relationship to the program being evaluated, their influence on decisions being made related to the program, etc.);
- what they might do with the evaluation results (e.g., inform program improvement or funding decisions);
- what types of communication they prefer or respond to; and
- their experience and comfort with evaluation or research.<sup>56</sup>

Clear communication objectives will enable you to determine the appropriate information for each audience. The communication objectives naturally flow from your evaluation purpose, as defined in Step 4. The main purposes for communicating evaluation findings typically include building awareness and support; facilitating program growth and/or improvement; and demonstrating results and accountability.<sup>56</sup>

Communication channels are the means by which a message is sent; vehicles are the formats used to deliver messages. See Table 7. These choices will ensure the evaluation results effectively reach the right intended users.<sup>56</sup>

Table 7. Possible channels and vehicles for communicating evaluation results

Channels	Vehicles
Mass media	Print, broadcast media
New media channels	Social media services including Twitter, Facebook, LinkedIn
Interpersonal channels	One-on-one meetings, stakeholder-led meetings
Community-specific venues (e.g., community centres, religious institutions, schools)	Poetry, theatre, presentations

Channels	Vehicles
Professional venues (e.g., conferences, listservs, online forums)	Presentations, poster presentations, newsletters, webinars <sup>57</sup>

You do not need to finalize the findings and recommendations before communicating with evaluation stakeholders. Your communication strategy may include sharing interim results to facilitate program course corrections and decision-making.<sup>56</sup>

Plan your communication strategy using Worksheet for Step 9.

## 4. Create and distribute communication product(s)

To effectively reach your stakeholders, it may be necessary to use a variety of channels and prepare different communication products.

Some stakeholders may look for highlights of the results. In that case, an infographic or an executive summary will suffice. Others could want an update on the program's progress, details on evaluation procedures and findings, or an overview of the program's history and memory. That calls for a written report.

No matter which format you choose, a successful communication product will:

- present the purpose of the evaluation;
- anchor the content to the evaluation questions;
- be simple and concise;
- be visually attractive; and
- be tailored to the audience what do they need and want to know?<sup>56</sup>

Visual aids can be powerful methods for communication. You could include maps, tables, figures and graphs or photographs. All can help to summarize information and make your report and other dissemination materials clear and engaging.58

Additional ways to communicate your findings include slidedocs (PowerPoint presentations which can be shared and understood without a presenter)<sup>59</sup>, newsletters, one to two page handouts and word clouds (word clouds are graphical representations of how often a word appears within a section of text)60.

## Want to help your audiences explore and understand the collected data?<sup>61</sup>

Check the Data Visualization Checklist (developed by Stephanie Evergreen and Ann K. Emery). It guides evaluators in how to use text, colour and gridlines for maximum impact and understanding.62

## **Questions for reflection**

When thinking about communicating with your potential audience(s), ask yourself:

- Who is a priority?
- What do they already know about the topic?
- What is important for them to know?
- Where do they prefer to receive their information?
- What is their preferred format to receive information?
- What language level is appropriate?
- Within what timeframe are evaluation updates and reports necessary?

## Summary

At the end of this step, you will have interpreted your evaluation results and the key messages to disseminate to your intended users. You will also have created a dissemination plan. This will enable you to develop the communication products to share your results. Once that happens, stakeholders are ready to use the evaluation findings.

#### **Additional resources:**

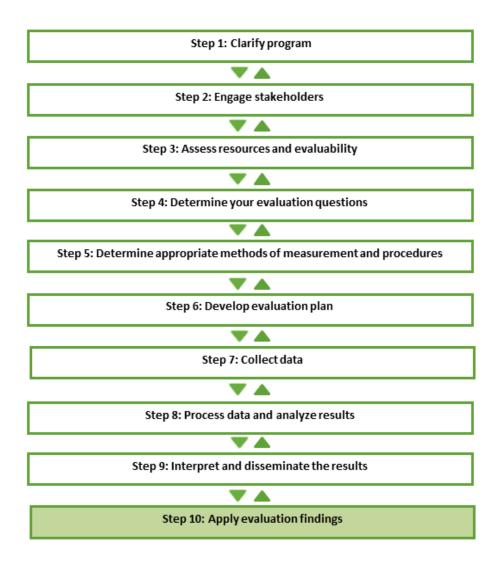
- Evergreen S. (2014). Presenting data effectively.<sup>58</sup>
- Duarte, N. (2008). slide:ology: The Art and Science of Creating Great Presentations.<sup>63</sup>
- Torres, Preskill and Piontek. (2005). Evaluation strategies for communicating and reporting: enhancing learning in organizations. 56

#### Worksheet

#### **Get Worksheet for Step 9: Dissemination plan**

For a full list of worksheets, please visit www.publichealthontario.ca/HPevaluation.

# Step 10: Apply evaluation findings



# What is Step 10 about?

We now come to the final step – using your evaluation results.

Reporting and dissemination may facilitate use. In this step, we are focusing on actually using the results to direct change and new thinking. At this stage, build on your dissemination plan to follow up on the key messages and actions you would like to see as a result of your evaluation.

# Why is Step 10 important?

Sharing results can lead to action, around:

- making decisions to improve the program, i.e., the best use of resources;
- strengthening understanding of the program at the community and organizational levels;
- securing social, financial and political support;
- helping your program establish a network of like-minded groups or individuals with similar goals; and





# How do I do Step 10?

To make the best use of evaluations and your findings:

- 1. Review your recommendations and brainstorm actions
- 2. Prioritize changes
- 3. Create an action plan to implement changes
- 4. Evaluate the evaluation process

# Review your recommendations and brainstorm actions

As previously described, there are three main ways to use evaluations: improve a program, assess the effectiveness of a program and generate new knowledge. As a group, review what you have learned from the evaluation and agree to the next steps to incorporate the results.

- Some questions to discuss:
- What did we discover about each of our evaluation questions?
- What emerged as strengths of the program?
- What emerged as weaknesses of the program?
- What concrete changes can our organization make to improve program implementation or outcomes, as set out in the program logic model?
- What recommendations can be implemented?

- Can we collaborate with any stakeholders to implement recommendations?
- How can the evaluation findings be used to secure funding for the program?

## 5. Prioritize changes

Your results could lead to decisions about any number of changes – in program strategy or implementation, reassigning staff, or shifting financial resources. Such changes can improve the chances of meeting your program goals and objectives.

With the ideas you generate, prioritize the resulting actions. Involve your stakeholders in selecting the highest priority items and those that have the most possibility to actually implement. How? You can use many of the same techniques used in program planning, including idea rating sheets (formerly called "dotmocracy")<sup>64</sup> or the group priority sort<sup>65</sup>.

## 6. Create an action plan to implement changes

Plan to make and implement strategic decisions about the program (see Worksheet for Step 10). Identify a lead for the program improvement plan, and set a timeframe to achieve the targeted improvements. Plan to re-evaluate the program, to assess whether you've increased its effectiveness and are meeting program objectives.

## 7. Evaluating the evaluation

Take the time to evaluate your evaluation. You can stimulate discussion by addressing the implementation of the evaluation as well as the actual or anticipated outcomes.

The evaluation process itself can:

- Build shared meaning and understanding between groups involved in a program.
- Help key stakeholders better understand the population of interest, particularly disenfranchised groups who are not often heard.
- Create space for staff and participants to reflect and build trust.
- Give stakeholders an opportunity to obtain skills (e.g., identify problems; set criteria; group prioritization; collect, analyze and interpret data; etc.).

You can use quantitative and qualitative techniques to evaluate your evaluation; for example, ask program participants what they think of the results, ask peers or experts to review the evaluation, or ask for individual or group reflection on the process. 66 This will enable everyone to improve future evaluation activities.

## **Questions for reflection**

- What individual and organizational obstacles might you encounter when trying to implement your recommendations?
- How does this organization make decisions? Can you account for that as you implement?
- How can you improve processes for evaluation within the organization?

## **Summary**

In this step, the focus is on taking action. Proper reporting and dissemination of the results can help ensure that the evaluation translates into positive changes.

In addition, assessing the evaluation itself is an important part of the cycle, and will be helpful to inform subsequent evaluations.

#### Additional resources:

- Stufflebeam, D.L. (1999). Program evaluations metaevaluation checklist. Available from: https://www.wmich.edu/sites/default/files/attachments/u350/2014/program metaeva I short.pdf 67
- Patton, M. Q. (2008). Utilization-focused Evaluation. 4th Edition. Thousand Oaks, CA: Sage.15

#### Worksheet

#### **Get Worksheet for Step 10: Action plan**

For a full list of worksheets, please visit www.publichealthontario.ca/HPevaluation.

# Conclusion

Evaluations help organizations to justify, support and improve programs, and make other important decisions about them.

To do that, you have to engage the right stakeholders. Select evaluation questions that are both salient to those who take action, and relevant to the program in its current context. Choose methods that will yield compelling data. Analyze the results with great care. And share what you have learned. All of this will support the best use of the evaluation findings.

Proper evaluations take time and resources, but yield valuable results. Taken step by step, anyone can complete a well-designed evaluation – one that encourages beneficial action to follow.

# References

- 1. Scriven M. Evaluation thesaurus. 4th ed. Newbury Park: Sage; 1991.
- 2. Ontario public health standards [Internet].: Queen's Printer for Ontario; 2013 [updated 2013 Feb 22; cited 2015 Jan 22]. Available from:

http://www.health.gov.on.ca/en/pro/programs/publichealth/oph standards/

3. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Planning health promotion programs: introductory workbook [Internet]. 4th ed. Toronto, ON: Queen's Printer for Ontario; 2015 [cited December 11, 2015]. Available from:

https://www.publichealthontario.ca/en/eRepository/Planning\_health\_promotion\_programs\_work book En 2015.pdf

- 4. Wholey JS. Exploratory evaluation. In: Wholey JS, Hatry HP, Newcomer KE, editors. Handbook of practical program evaluation. 3rd ed. San Francisco, CA: Jossey-Bass; 2010.
- 5. Rossi PH. Freeman HE. Evaluation: a systematic approach. 4th ed. Newbury Park, CA: Sage Publications; 1989.
- 6. World Health Organization. Ottawa charter for health promotion: an international conference on health promotion, the move towards a new public health [Internet]. Geneva: World Health Organization; 1986 [cited 2014 Dec 2]. Available from:

http://www.who.int/healthpromotion/conferences/previous/ottawa/en/index1.html

7. Davies R. Planning evaluability assessments: A synthesis of the literature with recommendations. Working Paper 40, Department for International Development; 2013. Available from:

https://www.gov.uk/government/uploads/system/uploads/attachment data/file/248656/wp40planning-eval-assessments.pdf

8. Centers for Disease Control and Prevention, CDC Division for Heart Disease and Stroke Prevention, State Heart Disease and Stroke Prevention Program. Evaluation guide: Developing and using a logic model. Available from:

http://www.cdc.gov/dhdsp/programs/nhdsp program/evaluation guides/docs/logic model.pdf

- 9. W.K. Kellogg Foundation logic model development guide [Internet].: W.K. Kellogg Foundation; 2006; cited 2015 Jan 9]. Available from: http://www.wkkf.org/resourcedirectory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide
- 10. The Health Communication Unit. The Stakeholder Wheel. Toronto, ON: Dalla Lana School of Public Health; 1998.
- 11. Online health program planner [Internet]. Toronto, ON: Ontario Agency for Health Protection and Promotion; c2014; cited 2014 Dec 2]. Available from:

http://www.publichealthontario.ca/en/ServicesAndTools/ohpp/Pages/default.aspx

- 12. Yarbrough DB, Shulha LM, Hopson RK, Caruthers FA. The program evaluation standards: A guide for evaluators and evaluation users. 3rd ed. Thousand Oaks, CA: Sage; 2011.
- 13. Paloma-Wellesley. Working together: The Paloma-Wellesley guide to participatory program evaluation. Toronto, ON: Paloma Foundation and Wellesley Institute; 2010.
- 14. Preskill H, Jones N. A practical guide for engaging stakeholders in developing evaluation questionsRobert Wood Johnson Foundation Publication: RWJF Evaluation Series; 2009. Available from: http://www.rwjf.org/content/dam/web-assets/2009/01/a-practical-guide-for-engagingstakeholders-in-developing-evalua
- 15. Patton MQ. Utilization-focused evaluation. 4th ed. Thousand Oaks, CA: Sage; 2008.
- 16. W.K. Kellogg Foundation evaluation handbook [Internet].: W.K. Kellogg Foundation; 2010; cited 2014 Jan 5]. Available from: http://www.wkkf.org/resource-directory/resource/2010/w-k-kelloggfoundation-evaluation-handbook
- Overseas Development Institute; 2015. Available from: http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9802.pdf
- 18. CDC Division for Heart Disease and Stroke Prevention, State Heart Disease and Stroke Prevention Program. Figure 3, Mapping evaluation questions and indicators to a logic model. In: Evaluation guide: Developing and using a logic model. p. 9.
- 19. Glanz K, Rimer BK, Viswanath K. Health behavior and health education. 4th ed. San Francisco, CA: Jossey-Bass; 2008.
- 20. Mayne J. Addressing attribution through contribution analysis: using performance measures sensibly. Canadian Journal of Program Evaluation. 2001;16(1):1-24.
- 21. Patton MQ. Developmental evaluation: Applying complexity concepts to enhance innovation and use. New York: Guilford Press; 2010.
- 22. Gamble JA. A developmental evaluation primerThe J.W. McConnell Family Foundation; 2008. Available from:

http://www.mcconnellfoundation.ca/assets/Media%20Library/Publications/A%20Developmental% 20Evaluation%20Primer%20-%20EN.pdf

- 23. Pawson R, Tilley N. Realistic evaluation. London: Sage; 1997.
- 24. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Meserve A, Bergeron, K. Focus on: Six strategic steps for situational assessment. Toronto, ON: Queen's Printer for Ontario; 2015. Available from: http://www.publichealthontario.ca/en/eRepository/FocusOn-Situational Assessment 2015.pdf

- 25. Altschuld JW. Bridging the Gap Between Asset/Capacity Building and Needs Assessment. Thousand Oaks, CA: Sage; 2014.
- 26. Chapter 3. Assessing Community Needs and Resources [Internet]. Lawrence, KS: University of Kansas; 2015; cited October 8, 2015]. Available from: http://ctb.ku.edu/en/table-ofcontents/assessment/assessing-community-needs-and-resources
- 27. Saunders RP, Evans MH, Joshi P. Developing a process-evaluation plan for assessing health promotion program implementation: a how-to guide. Health Promotion Practice. 2005;6(2):134-47.
- 28. Realist Evaluation [Internet].: Better Evaluation; cited 2014 Nov 18]. Available from: http://betterevaluation.org/approach/realist\_evaluation
- 29. Centers for Disease Control and Prevention. Introduction to program evaluation for public health programs: A self-study guide [Internet]. Atlanta, GA: ; 2011 [cited 2015 Jan 12]. Available from: http://www.cdc.gov/eval/guide/CDCEvalManual.pdf
- 30. Photovoice [Internet].; cited 2015 Jan 12]. Available from: http://www.photovoice.org/
- 31. NHS Institute for Innovation and Improvement. The good indicators guide: Understanding how to use and choose indicators. [Internet]. Coventry, UK: ; 2008 Available from: http://www.apho.org.uk/resource/item.aspx?RID=44584
- 32. First Nations Centre. Understanding health indicators. Ottawa, ON: National Aboriginal Health Organization; 2007. Available from: http://www.naho.ca/documents/fnc/english/FNC-UnderstandingHealthIndicators 001.pdf
- 33. Committee on Evaluating Progress of Obesity Prevention Effort, Food and Nutrition Board, Institute of Medicine. Indicators for the Evaluation Plans. In: Green L, Sim L, Breiner H, editors. Evaluating Obesity Prevention Efforts: A Plan for Measuring Progress. . Washington, DC: National Academies Press; 2013. p. 95-114.
- 34. Patton MQ. Qualitative Research & Evaluation Methods: Integrating Theory and Practice. 4th ed. Thousand Oaks, CA: Sage Publications, Inc.; 2015.
- 35. Ontario Centre of Excellence for Child and Youth Mental Health. Method mini-toolkitqualitative interviewing: an overview . Toronto, ON: Ontario Centre of Excellence for Child and Youth Mental Health. Available from:
- http://www.excellenceforchildandyouth.ca/sites/default/files/docs/minikit\_qualitative\_interviewin g.pdf
- 36. Ontario Centre of Excellence for Child and Youth Mental Health. Method mini-toolkit-collecting information using questionnaires: an overview. Toronto, ON: Ontario Centre of Excellence for Child and Youth Mental Health. Available from:
- http://www.excellenceforchildandyouth.ca/sites/default/files/docs/minikit\_questionnaires.pdf

- 37. CDC. Data collection methods for program evaluation: questionnaires; 2008. Available from: http://www.cdc.gov/healthyyouth/evaluation/pdf/brief14.pdf
- 38. Taylor-Powell E. Questionnaire design: asking questions with a purpose. Madison, WI: Cooperative Extensions; 1998. Available from: http://learningstore.uwex.edu/Assets/pdfs/G3658-02.pdf
- 39. Ontario Centre of Excellence for Child and Youth Mental Health. Method mini-toolkit-case studies:an overview. Toronto, ON: Ontario Centre of Excellence for Child and Youth Mental Health. Available from:

http://www.excellenceforchildandyouth.ca/sites/default/files/docs/minikit case studies.pdf

- 40. CPHA. Guide to questionnaire construction and question writing. Ottawa, ON: CPHA; 2012.
- 41. Dillman D, Smyth J, Christian L. Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method. 4th ed. Hoboken, NJ: John Wiley & Sons, Inc; 2014.
- 42. Taylor-Powell E, Steele S. Collecting evaluation data: direct observation. Madison, WI: Cooperative Extension; 1996. Available from: http://learningstore.uwex.edu/Assets/pdfs/G3658-05.pdf
- 43. CDC. Data collection methods for program evaluation: observation; 2008. Available from: http://www.cdc.gov/healthyyouth/evaluation/pdf/brief16.pdf
- 44. Core indicators for public health [Internet].: Association of Public Health Epidemiologists of Ontario; 2001; cited March 22, 2011]. Available from: http://www.apheo.ca/for-users-alternativestructure
- 45. CDC. Developing an effective evaluation plan [Internet]. Atlanta, Georgia: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; Division of Nutrition, Physical Activity, and Obesity; 2011 Available from: http://www.cdc.gov/obesity/downloads/cdc-evaluation-workbook-508.pdf
- 46. Health System Intelligence Project. The health planner's toolkit. Module 6: evaluation; 2008. Available from: http://www.ontla.on.ca/library/repository/mon/22000/283845.pdf
- 47. Cook S, Godiwalla S, Brooks K, Powers C, John P. Recruitment and retention of study participants. In: Wholey JS, Hatry HP, Newcomer KE, editors. Handbook of practical program evaluation. 3rd ed. San Francisco, CA: Jossey-Bass; 2010. p. 182-207.
- 48. Porta M, editor. A dictionary of epidemiology. 6th ed. New York, NY: Oxford University Press; 2014.
- 49. Hatry HP. Using agency records. In: Wholey JS, Hatry HP, Newcomer KE, editors. Handbook of practical program evaluation. 3rd ed. San Francisco, CA: Jossey-Bass; 2010. p. 243-61.

- 50. Grembowki D. The practice of health program evaluation. Thousand Oaks, CA: Sage Publications, Inc.; 2001.
- 51. Canadian Institutes of Health Research, Natural Sciences and Engineering Council of Canada, and Social Sciences and Humanities research Council of Canada. Tri-Council policy statement: ethical conduct for research involving humans; 2010. Available from: http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS 2 FINAL Web.pdf
- 52. Osborne J. Best Practices in Data Cleaning: A Complete Guide to Everything You Need to Do Before and After Collecting Your Data. Thousand Oaks, CA: Sage Publications; 2013.
- 53. Miles MB, Huberman MB, Saldana J. Qualitative data analysis: a methods sourcebook. 3rd ed. London, UK: Sage; 2014.
- 54. Meyer DZ, Avery LM. Excel as a Qualitative Data Analysis Tool. Field Methods. 2009;21(1):91-112.
- 55. Taylor-Powell E. Program development and evaluation: Analyzing quantitative data. University of Wisconsin-Extension; 1996. Available from: http://learningstore.uwex.edu/pdf/G3658-6.pdf
- 56. Torres R, Preskill H, Piontek M. Evaluation strategies for communicating and reporting: enhancing learning in organizations. 2nd ed. Thousand Oaks, CA: Sage Publications; 2005.
- 57. Schiavo R. Health communication: from theory to practice. 2nd ed. San Francisco, CA: Jossey-Bass; 2014.
- 58. Evergreen S. Presenting data effectively. 1st ed. Thousand Oaks, CA: Sage Publications; 2014.
- 59. Slidedocs: Spread Ideas with Effective Visual Documents [Internet]. Slideshare: Nancy Duarte; 2014 [updated 2014 Feb 21; cited 2015 Mar 17]. Available from: http://www.slideshare.net/duarte/duarte-slidedocs-15mcafslideshare
- 60. Word Cloud [Internet].: Better Evaluation; cited 2015 December 04]. Available from: http://betterevaluation.org/evaluation-options/wordcloud
- 61. Azzam T, Evergreen S, Germuth AA, Kistler SJ. Data visualization and evaluation. New Directions for Evaluation. 2013;139:7-32.
- 62. Evergreen S, Emery AK. Data Visualization Checklist; 2014. Available from: http://stephanieevergreen.com/wp-content/uploads/2014/05/DataVizChecklist May2014.pdf
- 63. Duarte N. slide:ology: The Art and Science of Creating Great Presentations. North Sebastopol, CA: O'Reilly Media; 2008.
- 64. Idea Rating Sheets [Internet]. Toronto, ON: Jason Diceman; cited 2015 Dec 04]. Available from: http://www.idearatingsheets.org/

- 65. Jacobson A, McGuire M, Zorzi R, Lowe M, Oandasan I, Parker K. The group priority sort: a participatory decision-making tool for healthcare leaders. Healthc Q. 2011;14(4):47-53.
- 66. Review evaluation (do metaevaluation) [Internet].: Better Evaluation; cited October 14, 2015]. Available from: <a href="http://betterevaluation.org/plan/manage/review\_evaluation">http://betterevaluation.org/plan/manage/review\_evaluation</a>
- 67. Stufflebeam D. Program evaluations metaevaluation checklist. Kalamazoo, MI: Western Michigan University; 1999. Available from:

https://www.wmich.edu/sites/default/files/attachments/u350/2014/program metaeval short.pdf

### **Public Health Ontario**

480 University Avenue, Suite 300 Toronto, Ontario M5G 1V2

647-260-7100 communications@oahpp.ca www.publichealthontario.ca

