Goals-Based Evaluation for Health Promotion Programs

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Background

Evaluation is “the systematic assessment of the design, implementation [and/or] results of an initiative for the purposes of learning or decision-making.” Evaluation should be systematic, impartial, methodical, and provide information that is credible, reliable and useful. Many types of initiatives can be evaluated: from a communication campaign to a healthy public policy to a health promotion program or service. For simplicity, in this resource we will use the term “program” to refer to any and all of these. There are many different types of evaluation that can be conducted, depending on the purpose, or stage of the program’s development and implementation. For example, one can produce the information needed to inform the development of a new program; assess if a program is carried out with the necessary reach, intensity, and duration; and/or evaluate changes in outcomes attributable to a program.

This At a Glance provides an overview of a specific approach to evaluation which can be used to evaluate programs, including health promotion programs, called goals-based evaluation. An accompanying video presentation summarizes a ten-step, three-phase model for goals-based evaluation and provides a case study from an Ontario public health unit. These resources aim to strengthen the capacity of health promotion practitioners to plan and evaluate health promotion programs.

As cited in Evaluating Health Promotion Programs: introductory workbook, Michael Scriven defines goals-based evaluation as any type of evaluation which aims to measure the achievement of pre-set goals and objectives. This type of evaluation can measure both processes, such as the procedures and tasks used to deliver a program, and outcomes, such as the results of a program.

Program planning and program evaluation are closely linked and part of an ongoing cycle. In particular, goals-based evaluation relies on thoughtful program planning, where specific information necessary for a robust evaluation can be developed. In this way, goals-based evaluation aligns with Public Health Ontario’s (PHO)’s health promotion program planning process, which emphasizes identifying the need for the program, and developing goals, objectives and relevant indicators.

The ten step model for goals-based evaluation presented in this At A Glance is based on one developed by The Health Communications Unit (THCU) in 1998. The model was developed based on THCU’s knowledge of evaluation models as well as their experience in supporting Ontario’s public health units to plan and evaluate health promotion programs. In 2011 THCU moved from the University of Toronto and integrated into PHO operations.
The Ten Steps for Goals-Based Evaluation of Health Promotion Programs

The goals-based evaluation model consists of ten steps in three phases: planning, implementation and utilization. While the model is depicted as a linear process, in reality the process can be more circular or iterative. It may be necessary to return to previous steps as the evaluation, the program, and the context in which they are taking place evolve.

Figure 1: Ten Steps for Goals-Based Health Promotion Program Evaluation

Step 1: Describe the Program

Purpose: To gather information for the program evaluation

This step creates the foundation for evaluation. Begin by creating a summary of the program, including: a clear description of the program including the need and rationale for the program, the program’s goals, audience, activities, indicators, inputs, outputs, and outcome objectives\(^5\)\(^7\) (see Appendix A: Glossary for definitions of these terms). These are the necessary ingredients for program evaluation and will enable the evaluation to produce useful and actionable information.

A logic model can be a helpful way to build understanding and clarity about the program,\(^8\) and visually illustrate the relationship between a program’s inputs and the desired outcomes.\(^9\) In other words, a logic model can show that the logic or theory underlying the program will plausibly lead to the planned goals and objectives.

Resources to support this step (see Resources section for a complete list):

- **At A Glance: Planning Health Promotion Programs**: This resource summarizes PHO’s six steps for planning health promotion programs.
- **Focus On: Logic model- a planning and evaluation tool**: This document provides an overview of the components of a logic models, examples of logic models designs, and describes the use of logic models in program planning and evaluation.
- **Focus On: Evaluability assessment- a step model**: This resource provides guidance on how to conduct an evaluability assessment and describes the known facilitators and challenges that may arise during the process.
Step 2: Identify and Engage Partners

**Purpose:** To identify evaluation partners and determine how best to engage them

This step involves identifying the individuals, groups, and organizations who will be impacted by the evaluation’s implementation or results, and can contribute to the success of the evaluation. For simplicity, we will refer to these as “partners”. Consider both internal and external partners, including the program audience. Once the partners are identified, consider the interests and expectations of each, how they might use the evaluation results, and ways to engage them in the evaluation process.

Resources to support this step (see Resources section for a complete list):

- **Wheel of Engagement**: This tool from the Tamarack Institute helps to identify who to engage, and to what degree, with opportunities and ongoing work.
- **Context and content experts**: This paper from the Tamarack Institute explores how to increase the authenticity of community engagement and meaningfully engage both content experts, described as professionals and staff in an organizations, service providers and leaders with formal power, and context expertsd described as people with lived experience of the situation.

Step 3: Determine Timelines and Available Resources

**Purpose:** To identify when the evaluation will occur and what resources are available to complete it.

Consider the context in which the evaluation is occurring, and any factors and processes (such as grant timelines or ethics approvals) that may impact the overall timelines for the evaluation. Next, identify the resources needed to carry out the evaluation. These could include available dollars for staff salaries, consultants, data collection, translation or interpretation, as well as supplies, equipment and communications. Resources can also include the time needed to complete the evaluation, and in-kind support from partners.

Step 4: Develop Evaluation Questions

**Purpose:** To select and prioritize the evaluation questions

Building on the information gathered in the previous steps, identify potential questions to guide the evaluation. As previously stated, this evaluation model is a goals-based model, which can be used to measure processes or outcomes. Evaluation questions differ according to what is being measured.

**A process evaluation**, or implementation evaluation, determines whether program activities have been implemented as planned/intended, and why? Or, why not? Process evaluation questions could include “Was the program implemented as designed (program fidelity)?” “Is the program reaching the intended audience?” “How satisfied is the audience with the program?”

**An outcome evaluation**, or effectiveness evaluation, focuses on the more downstream outcomes of a program. It measures the effects of the program on the audience by assessing the progress in achieving the planned goal. Evaluation questions could include “What did/does the audience do differently as a result of the program?” “Did the program result in unintended consequences or outcomes? What were they?” “Did program outcomes increase or decrease?”
It may be necessary to prioritize evaluation questions, depending on how many are identified, the resources available for the evaluation, and the timeliness for the evaluation. Involve the internal and external partners identified in Step 2 in the prioritization process when possible. Once evaluation questions have been selected, the evaluation approach(es) that best suit those questions can be determined.

**Step 5: Select Measurement Methods and Procedures**

**Purpose:** To determine what to measure, how to measure it, and what data collection procedures to use

In this step, determine what to measure, and what procedures to use in order to measure it. This includes how, when, and from whom the data will be collected, with consideration for ethical conduct related to data collection. Develop a data collection plan that includes:

- **What will be measured:** Select the indicators that match the program’s key activities and outcomes, and align with the resources available. Ensure the data you collect is related to your evaluation questions and avoid collecting information that will not be useful or used.

- **How data will be collected:** There are four common groups of evaluation methods elect one or a mix of collection methods to answer the evaluation questions identified:
  1. Review of existing data or documentation, such as meeting notes and program reports;
  2. Talk to people directly, via interviews or focus groups;
  3. Obtain written responses through surveys or similar methods; and
  4. Observe, monitor, or track outcomes through primary or secondary data sources.

- **When data will be collected:** Determine at which point(s) data collection will take place, for example, before, during or after the program has been implemented.

- **From whom data will be collected:** Determine who you will collect data from. This includes determining the sample size, ensuring adequate representation that will reflect the program’s audience, how participants will be recruited, and where data collection will take place. In the case of secondary data, detailed the sources of that data.

A data collection matrix can be a useful way to summarize the evaluation questions, links to logic model (if applicable), as well as the indicators, methods, data sources, timelines, roles and responsibilities, and data analysis process. This example has been provided by Wellington Dufferin Guelph Public Health from an evaluation of a pilot program of an overdose prevention site (OPS). The evaluation featured three evaluation questions:

1. What are the strengths and challenges of the OPS (as it is being implemented through the pilot program)?
2. What are the positive and negative short-term outcomes for clients associated with the use of the OPS?
3. Is an OPS an effective way to keep people who use substances safe in our community?

The below data collection matrix summarizes plans for the first evaluation question.
### Table 1. Data Collection Matrix Example

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Case Study from Wellington-Dufferin-Guelph&lt;sup&gt;12&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation Question(s)</td>
<td>What critical question(s) will be answered as a result of the evaluation?</td>
<td>What are the strengths and challenges of the site as it is being implemented?</td>
</tr>
<tr>
<td>Indicators</td>
<td>What will indicate success (how will you know that the program has been successful?)</td>
<td>• Location and layout</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Hours of operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff ability and capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Client referrals to other services</td>
</tr>
<tr>
<td>Data Collection Methods</td>
<td>How will the data be collected?</td>
<td>Interviews</td>
</tr>
<tr>
<td>Data Sources</td>
<td>From whom and where will the data be collected?</td>
<td>Staff and clients of the pilot site</td>
</tr>
<tr>
<td>Timelines</td>
<td>When will the data be collected?</td>
<td>February – March 2019</td>
</tr>
<tr>
<td>Roles &amp; Responsibilities</td>
<td>Who is responsible for data collection, and what is their role?</td>
<td>2 Health Promotion Specialists will conduct interviews</td>
</tr>
<tr>
<td>Data Analysis Methods</td>
<td>How will the data be analyzed?</td>
<td>Responses to open-ended questions will be analyzed for major and minor themes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responses to close-ended questions will be quantified as proportions</td>
</tr>
</tbody>
</table>

### Step 6: Create the Evaluation Plan

**Purpose:** To document the decisions made in Steps 1 through 5 in an evaluation plan

The evaluation plan documents all of the decisions and information produced in the model described here. Typically, an evaluation plan includes the program description, the purpose of the evaluation, evaluation questions and methodology, a data analysis plan, budget and timelines, and how the results of the evaluation will be used.<sup>5</sup>

An important consideration in any evaluation plan is to consider ethical issues. Ethical issues can arise at any point throughout the lifecycle of an evaluation, from the initial development of a plan through to the application of findings. For example, evaluators often experience conflicts of interest, especially when the evaluator, or their affiliated organization, is also implementing the program being evaluated. Also, evaluations involve actionable information that can have a direct and immediate impact on the

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<sup>12</sup> Reference to a case study from Wellington-Dufferin-Guelph is used to illustrate the data collection matrix example.
welfare of individuals and their communities. Ethical reflection is therefore an important aspect of creating an evaluation plan and can help ensure evaluations respect the rights and protect the welfare of individuals and their communities. This includes avoiding unnecessary risks (e.g., harms or burdens).

Resources to support this step (see Resources section for a complete list):

- **A framework for the Ethical Conduct of Public Health Initiatives**: This framework provides a public health lens to the Canadian Tri-Council Policy Statement 2, Ethical Conduct for Research Involving Humans (TCPS 2). The framework poses ten guiding questions to be considered when planning and evaluating evidence-generating public health initiatives.

### Step 7: Collect Data

**Purpose:** To collect the data needed to answer each evaluation question

The evaluation results and corresponding recommendations hinge upon the quality of the data collected. To ensure that data are reliable, develop standard data collection procedures and tools, and provide training for those collecting data. Consider whether participation incentives are appropriate and brainstorm ways to enhance response rates.

Resources to support this step (see Resources section for a complete list):

- **Data Collection Methods**: This collection of short resources from the Centres for Disease Control and Prevention explore specific data collection methods, including for focus groups, questionnaires, interviews and observation.

### Step 8: Process and Analyze Data

**Purpose:** To synthesize and analyze data collected for the evaluation

This step involves engaging with the data to process, analyze, and synthesize information from all sources.

- **Ensure quality data**: Develop and implement quality control techniques to ensure high quality data.

- **Organize the data**: Data typically requires some “cleaning” and organizing to be ready for analysis. Quantitative and qualitative data may need to be “cleaned” and organized in different ways. Consider using Excel or statistical software (e.g., SAS, R) for quantitative data, and software such as NVivo for qualitative analysis.

- **Analyze the data**: Qualitative and quantitative data require different analysis techniques. For many evaluations of quantitative data, simple descriptive statistics may be sufficient. This might include counts or frequencies, percentages, measures of central tendency (such as mean, median and mode) and variability. More complex analyses of associations between indicators, or modeling may also be appropriate. Qualitative analysis may identify themes in the data, guided by the evaluation questions.

- **Synthesize the data**: This is the process of organizing and classifying the information that has been collected, summarizing and comparing the results.
Step 9: Interpret and Disseminate Results

**Purpose:** To interpret and share your evaluation findings, engaging partners to help identify recommendations

This step involves describing what was learned through the evaluation, interpreting the data analyzed and synthesized in the previous step, so that decisions can be made about the program. Partners, including the program’s audience, can be included in interpreting the findings. Anchor the interpretation to the original evaluation questions. Create a list of recommendations that align with the evaluation outcomes.

Recommendations are actions to consider as a result of what has been learned through the evaluation. The recommendations will be informed by the program’s audience and the partners identified in Step 2, as well as the purpose for the evaluation (Step 7). Review recommendations with partners to identify actionable outcomes and discuss what has been learned from conducting the evaluation and next steps to incorporate results.

Evaluations are most useful when their results are used, for example by decision-makers, policy-makers, funders, and other groups. Identify who will use the evaluation results, and how they will use them. Then the appropriate channels/formats for the audience and purpose can be selected. Presentation of findings can take many forms such as a written report, slide show presentation, infographic, and/or short informational video. Make results available to partners. Tailor what is disseminated to their specific interest in the evaluation and how they plan to use the results.

Step 10: Apply Evaluation Findings

**Purpose:** To use your evaluation results

“It is not really program evaluation unless the information is used to make decisions.”

The ultimate purpose of program evaluation is to use the information. Evaluation findings can be used in several ways: to inform decisions regarding the program’s continuation, improvement, or wind-down; to demonstrate that resources are well-managed; and to generate knowledge and understanding of the program or the issue that it addresses. In this step, apply the evaluation findings as detailed in the evaluation plan developed in Step 6.
Conclusion

Evaluations help organizations to justify, support and improve programs, and make other important decisions about them. A goals-based evaluation will help to determine if the health promotion program has achieved the goals and objectives it was designed to. An effective evaluation involves engaging partners, assessing resources, developing evaluation questions, gathering and analyzing data and utilizing the results. 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


14. Tamarack Institute. Developing evaluations that are used [Internet]. Kitchener, ON: Tamarack Institute; 2017 [cited 2022 Jul 7]. Available from: https://www.tamarackcommunity.ca/hubfs/Developing%20Evaluations%20that%20are%20Used.pdf?hsCtaTracking=595905c0-9a6e-424e-abff-6ee45d31e134%7C59d234ab-c125-4be2-b269-8821e7cb573b


Appendix A: Glossary of Planning and Evaluation Terms

**Activity:** The proposed events or actions that will take place as part of the program. 

**Audience:** The specific group that the program intends to reach. Identification of the audience should be rooted in the results of a situational assessment which clearly articulates the individuals, networks, organizations, and partners most impacted by the situation which the program intends to improve. There can be multiple audiences for a single program: the primary audience is the main population which the program intends to reach, while a secondary (or even tertiary) audience can be impacted or influenced by the program, but are not direct recipients of it.

**Goal:** A statement that reflects the broadest level of results to be achieved by the program. The goal clarifies what is important about the program and includes the program’s intended audience. Generally speaking, goals use action words such as reduce, eliminate, improve, or increase.

**Indicator:** A variable that measures the extent to which the program’s objectives have been met. The type of indicators varies according to what precisely is being measured. Process indicators demonstrate the concrete tasks that the program accomplished. Outcome indicators demonstrate if the program is achieving the desired change. Indicators should be important, obtainable, reliable, and valid.

**Input:** The resources needed to implement a program. Examples include funding, staffing, and program materials.

**Logic Model:** A logic model is a visual representation of the logic that underpins the public health program. It shows the relationship between the program’s resources (inputs), the program’s activities (outputs), and the program’s results (outcomes). A logic model can be as broad or as specific as needed, and may have a design specific to its purpose and audience. For example, a logic model can build understanding and clarity of the program, identify resources or the sequencing of activities that should be implemented, or provide a basis for evaluation. Generally, logic models commonly contain the program’s goal, inputs, activities, audience, outputs, and outcomes. Logic models can also include a description of the situation, assumptions, external factors that might impact the program, and strategies.

**Objectives:** The specific and measurable steps that must be carried out in order to attain the program’s goal. Process objectives identify the changes or tasks which are needed in order to implement the program. Outcome objectives identify the long-term accomplishments of a program. Objectives should be SMART: that is, Specific, Measurable, Actionable, Realistic, and Time-specific. Well-written objectives generally include four components.

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**Figure 2: Components of an Objective**

- **AUDIENCE:** Who will receive the program
- **OUTCOME:** What will change as a result of the program
- **MEASURE:** By how much will the outcome change?
- **TIME:** By when will the outcome change?
**Outcome:** A measurable positive or negative change to the audience of a program,\(^7\) that will occur as a result of the program.\(^7\) In other words, an outcome captures the effects of a program.\(^7\) Outcomes measure the achievement of the program’s goal, and therefore are ambitious and often long-term.\(^10\) It may be useful therefore to develop short-term outcomes which can be measure in weeks or months, and intermediate outcomes, which can be measured in months or years.\(^8\)

**Output:** The product or result of the program’s activities.\(^8\) Outputs quantify activities by providing numeric values or percentages.\(^9\)

**Process evaluation:** Systematically gathering information during program implementation. Process evaluations describe and assess the reach of the program, audience recruitment and retention, perceptions of program quality, acceptability, and fidelity of implementation.\(^2\)
Resources


- Ontario Agency for Health Protection and Promotion (Public Health Ontario); Meserve A. At a glance: the six steps for planning a health promotion program [Internet]. Toronto, ON: Queen’s Printer for Ontario; 2015 [cited 2023 Jul 21]. Available from: https://www.publichealthontario.ca/-/media/documents/S/2015/six-steps-planning-hp-programs.pdf


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