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Evaluability assessment – a step model

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Introduction

Outcome evaluations are an important source of evidence in the evidence-informed decision making (EIDM) process, particularly when there is insufficient existing evidence in peer-reviewed and grey literature, or an organization is adapting a proven intervention to a new setting or population.[1]

However, outcome evaluations can be resource-intensive and should only be undertaken if the results of the evaluation will be used in decision making.[2,3] Evaluability assessments (EA) are a method which can be used to ensure a program or intervention is ready for an outcome evaluation.[4]

Background

EA "is a method for examining a program (or a proposed program) to assess its structure, to determine plausibility of the program achieving intended goals, the evaluability of those goals, and the utility of implementing further evaluation of the program."[2(p.11)] The method of EA was developed by Wholey in the 1970's to improve the usefulness and quality of outcome evaluations.[9]

In order for a program to be ready for an outcome evaluation it must meet four conditions:

1. Clearly-defined with a shared understanding amongst stakeholders of the target audience, activities, objectives and goals *and* program resources and activities will plausibly lead to proposed objectives and goals.

2. Information needs of the intended users are clearly defined and agreed upon.

3. Needed data are accessible.

4. Evaluation results will be used by the intended users.[3,10]

A number of step models for EA have been discussed in the literature, but no one model has been identified as a preferred model.[9] In addition, few authors are explicit about how step models were operationalized in their EA studies.[9]

Therefore, this Focus On summarizes the result of a systematic search and literature synthesis conducted in order to provide further guidance on how to conduct an EA, and the known facilitators and challenges that may arise during the process.

A number of terms are used throughout this document including:

Outcome evaluations

Assess the effectiveness of program activities or services and measure the degree of change in outcomes such as health status or behaviours.[5-7]

Intended users

Those who will be the primary users of the evaluation results. They are the decision makers regarding an evaluation's focus, design and methods. They are also the ones primarily responsible for ensuring evaluation results are used in program decision making.[8]
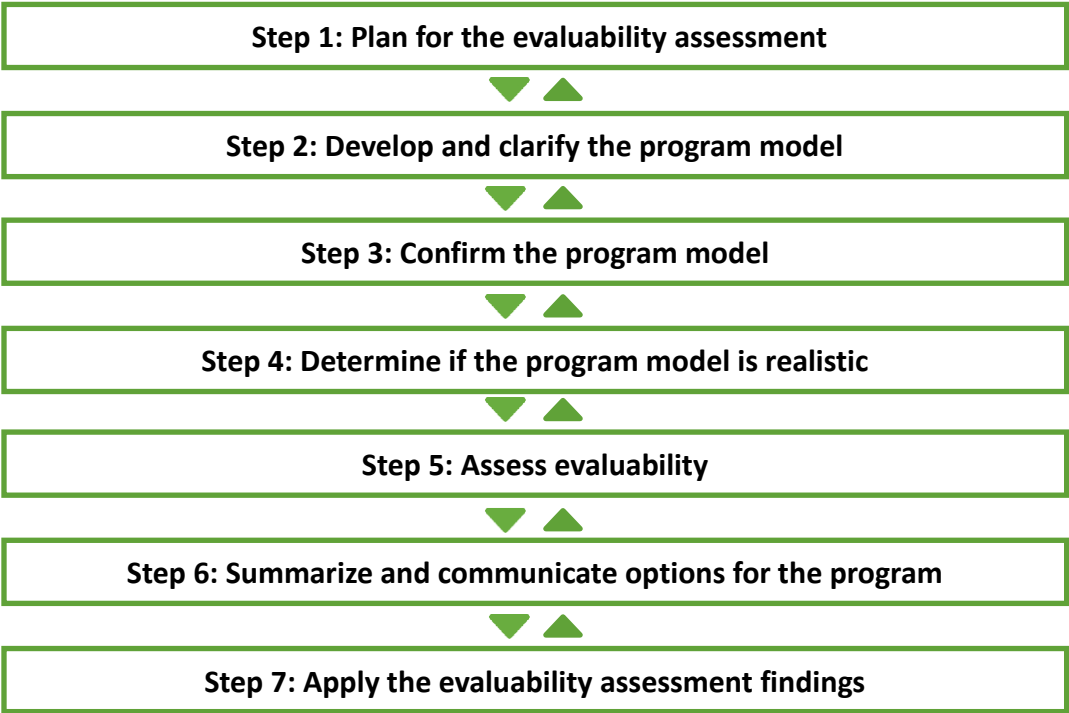
Stakeholders

Anyone who has an interest in the program or the evaluation. Stakeholders for an evaluation can include funders, management, program staff, clients, as well as those who provide similar programs or services. Intended users are often identified within these different stakeholders groups.[8]

Methods

The content of this document, including the step model, was developed based on a systematic search of peer-reviewed and grey literature with additional input from health promotion consultants within the Health Promotion Capacity Building unit at Public Health Ontario (PHO). Further details regarding the search strategy and development of the step model are available in Appendix A.

Seven steps for conducting an evaluability assessment

FIGURE 1: SEVEN-STEP MODEL FOR CONDUCTING AN EVALUABILITY ASSESSMENT

Step 1: Plan for the evaluability assessment

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Step 2: Develop and clarify the program model

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Step 3: Confirm the program model

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Step 4: Determine if the program model is realistic

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Step 5: Assess evaluability

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Step 6: Summarize and communicate options for the program

▼ ▲

Step 7: Apply the evaluability assessment findings

Step 1: Plan for the evaluability assessment

> **The purpose of this step is to identify the workgroup members and determine timelines and resources for the EA. In this step the workgroup will also confirm the program to be evaluated, intended users of the evaluation and their information needs. Methods used in this step can include project management, key informant interviews, and document review.**

Although an EA uses fewer resources than an outcome evaluation,[11,12] it can take between one and 20 months to complete.[4,12-15] As such, planning for who will carry out the EA, as well as those who will provide a supportive role is an important first step.[2,16,17] EA workgroups can be made up of managers, program staff, public health graduate students, faculty and/or evaluators (internal or external).[3,11,13,14,16-20] Once the workgroup has been identified, it will need to determine, along with the intended users of the EA, timelines as well as available resources for the EA.[2,16,17] Additional project management tasks could include creating a terms of reference which includes how decisions regarding the EA will be made, creating workplans and developing a budget.[21]

Programs can be made up of a single intervention (e.g., cooking demonstrations) or multiple interventions (e.g., cooking demonstrations, changes in recreational centre procurement policies and a social media campaign; all with the goal of reducing childhood obesity). Therefore it is necessary for the workgroup to determine, with the help of the intended users, the boundaries of what is being evaluated.[2,16,17,22,23] Key informant interviews and review of existing documents can be useful to identify what is to be evaluated and the evaluation's stakeholders.[2,16,17,22-24]

Discussions with stakeholders will enable the EA workgroup to identify the purpose of the evaluation and information needs of intended users and assess the organizational climate and support for an outcome evaluation.[2,4,16,17,24,25]

At the end of this step, the workgroup will have:

- Identified its members and how it will function together.
- Determined the program's stakeholders, the EA's intended users and their information needs.
- Developed a basic understanding of the program to be evaluated; and
- Confirmed the budget and timelines for the EA.

Step 2: Develop and clarify the program model

> **The purpose of this step is to develop a deeper understanding of the program, including stakeholder assumptions and program context and to establish consensus on the program's intended goals, objectives and activities. Methods used in this step can include document review, interviews and small group discussions with stakeholders, the development of a logic model or theory of change and tables of performance indicators.**

Depending on their experience and involvement with the program, stakeholders can have varying understanding and assumptions regarding a program.[13,17,18,24] Developing a written program model allows the EA workgroup to determine if program funders, upper management, program staff and the population served have a shared understanding of the activities and intended outcomes of a program.[2,13,16,23,25-28]

> **PHO's Evaluating health promotion programs: introductory workbook provides a 10-step model for evaluating programs.**
>
> **Completion of four of ten steps (1, 2, 3, and 5) in the planning phase of an evaluation contributes to some of the work of an evaluability assessment.**

Development of the program model can occur through review of administrative documents and interviews.[4,11-13,15-17,28-30] Wholey,[4] Kaufman-Levy et al.[22] and Soura[19] provide suggestions on questions or themes to ask policymakers, program managers, staff and other stakeholders.

The program model should include the program's goals, objectives, strategies, audiences and available resources.[21] It can be a written or visual description. One option is a logic model which shows, often visually, the relationships between the activities and intended outcomes of the program.[6,31] A theory of change goes further by describing the context and underlying assumptions of the intervention.[32] Some program models, particularly if they already have an existing process or outcome evaluation plan, include a table of performance indicators.[29] Further information on how to develop a logic model or theory of change can be found in PHO's Focus On: Logic model–a planning and evaluation tool.

At the end of this step the EA workgroup will have developed a program model to which all stakeholders agree is how the program is operating.

Step 3: Confirm the program model

> **The purpose of this step is to verify that the written program model aligns with how the program operates in practice. Methods used in this step can include site visits or observation, review of administrative data, and interviews with program staff and the population served.**

Programs do not always operate in practice the same way they are described in program documentation or understood by senior management.[3,12,13,16,22] Viewing the program through site visits or observations will allow the EA workgroup to confirm the program model created in Step 1 aligns with how it is actually being implemented.[4,13,16-18,30] This can also be achieved through meetings and interviews (either in-person or on the telephone) with program staff and the population being served,[4,17-19,33] as well as reviewing existing data systems.[4,13,17-19] If the written program model and how the program operates in practice are not aligned, the EA workgroup may decide at this time to return to the program's stakeholders or the EA's intended users to recommend changing the program model or providing additional training to staff so that the program operates as it was originally intended.[13]

Meetings and interviews with program staff can provide additional information necessary to develop an outcome evaluation plan such as program features (timing or seasonality of the program), setting(s) in which the program operates, number and types of people currently reached by the program (including geographic, socio-demographic and socio-cultural descriptions) and how clients are recruited/enrolled into the program.[17,24] Additionally, this step can help the EA workgroup identify known problems with the program and any changes to the program's activities or features program staff intend to make in the near future.[13,22]

At the end of this step the EA workgroup will have determined whether or not the program is operating as described in the program model, and collected additional information necessary to plan an outcome evaluation.

> **Planning tip**
>
> **Multiple steps contain the same suggested data collection activities, such as key informant interviews. Plan your data collection activities to collect all of the information you will need at each step.**

Step 4: Determine if the program model is realistic

> **The purpose of this step is to assess the likelihood that program activities and available resources will lead to the program's intended goals and objectives. Methods used in this step can include site visits and observations, a review of the literature and interviews with experts.**

To assess the plausability of an intervention, the EA workgroup must determine if the:

- Resources are sufficient to achieve the intended outcomes[4]
- Intervention is consistently and reliably carried out to the expected degree[4]
- Activities are known to lead to the intended outcomes (e.g., through research studies, evaluations or a pilot project)[3,29]
- Clients/recipients are receiving the necessary dosage and intensity of the intervention[2,13]

This can be determined using information collected in Steps 1 to 4, as well through literature reviews.[11,29,30]

Following this step, the EA workgroup may determine that this a good time to inform the EA's intended users on findings to date.[4,11] This is partricularly important if the workgroup has found that there are major differences in the written program model and what is occuring in practice, if the program is significantly underperforming, or if there is insufficient evidence that the resources available and program activities will lead to the program's outcome objectives.[4] The program's stakeholders and the EA's intended users will need to decide whether the EA should continue or if changes to the program are necessary before proceeding further.

At the end of this step the EA workgroup will have determined if the program, as it is occuring, is likely to lead to its intended outcomes.

Step 5: Assess evaluability

> **The purpose of this step is to determine which elements and outcome objectives, including any health equity measures, could be evaluated. Methods used in this step can include an assessment of available data sources, review of the literature, interviews with experts and development of an evaluation plan.**

The most important output of the EA is to determine if the program meets the four conditions necessary to design an outcome evaluation (identified above). The EA workgroup will often determine this through indicators or checklists[34,35] and/or in discussion with the intended users and program managers.[11,16,17,23,28] During this step the workgroup can assess whether the evaluation could incorporate health equity outcomes as well.[1,36]

At the end of this step, the EA workgroup will have identified:

- whether the intended outcomes are likely to occur, or need to be changed given program activities and available resources
- ways to improve the program to increase the likelihood that intended outcomes will occur
- what data are available or could be collected for an evaluation
- how the program could be evaluated for impact (if at all) and its estimated costs
- how the evaluation results would be used[4,13,24]

Step 6: Summarize and communicate options for the program

The purpose of this step is to summarize the results of the EA, develop recommendations for the program and its evaluation and to communicate these findings to program stakeholders. Methods used in this step can include facilitated meetings, presentations and report development.

As the EA workgroup likely will have collected large amounts of data and information through the previous steps, it will be necessary to summarize what has been learned in order to communicate the EA findings effectively. Sources in the review did not describe how findings were summarized for intended users, but some options include arranging findings by the four conditions for evaluability or the program model components. The workgroup can communicate what they have learned through the EA to the intended users through facilitated meetings, presentations or reports. The workgroup may also want to recommend how to proceed with the outcome evaluation. Options include:

1. Evaluate some of the program

2. Change the program to increase the likelihood it will achieve its outcome objectives

3. Make no changes and evaluate the entire program

4. Stop the program or do not proceed with an outcome evaluation

5. Ignore the results of the EA[2]

At the end of this step, the workgroup will have completed the EA. In many cases after communicating with intended users, this may be the end of the process as the decision makers for the program may decide not to proceed with an outcome evaluation.[11]

Step 7: Apply the evaluability assessment findings

> **The purpose of this step is for decision makers to reach agreement on changes to the program and evaluation design. Methods used in this step can include facilitated meetings and prioritization exercises.**

Following the EA, decisions need to be made regarding:

- what changes should be made to how a program is operating in practice
- what resources are available and appropriate timelines for an outcome evaluation
- how results from an outcome evaluation will be used
- whether to proceed with an outcome evaluation

As described in Step 1, the EA workgroup may or may not include those able to make decisions regarding the program and its evaluation.[13] Therefore program decision makers may meet separately to determine next steps, if any, for an outcome evaluation. These conversations can occur using usual processes for decision-making or through facilitated meetings and prioritization exercises.

At the end of this step, if decision makers decide to proceed, the EA workgroup may be asked to finalize a program model that aligns with how a program is operating in practice, to develop key questions to address in an outcome evaluation and/or to develop an evaluation plan.[12,16]

Facilitators and challenges in EA

Literature results showed challenges that could hinder, as well as factors that could facilitate an EA.
[3,4,9,11,17,20,24,33] Most of the identified facilitators were focused on engagement with intended users and included:

- stakeholder involvement in the workgroup[9,24]
- updating stakeholders frequently on learnings throughout the EA[3,4,11,17]
- excellent facilitation skills[13,17,20]
- clarifying the deliverables expected from the EA and their timelines[3]
- sensitivity to program manager's and staff unease with evaluation in general[13]

Organizational facilitators identified included stability of the program and management staff,[13] clear understanding of the purpose and process of an EA[13] and an organizational commitment to evaluation and program improvement.[13] Additional EA workgroup facilitators included effective project management skills,[13] documenting decisions regarding the EA,[3] possible outcome evaluation and the program[4] and efficient use of EA resources.[4] Challenges identified included ensuring neutrality of the evaluator and preserving working relationships with stakeholders when challenging a program's design.[33]

Conclusion

An EA is a pre-evaluation activity which, in addition to increasing the usefulness and relevance of outcome evaluations,[9,11,12,30] can identify activities unlikely to lead to program outcomes,[9,12,17,30] build evaluation capacity,[11,18] and assist in developing[11,20] or improving a program.[9,11,17,24,30] This Focus On provides a step model which can be used to carry out an EA. It also highlights some of the facilitators and challenges to conducting an EA. EA is recommended in advance of an outcome evaluation, in order to ensure scarce evaluation resources are used most appropriately.

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Appendix A: Methodology

Literature search methodology

MEDLINE, Embase, PsycINFO, CINAHL, Health Business Elite and SocINDEX electronic databases were searched on January 23, 2017 by PHO Library Services for articles published from inception to 2017. A systematic search of grey literature was also executed on January 19 and 20, 2017 and included targeted web searches from the Centre for Disease Control and Prevention (CDC), Better Evaluation, Canadian Evaluation Society, and the American Evaluation Association. The Ontario Public Health Libraries Association (OPHLA) custom search engine was also searched, as well as a general Google search. The following search terms were used for all searches: "evaluability assessment", "exploratory evaluation", "public health or health promotion or community health", "methods or steps or toolkit or tool-kit or primer or checklist". Sources in English or French were eligible for inclusion if they focused on evaluability assessment (how to conduct an EA or reported a completed EA) and took place in a public health or health promotion setting. Two reviewers independently screened all titles and abstracts to ensure agreement regarding inclusion of the article. Full-text articles were also screened in this way. Consensus was reached on all disagreements through discussion.

A data extraction table was drafted and refined by discussion among the authors. Data extraction was then completed by both authors, with each reviewing half of the sources. Information extracted from each source included: author, year of publication, purpose or objective of the source, population and setting, definition of EA, approaches to EA (data collection methods, length of time, development of logic models), steps to and/or used in conducting EA, benefits, facilitators, and challenges/barriers to EA, and the level of initiative (local program versus organization/systems level initiatives). Following further discussion, only the EA of program initiatives were included in the development of the steps to EA as the EA of organization/systems-level initiatives were carried out in order to inform system-wide evaluations or decisions regarding what types of programs to fund. Quality assessment was not conducted on included sources.

Literature search results

The electronic database search identified 49 articles and the grey literature search identified 222 sources, from which 10[11,15-18,29,37-40] and nine[12,14,19,20,30,33,41-43] met the inclusion criteria respectively. The included 19 sources consisted of a mix of 16 journal articles and three reports[41-43] all of which focused on health promotion or public health within Canada, the United States, and Australia. Each source provided a step model for conducting EA or gave a general overview of processes.

Step model development

Eight[11,12,14,16-19,29] of the 12 sources related to EA of local programs contributed to the development of the step model. Of the eight, four[12,14,19,29] made reference to steps that were cited or adapted from others and

four presented original work (created their own steps) leading to a total of 14 sources[2,4,10,12,13,16,22-25,28,37,44,45] for the creation of the model. A new seven-step model for conducting EA was created following the synthesis of the findings.

Following the completion of data extraction, data retrieved for the 'steps to and/or used in conducting EA' section were further analyzed and additional information was extracted into a separate table. Where source authors made reference to or adapted a pre-existing EA step model and provided citations, the original steps were retrieved and data extraction was conducted on those sources. Information extracted from the sources included: number of steps and step name, purpose of the step, and tasks of the step. Next, all information gathered on EA steps from the two data extraction tables was analyzed and synthesized, and a step model was created.

Limitations and strengths

The search terms and databases used, while comprehensive, may have missed some articles on EA. For example, a recent textbook on EA[46] was not identified in this search. In addition, there are many examples of EA in fields other than public health and health promotion, which were not included in this review (for example an often-cited review for the international development field[47]). Therefore, this document may not include possible additional data collection methods, benefits, barriers and facilitators to conducting an EA. We decided to include all step models cited, without carrying out a quality appraisal of included sources therefore, we may have included step models and methods which are not as relevant as others.

A major strength in the development of the suggested step model for conducting an EA is that it is based on the findings of a systematic search of both peer-reviewed and grey literature. To our knowledge, the creation of other step models for EA have not been done in this way. The authors' findings also align with a published review of 20 years of EA[9] as well as a literature review carried out for EA of projects in international development,[47] demonstrating the relevancy and applicability of the new model.

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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, front-line 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

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