Evaluating health promotion programs

November 1, 2012 V4.12

Five-minute exercise in evaluation design

- In pairs, carefully observe one another
- Turn your backs to each other
- Both of you change three things about your personal appearance while your back is turned
Five-minute exercise in evaluation design

• Now, face each other, and in turn, try to identify the three changes in the other person
• As a large group, discuss what this tells us about:
  • The nature of change
  • Measurement of change
  • Attributing change to interventions

Learning objectives:

By the end of this session, you will be able to:

1. Explain the purpose of each step in our evaluation model
2. Describe what is involved in each step
3. Identify how these steps can be applied to your situation
4. Know how to access our evaluation products and services to support your evaluations
Definition: program evaluation

- The application of systematic methods to address questions about program operations and results
- It may include ongoing monitoring of a program as well as one-shot studies of program processes or program impact\(^1\)

Evaluation...we’ve all done it!

- **Program evaluation** takes it a step further
  - To focus on a program
  - And to be **systematic** about what information we use and how we use it

How have you been involved in program evaluations?
- a) Doing an evaluation of a program
- b) Having your program evaluated by someone else
- c) Providing data for an evaluation
- d) Reading evaluation reports
Why should we evaluate a program?

• For learning:
  • To provide information about the program
  • To compare different program types
  • To improve a program

• For accountability:
  • To measure the program’s effectiveness or contribution
  • To demonstrate the program’s value
  • To meet funding requirements

Note: we can also evaluate groups of programs, whole systems, series of events... not always a single program/single evaluation

The **10** steps to evaluating a health promotion program

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Terminology varies...

<table>
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<th>Alternatives</th>
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<tr>
<td>Activities</td>
<td>Process objectives, implementation objectives</td>
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<tr>
<td>Goal</td>
<td>Purpose, mission</td>
</tr>
<tr>
<td>Indicators</td>
<td>Benchmarks, criteria for success, outputs</td>
</tr>
<tr>
<td>Objectives</td>
<td>Outcomes, impacts, effects</td>
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<tr>
<td>Outcome evaluation</td>
<td>Summative evaluation</td>
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<tr>
<td>Population of interest</td>
<td>Target group, audience, community</td>
</tr>
<tr>
<td>Resources</td>
<td>Budget, assets, inputs</td>
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<tr>
<td>Strategies</td>
<td>Components, initiative, intervention</td>
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Step 1: Clarify program

- Ensure that your program has clearly defined goal(s), populations of interest, outcomes, strategies, activities, outputs, and indicators
- Often accomplished using a logic model
- A logic model is a diagrammatic representation of a program
- It shows the relationships among:
  - WHAT: what does the program do?
  - WHO: who are the recipients of the program?
  - WHY: what outcomes are to be achieved?
Elements of a well-written process objective

- How much
- Population of interest (for whom)
- Output (what product)
- Conditions (when)

Well-written process objective

4 evaluation workshops delivered to health promotion practitioners by the end of the calendar year
Elements of a well-written outcome objective

How much + Population of interest (who) + Conditions (when) → Well-written outcome objective

75% of health promotion practitioners attending the workshop report an increase in knowledge about evaluation by the end of the calendar year.
Step 2: engage stakeholders

- Define your stakeholders, understand their interests and expectations, and engage them in a review of objectives

- This will help you develop your evaluation questions
Understanding stakeholder interests and expectations

- What do they want to know from the evaluation?
- How do they expect the evaluation to be conducted?

What do they care about?
What kind of information will persuade your stakeholders?
Usually need to prioritize stakeholder interests due to budget limitations.

Step 3: Assess resources

- Clarify staff time, money and other resources available for evaluation
- This will inform your evaluation design decisions
Consider:

- Funds
- Staff and volunteer time and interests
- Timeline
- Equipment and tools
- Support of partners

Step 4: Organize and select evaluation questions

- Organize your evaluation questions by type:
  - Formative
  - Process
  - Outcome

- Select your key evaluation questions

- Think about:
  - What type of decisions need to be made with the evaluation data
  - Stakeholder interests
  - Resources
| Formative evaluation | • Situational assessment  
Is there a need for this type of program?  
• Logic model development  
Theory of change - how will the activities lead to the outcomes?  
• Evaluability assessment  
Is the program ready to be evaluated?  
What type of evaluation?  
• Pre-testing materials  
Is the message that we want to communicate being understood by our population of interest? |
| --- | --- |
| Process evaluation | • Sometimes known as program tracking or monitoring  
• Sample process evaluation questions:  
  • Was the program carried out as designed?  
  • Did we reach the desired target group?  
  • How many participants attended each session?  
  • What were the implementation facilitators and barriers? |

Is used in the development and planning stages of a program  
Measures program activity and implementation
Outcome evaluation

Estimates success of program at meeting goals and objectives

• Measures change produced by program activities (i.e., the effect)

• It can be difficult to measure long-term outcomes

• Sample outcome evaluation questions:
  • Has there been an increase in physical activity levels?
  • Are participants more ready to quit smoking?
  • Have participants increased their knowledge of healthy eating?

Selecting evaluation type – guided example

1. When will you be doing the evaluation?
2. Why are you conducting the evaluation?
3. What questions do your stakeholders want answered?
4. Who is available to conduct the evaluation?
5. How do you expect to conduct the evaluation?
6. How much resource support do you have (time, expertise, funds)?
7. What evaluations have you already conducted?
Step 5: Determine methods of measurement and procedures

- **What** will you measure?
- **When** will you collect data?
- **How** will you collect data?
- **Who** will you collect data from?
- **Who** will use the data?

Methods and procedures: **what** will you measure?

- **Indicators** are ways of measuring the objectives
- Sometimes indicators exactly measure the objectives
- Often we need to find indirect ways of measuring our objectives
<table>
<thead>
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<tr>
<td>Population(s) of interest</td>
<td></td>
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<tr>
<td>Long-term outcome objectives</td>
<td></td>
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<tr>
<td>Short-term outcome objectives</td>
<td></td>
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<td>Activities</td>
<td></td>
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<td>Outputs/process objectives</td>
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<td>Resources</td>
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**Methods and procedures: what will you measure?**

- **Short-term outcome objectives:**
  - By the end of the first year, 80% of participating parents will have increased access to affordable, nutritious food through participation in the community kitchen program.

- **Possible outcome indicators:**
  - # of participating parents reporting decreased reliance on food bank
  - % of participating parents who agree that they have increased access to affordable, nutritious food
Methods and procedures: what will you measure?

There are three main considerations for selecting indicators:

• Validity

• Reliability

• Accessibility

Validity

• How well does the indicator actually measure what it should?²

• Examples:
  • Self-reported weight versus actual weight?
  • If they say they ‘like’ it – it doesn’t mean it is ‘useful’
Reliability

• Will it give consistent measurement over time?

• Examples:
  • If you ask the same question at different times, will they respond in the same way?
  • Does everyone understand the question in the same way? Is there too much room for interpreting the question?
  • Can emotions or other circumstances change respondents’ answers from day to day?

Accessibility

• What are the barriers to obtaining data on your outcome indicators?

• Examples:
  • There is a limited sample of parents willing to complete the survey
  • Others?
Exercise

• Look at the proposed indicators for one outcome objective and one process objective

• For each of the indicators, consider whether it is:
  • Valid
  • Reliable
  • Accessible

• Make notes of your analysis

Process objective:
To make 25 presentations to community members of all ages about diabetes and the value of traditional foods in prevention and treatment.

Indicator:
Number of people in attendance at each community presentation as recorded by meeting organizers.
**Outcome objective:**
That at least one traditional food is available every day to all community members through daycares, schools, homes and events by end of the year.

**Indicator:**
Percentage of daycare directors that claim to be offering at least one traditional food (from a list provided to them) to the children in their daycare, each day, when contacted for a brief telephone survey.

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**Sources of indicators**

- Canadian Council on Social Development
- Federation of Canadian Municipalities quality of life reporting system
- Health Canada website
- U.S. Healthy people 2020 local health indicators
- Clearinghouses and other repositories for indicators can help with this step. Some examples of these include:
  - Canadian Institute for Health Information (CIHI)
  - Association of Public Health Epidemiologists in Ontario
Methods and procedures: **when** will you collect the data?

Before, during, after the intervention?

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Methods and procedures: **how** will you collect the data?

- Four main data collection methods:
  1. Talking to people
  2. Getting written responses
  3. Reviewing existing data or documentation
  4. Observing and tracking

- What are you already capturing?

- Pilot testing?
Quantitative and qualitative evaluation methods

“Not everything that can be counted counts, and not everything that counts can be counted.”
Albert Einstein

Methods and procedures: **who** will you collect data from?

Will you have a comparison group?
The following ethical issues should be considered:

- Informed consent
  - Purpose/goal/objectives of the evaluation
  - Evaluation method
  - Potential risks
  - Potential benefits

- Anonymity, confidentiality and security of data

- How the participants will be informed of the results

Methods and procedures: who will use the data?

- Who needs to be persuaded?
  - This will influence the types of measurements you use
Components of an evaluation plan

<table>
<thead>
<tr>
<th>Evaluation question</th>
<th>Objective (refer to logic model)</th>
<th>Indicator (refer to logic model)</th>
<th>Method of data collection</th>
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<tr>
<td>What do you want to know about the program?</td>
<td>What did the program set out to do?</td>
<td>What will demonstrate success?</td>
<td>What tools will you use to collect the information you need?</td>
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Step 6: develop work plan, budget and timeline

- Identify specific tasks, roles, resource allocations and deadlines for the evaluation
- In-house versus out-source?
Step 7: collect data

- Pilot test tools and procedures
- Revise
- Train
- Collect data

What’s wrong with this questionnaire?

- At your table, review the questionnaire and discuss whether you feel there are flaws in the questions
- Make notes about your conclusions
Types of errors to look for:

- Leading questions (therefore bias)
- Incorrect order (creating resistance or bias)
- Intrusive questions that may generate hostility
- Lingo and complicated words/phrases
- Double-barreled questions
- Changing response categories (order of the terms)

Step 8: process data and analyze the results

- Double-check at least 10% of data
- Put data in a format that can be summarized and interpreted
- Identify themes in qualitative data
- Enlist the support of a data analysis expert whenever possible
Step 9: interpret and disseminate the results

- Work with stakeholders to make sense of findings
- Draw conclusions based on the findings. What are the answers to your evaluation questions?
- Make recommendations on actions that should result from the evaluation
- Share results in formats that are tailored to specific audience needs/preferences

Step 10: take action

- Involve your stakeholders
- Use the answers to your evaluation questions:
  - Try something different?
  - Keep doing something that worked well?
  - Improve program?
  - Replace program?
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PHO evaluation resources

- At a glance: ten steps to evaluating health promotion programs
- Evaluating health promotion programs workbook
- Health communication outcomes. At the heart of good objectives and indicators
- Online Health Program Planner

Resources are available in both English and French
Other recommended evaluation resources

• Making evaluations matter: a practical guide for evaluators\textsuperscript{13}
• W.K. Kellogg Foundation evaluation handbook\textsuperscript{14}
• Introduction to program evaluation for public health programs\textsuperscript{15}
• Developing an effective evaluation plan\textsuperscript{16}

Health promotion capacity building services

• Free to those working on Ontario-focused projects

  • Service request form:
    • http://www.oahpp.ca/services/hpcdrip-consultation-services.html
Health promotion capacity building services

• Scope varies, depending on need:
  • Brief, one-time advice
  • Links to other sources of information and resources
  • Review your work or product
  • Consultations
  • Training sessions/workshops

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References


References (continued)


References (continued)


16. Developing an Effective Evaluation Plan. 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.