teip your program in the best direction

TOWARDS EVIDENCE-INFORMED PRACTICE

Setting the standard for health promotion excellence!

Program Evaluation Tool

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 *= see Tips section for more information*

 *= see Resources section for more information*

Overview

The TEIP Program Evaluation Tool provides user-friendly guidelines for local program evaluation. The Tool is designed to help practitioners develop **realistic evaluation plans** that include both **process and outcome measures**.

This document does not pretend to cover all aspects of program evaluation - a field of study requiring many years to master. Rather, it focuses on the more practical and pragmatic aspects of program evaluation.

The evaluation process is divided into 9 steps with accompanying guidelines and worksheets. In addition, the **Evaluation 101 Section** reviews key evaluation concepts for those who are new to evaluation or could benefit from a brief refresher. Further guidance is available in the **Tips & Resources Section**.

Development of the TEIP Program Evaluation Tool

Despite the availability of numerous excellent evaluation resources, lack of confidence, skills, and supports for program evaluation is a perennial concern among health promoters in Canada.

In 2006-07 TEIP hired Dr. Brian Rush, of Virgo Evaluation Planning and Consultation to provide intensive evaluation education and support to the original TEIP Pilot communities. Dr. Rush's approach emphasizes the development of a healthy organizational culture for evaluation and uses a participatory approach to involve program stakeholders in evaluation planning.

This Tool is the result of applying Dr. Rush's approach to building local evaluation capacity.

Guiding Principles Informing Tool Development

- Program evaluation is strengthened by participatory evaluation processes which:
    - Involve stakeholders throughout the evaluation process
    - Increase usefulness of evaluation results
    - Increase organizational evaluation capacity
- Evaluation plans must fit local evaluation capacity and resources.
- One must be selective and strategic in deciding what to evaluate. Identification of priority evaluation questions to demonstrate program impact and inform program decision-making is key.
- Not everything that can be counted counts and not everything that counts can be counted - *Albert Einstein.*

Program Evaluation Tool

Steps, Worksheets and Outcomes

The ***TEIP Program Evaluation Tool*** uses the analogy of building a house to illustrate 5 stages in planning and implementing a program evaluation.

Steps	Worksheets	Outcomes
Lay the Ground Work **1.** Select Evaluation Team **2.** Assess Organizational Capacity & Resources	Evaluation Team Worksheet Evaluation Resources Worksheet	▪ Evaluation team established ▪ Available resources identified ▪ Realistic timetable developed ▪ Vision of healthy evaluation culture created
Lay the Foundation **3.** Develop Program Logic Model **4.** Define Evaluation Questions	Program Logic Model Template Evaluation Questions Worksheet	▪ Program activities and objectives defined ▪ Relevant & useful evaluation questions prioritized ▪ Link between PLM and evaluation understood
Build the Frame **5.** Build Evaluation Framework **6.** Document Evaluation Plan	Evaluation Framework Template Evaluation Plan Template	▪ Indicators identified ▪ Evaluation design developed ▪ Data collection methods & tools created ▪ Data analysis methods established ▪ Realistic & credible evaluation plan
Complete the Interior **7.** Collect & Analyze Data **8.** Document Evaluation Report	Evaluation Report Template	▪ Ethical issues considered ▪ Timely data collection & analysis ▪ Key learnings & recommendations identified ▪ Evaluation results reported
Hold Open House **9.** Disseminate Findings & Modify Program	Dissemination Plan Template Action Plan Template	▪ Audiences identified & information tailored to audience preferences ▪ Stakeholder feedback shapes final evaluation recommendations

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Lay the Ground Work

Step 1: Select Evaluation Team

Laying the groundwork for a successful evaluation involves selecting an effective evaluation team and determining your organization's capacity and resources for evaluation.

A typical evaluation team consists of 3-5 people who are connected to the program and/or have evaluation expertise. A dynamic, multi-disciplinary team supports capacity building and creates stakeholder buy-in from the outset.

Additional Guidelines

Evaluation 101

Evaluation 101 - Step 1 provides further guidance on:

- *Skills & Experience of Evaluation Specialists*
- *Potential Evaluation Team Members & Roles*
- *Suggested Work Plan for Evaluation Team Meetings*

Guidelines: Select Evaluation Team

1. **Complete *Evaluation Team Worksheet.***
   - Ask program staff for suggestions or complete the worksheet together.
   - Seek advice from colleagues within your organization or outside networks.
2. **Develop a one page summary for potential evaluation team members describing:**
   - Program to be evaluated
   - Purpose and overall timeline for the evaluation
   - Time commitment
   - Roles and responsibilities of the evaluation team
   - Benefits of being a member of the evaluation team
3. **Develop a draft work plan and schedule for team meetings**
   - See *Evaluation 101 - Step 1 Suggested Work Plan for Team Meetings*
   - Seek input from evaluation team members.

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Evaluation Team Worksheet

People Connected to the Program			
Inclusion criteria:	**Name(s) & Contact Information**	**Date Contacted**	**Outcome** *(Yes / No / Contact for feedback only)*
▪ Represents intended audience, especially members of traditionally underrepresented groups ▪ Impacted by evaluation results ▪ Can support implementation of evaluation into practice? ▪ Involved in program implementation ▪ Contributes financial / technical resources to program ▪ Has experience with similar programs ▪ Interested in evaluation results ▪ Champion/specialist in the program field or intended audience ▪ Researcher whose research interest is related to program			
People with Evaluation Expertise			
▪ Experience developing logic models & evaluation questions ▪ Experience conducting an evaluation ▪ Expert knowledge of evaluation concepts *(i.e. evaluation design, data collection methods, data collection tools, analysis methods)* ▪ Experience developing data collection tools & evaluation plans ▪ Graduate student needing to complete a practicum			

Step 2: Assess Organizational Capacity & Resources for Evaluation

Realistic evaluation plans are developed within the constraints of local evaluation capacity, expertise and resources *(e.g. time, funds, in-kind support from partners and stakeholders[1])*

Organizational Capacity

Moving towards a healthy evaluation culture and developing a shared understanding of evaluation builds local evaluation capacity.

Developing a Culture of Evaluation

A healthy culture of evaluation:

- Develops organizational capacity and confidence in conducting evaluation
- Promotes enthusiasm for evaluation within the organization
- Integrates evaluation into the program planning cycle
- Involves all interested stakeholders
- Addresses important issues
- Ensures evaluation results are reported and actions taken

The ***Evaluation Thermometer Activity*** (see *Evaluation 101 – Step 2*) can be used to:

- Gauge where people are in terms of evaluation practice
- Identify internal evaluation champions who can support the evaluation process
- Build support within a newly formed evaluation team *(i.e. icebreaker activity)*.

Developing a Common Understanding of Evaluation

Lack of confidence in evaluation is a major barrier to a healthy evaluation culture. Those who are uncomfortable with evaluation may resist it or avoid involvement.

Be Realistic! A successful evaluation is one that yields information relevant to decision-making while staying within your organization's constraints of skills, time and resources.

- Keep it simple
- Keep it meaningful
- Ensure your evaluation plan is sound by having it reviewed by someone with evaluation expertise

[1] TCHU (2007). Ten Steps to Evaluating a Health Promotion Program. www.thcu.ca/resource_db/pubs/540532184.pdf

Additional Guidelines

Evaluation 101

Evaluation 101 - Step 2 provides further guidance on:

- *Evaluation Thermometer and Activity Guidelines*
- *Understanding Common Types of Program Evaluations*

Over time, you can gradually build up your organization's evaluation capacity!

Guidelines: Determine Evaluation Resources

1. **Work with Evaluation Team to develop a realistic evaluation budget.**
   - Record all resources (financial or in-kind) available to fund the evaluation using ***Part One: Evaluation Budget*** of the ***Evaluation Resources Worksheet***
2. **Develop a realistic timeline.**
   - Complete ***Part Two: Timeline & Human Resources*** of the ***Evaluation Resources Worksheet***
   - Set reasonable deadlines for each evaluation step in order to meet the final evaluation completion deadline
3. **Determine whether evaluation skills are available in-house or must be outsourced.**
   - See ***Part Two: Timeline & Human Resources*** of the ***Evaluation Resources Worksheet***
   - Consider no-cost or low-cost sources of evaluation expertise *(e.g. contributions from community partners, health promotion resource centres and/or academic researchers).*
   - Consider how much consultation time you can afford.
   - Reflect on which evaluation step requires extra expertise and consider outsourcing this step instead of outsourcing the entire evaluation process.
   - Look for internal champions who have evaluation skills. See ***Evaluation Team Worksheet.***
4. **Review evaluation plans** *(i.e. timeline and deliverables)*:
   - If your evaluation plans are too ambitions for the resources available, it may be necessary to simplify your plans or search for additional resources.

Do not overestimate the availability of staff time.

Staff may require temporary relief from some of their duties to devote time to the evaluation.

NOTE: *= potential steps to outsource*

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Evaluation Resources Worksheet

Program Name: **Date:**

Part One: Evaluation Budget

Source *(e.g. organization providing the resource)*	**Funds ($)**	**In-kind** *(e.g. printing, evaluation software, data entry, etc.)*
Community Partner	*$2000*	*Staff will facilitate the focus group*

Part Two: Timeline & Human Resources

Evaluation Deliverables *(Outputs & Skills)*	**Timeline**	**In-house**		**Outsource**	
		Person(s)	**Days**	**Person(s)**	**Days**
Program logic model					
Evaluation questions					
Evaluation indicators					
Evaluation framework *(Data collection tools and methods of analysis)*					
Evaluation plan					
Oversee evaluation plan implementation					
Collect data					
Data entry					
Analyze and interpret data					
Write evaluation report					
Disseminate evaluation findings					
Other:					

Lay the Foundation

Step 3: Develop Program Logic Model

An important pre-requisite to evaluation planning is the development a program logic model (PLM) in collaboration with key stakeholders. The PLM is a diagram that breaks down the program into its component parts and illustrates the logical and sequential links between program activities and the anticipated short and longer-term outcomes.[2]

Note: A program logic model is a snapshot of the program at one moment in time and should be periodically revisited as the program is revised or updated.

Role of the PLM in Program Evaluation:

Program evaluation aims to measure whether a program has met its objectives and to understand any contributing factors. The program objectives, as set out in the PLM, are a useful place to begin planning a program evaluation.

If a program lacks clearly stated objectives, or if the objectives are not in line with program activities, then it is difficult to conduct a meaningful program evaluation.

If a PLM Already Exists:

Consider the quality of the PLM and whether it needs to be updated. An effective and up-to-date PLM creates a solid foundation for evaluation planning. Update the PLM when:

- Important components of the program are missing from the PLM
- Program goals have significantly changed since the PLM was developed

Additional Guidelines

Evaluation 101

Evaluation 101 - Step 3 provides further guidance on:

- *Basic Elements of a Program Logic Model*
- *Characteristics of a Good Program Logic Model (includes an example of a Program Logic Model and SMART Outcome Objectives)*
- *Limitations of a Program Logic Model*

[2] OPHA Core Competencies Preliminary Long-Term Strategy Project Advisory Committee. (2005) Ontario Public Health Association Core Competencies Project.

Guidelines: Develop Program Logic Model

1. **Schedule a half or full-day meeting with the evaluation team and other program stakeholders to develop a first draft of the program logic model (PLM).**
    - Ensure everyone understands the purpose and the basics of PLM development.
2. **Write the basic elements of the PLM onto large Post-it notes**.
    - Use separate Post-its for each program Activity and each Intended Audience.
    - Use separate Post-its for each anticipated Short-term, Intermediate and Long-term Outcome Objective(s).
3. **Identify connections between all of the program elements.**
    - As a team, move the elements *(Post-its)* around until it seems to 'work'. You'll know when it does because your collective vision for the program will emerge.
    - There are different ways to categorize the elements and to identify the connections:

      Top-Down Approach *(Frontline practitioners often prefer this approach)***:**
        - Spread out the *Intended Audience* Post-its in one line at the top and place related *Activities* Post-its directly below.
        - Place each *Short-term Outcome Objectives* Post-it below its related Activity. Think about which activity and outcome completes the phrase "*If we do ...., then we will achieve...*" For example, *"if we distribute promotional material, then we will achieve increased awareness amongst the intended audience."*
        - Place each *Intermediate Outcome Objectives* Post-it below its related Short-term Outcome and each Long-term Outcome Objectives Post-it below its related Intermediate Outcome.
        - Consider whether related Activities can be grouped into broader categories *(e.g. skill building, social supports)*. Write these on Post-its and place them one line above its related Activities. These categories become the program *Components*.

      Bottom-Up Approach *(Managers often prefer this approach)***:**
        - Proceed as above, but in the opposite direction, beginning at the bottom with long-term outcome objectives and working your way up.

Hint: Add additional boxes and arrows as needed to the template below to create your own PLM.

4. **Document the Post-it PLM onto the *Program Logic Model Template*.**
5. **Seek feedback from stakeholders to ensure accuracy, clarity, and completeness.**
6. **Use the PLM as a basis for developing evaluation questions** (*Step 4*)

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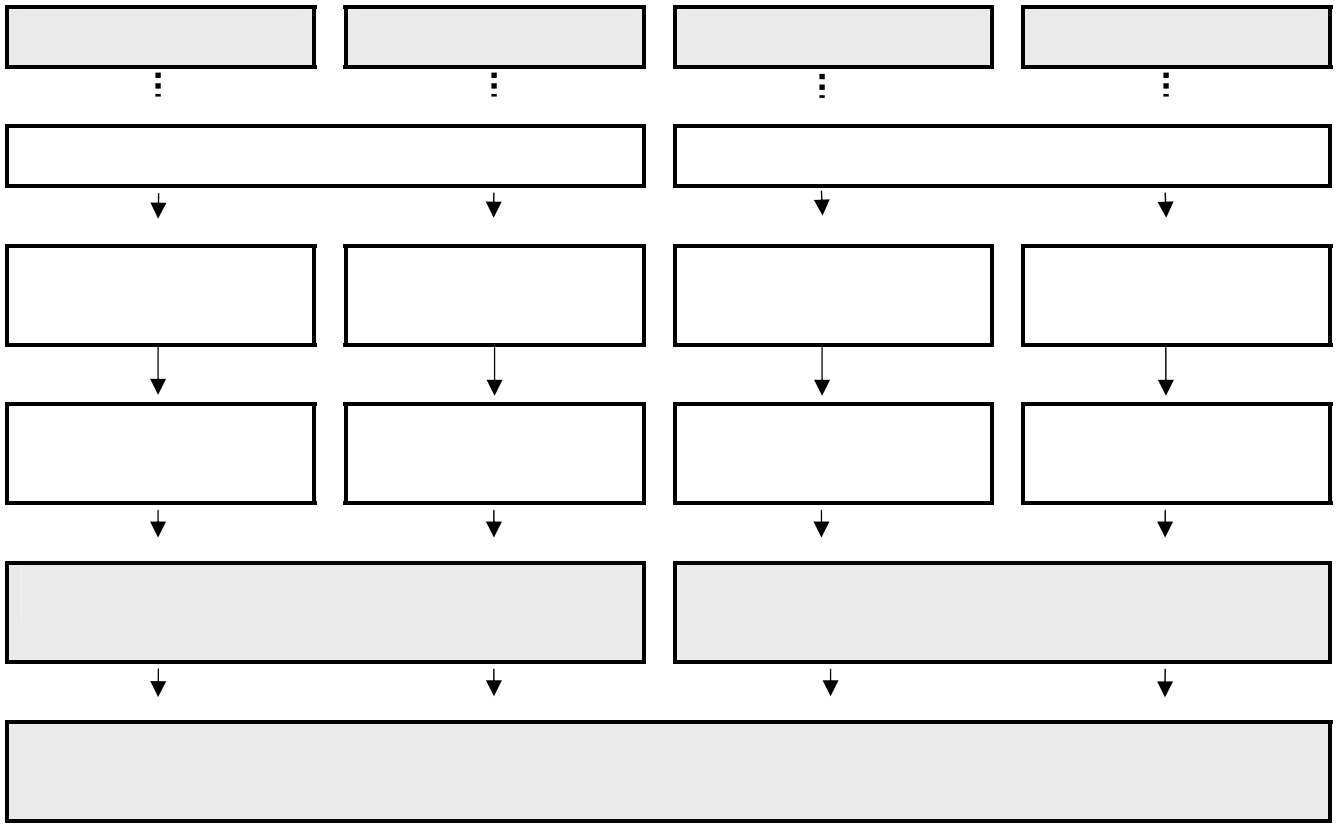
Program Logic Model Template

Program Logic Model for: **Date Revised:**



Step 4: Define Evaluation Questions

Good evaluation questions can focus the evaluation process and are the basis of a successful evaluation. Participatory development of evaluation questions results in more relevant questions and increases the likelihood that evaluation results will be acted upon.

Evaluation questions link to program objectives in the Logic Model and are of interest and relevance to program stakeholders. Consider as well local internal and external contextual factors that can impact the program and its outcomes *(e.g. political climate, existing programs with a focus on the same issues)*.

Important: Participatory development of evaluation questions results in more relevant questions and increases the likelihood that the evaluation results will be acted upon

Characteristics of Good Evaluation Questions

- Include both process and outcome questions
- Relate to both Process and Outcomes Objectives from the Program Logic Model (PLM)
- Address both quantitative and qualitative issues
- Are **SMART**:

  Specific – Asks about one issue or topic

  Measurable – Possible to obtain the data to answer the question

  Actionable – Information gathered will be used to make decisions about the program

  Relevant – Information is needed to increase program effectiveness and efficiency *(not just answer a question that would be nice to know)*

  Timely – Information is needed now to guide decision-making

Additional Guidelines

Evaluation 101

Evaluation 101 - Step 4 provides further guidance on:

- *Process vs. Outcome Evaluation Questions*
- *SMART Evaluation Questions (includes an example of SMART questions)*

Guidelines: Define Evaluation Questions

1. **Use a participatory approach**

   A participatory approach results in more relevant evaluation questions and increases the likelihood that evaluation results will be acted on.

   - Involve stakeholders in brainstorming potential evaluation questions.
   - Ensure all participants have a say and are familiar with the Program Logic Model (PLM) and the relevant external context (*See #4 below).*
   - In the absence of direct stakeholder input, document the information you think they would need to know.

2. **Complete the *Evaluation Questions Worksheet***

   a. **Document draft evaluation questions**
      - Classify evaluation questions as Process or Outcome
      - Develop SMART evaluation questions. *(See Evaluation 101 - Step 4 for examples.)*
      - Develop both qualitative and quantitative evaluation questions
      - Return to the PLM to consider if you have missed anything important

   b. **For each evaluation question, document the Link to the Program Logic Model.**
      - Process Evaluation Questions - indicate which *Intended Audience* or *Activity* the question is related to.
      - Outcome Evaluation Questions - indicate which *Short-term, Intermediate or Long-term Outcome Objective* the question is related to.

   c. **Document important E*xternal Contextual Factors* related to the evaluation question that may impact the results** *(e.g. political climate, existing programs)*.

   d. **Determine potential uses of evaluation results.**
      - For each evaluation question, discuss and record: *"How will the information gathered to answer this question be used?"*
      - **Remember** - the goal of evaluation is to improve outcomes and inform programming decisions. Don't collect information that will not be used.

The evaluation questions drafted in this step help to focus your evaluation process *(e.g. Was the program effective in increasing physical activity?)*. They are **NOT** the same as the questions developed for data collection tools to collect information *(e.g. How many minutes are you physically active a day?)*.

e. Select priority questions.

Due to limited time and resources, one cannot usually answer all evaluation questions. Some questions can be investigated at a later time.

- Assign priority levels of ***"High", "Medium",* or *"Low"*** based on the following:
  - Give higher priority to questions addressing local reporting requirements and/or standards *(e.g. Funder concerns, Public Health Standards)*
  - Consider stakeholder priorities. What questions may have the greatest impact in their decision-making.
  - Assign SMART evaluation questions a higher priority.
  - Include both process and outcome evaluation questions.

Important: It is not possible to evaluate everything.

Prioritize evaluation questions and select those which are most relevant, realistic and useful for guiding decision-making.

3. Roll-up detailed questions into a smaller number of questions by grouping and synthesizing related questions.

- Detailed evaluation questions can become questions asked on a survey or interview guide.
- Rolled-up evaluation questions express the broader issues the evaluation aims to understand about the program and its impact. E.g.:

Detailed Questions *(Many of the detailed evaluation questions can be later used in developing questions for the evaluation tools)*	**Rolled-up Question** *(The big picture the evaluation aims to answer)*
Did the flyer go out? Did the workshop get done? Were the workshop facilitators sufficiently trained? Did the workshop cover all of the materials? Was the flyer handed out at all of the promotional sites?	Was the program implemented as intended?
Were the promotional items written at an appropriate reading level for the intended audience? Was the promotional method effective at reaching the intended audience? What were the characteristics of the audience reached? How many individuals did our program reach?	Did we reach the audience as intended?

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Evaluation Questions Worksheet

Process Evaluation Questions

Key Stakeholders	Draft Evaluation Questions *(From each stakeholder's perspective "What do they want to know?")*	Link to Program Logic Model	External Contextual Factors	Potential Uses of Evaluation Results:	Priority *(High, Medium, or Low)*	Rolled-up Question
* *Communications Team*	*Were the flyers effective in recruiting participants? Did Health Professionals refer their patients to the program?*	*Activities/Process Objectives under the Promotion & Recruitment*	*Other smoking cessation programs available*	*Revise communication plan*	*High*	*How did the participants hear about the smoking cessation program?*

Outcome Evaluation Questions

Key Stakeholders	Draft Evaluation Questions *(From each stakeholder's perspective)*	Link to Program Logic Model	External Contextual Factors	Potential Uses of Evaluation Results:	Priority *(High, Medium, or Low)*	Rolled-up Question
* *Health Professionals*	*Is the smoking cessation program that patients are referred to successful in getting participants to stop smoking?*	*Short-term and Intermediate Outcome Objectives*	*Smoke-free by-laws Other related programs available*	*Improvements to program Advocate for future funding and referrals*	*High*	*NA*

* Evaluation questions for the Example Program Logic Model in *Evaluation 101-Step 3*

Build the Frame

Step 5: Build Evaluation Framework

After building the foundation of your evaluation it is time to build the ***Evaluation Framework*** and to document the ***Evaluation Plan***.

Evaluation Framework

The Evaluation Framework connects all of the elements needed to complete the Evaluation Plan, including Priority Evaluation Questions and External Contextual Factors *(from Step 4)* Indicators, Evaluation Design, Data Collection Methods & Tools and Methods of Data Analysis.

This is the most technically challenging of all the Steps. Don't despair if you must review this section several times before it begins to makes sense.

Important: Don't be intimidated by terms like "*data collection methods*" or "*evaluation framework*".

Learning evaluation is like learning a new language. Once you understand the vocabulary, it starts to makes sense.

1. Indicators

***What* will be measured?**

Indicators are used to measure the success of program activities. For example, an indicator of the success of an exercise program could be the change in the participants' body composition and/or muscle strength. The change indicates the degree to which program objectives have been met.

Indicators reflect three things[3]**:**

a. What is considered effective
b. What is considered a success
c. What change is expected

[3] Heart Health Resource Centre (2000). Evaluating Heart Health Projects—Objectives and Indicators: Workshop Manual.

To give breath and depth to what your evaluation will be measuring, it is important to include a balance of **quantitative** *(numbers)* and **qualitative** indicators *(text/descriptions)*.

Quantitative indicators provide breath of information ***(quantity)*** and are captured using numbers *(i.e. #of cigarettes smoked per day)*. Qualitative indicators give you more depth of information ***(quality)*** and are captured by descriptive information *(i.e. description of people's barriers to quitting smoking)*.

When relevant, use qualitative indicators to complement the quantitative indicators measured. For example, one of your quantitative indicators could be the % of participants who quit smoking. To have a deeper understanding of your program's impact, you can include the description of participants' motivation to quit or not quit smoking as the qualitative indicator. This qualitative indicator will provide you with information that you can use to strengthen your program and have a greater impact.

An Evaluation Consultant can help to identify realistic and appropriate indicators.

2. Evaluation Design

***When* will the data be collected?**

Examples of common evaluation designs include:

Feedback only

Participants provide feedback on changes made at the completion of a program. Information can be collected using a post program or workshop survey

Data is collected only once after the program/workshop.

Pre-test/post-test

Provides a more accurate assessment of changes resulting from the program - A brief questionnaire (pre-test) is administered as part of the program registration process and then repeated upon program completion (post test)

Data is collected at two separate intervals, before and after the workshop or program.

Pre-test/post-test with 6-month follow-up

Provides an assessment of the program's impact on the intended audience over time

Data is collected at three separate intervals, before, right after and 6-months after the workshop/program.

NOTE: The evaluation question and indicator influence the choice of evaluation design.

For example, if your evaluation question asks *"how did participants hear about the peer nutrition program"*, a ***feedback only*** evaluation design can be selected.

If % body fat lost is an indicator of a healthy weight program then a ***pre-test/post-test*** evaluation design can be selected.

Evaluation Question	Evaluation Design
How did participants hear about the peer nutrition program?	Feedback only
How effective is the healthy weight program? *(Indicator = % loss body fat)*	Pre-test / post-test

3. Data Collection Methods & Tools

How will the data be collected?

Examples of common data collection methods include:

Observation - Activities of intended audience are observed, recorded and interpreted.

Focus Group - Facilitator elicits discussion among participants on specific issues.

Survey - Participants respond to a written series of questions.

Interview - Participants respond to questions delivered in conversation.

Document Review - The content of selected documents is analyzed and interpreted.

The ***data collection tool*** is the instrument used to gather the information to measure program evaluation indicators**. Remember:** When developing data collection tools, collect both quantitative data *(numbers)* and qualitative data *(text/descriptions)***.**

The evaluation design & data collection method determine the evaluation tools required.

Example: Connecting Evaluation Question to Data Collection Methods and Tools

Evaluation Question	Data Collection Method	Data Collection Tool
How appropriate was the program for a specific cultural group?	Focus group	Facilitator's guide topic list
Would past participants recommend the program to others?	Web-based survey	Survey questions
How do children participate in the activities?	Observation	Observation guide & Recording sheets

4. Methods of Data Analysis

What will be done with the collected data?

We recommend consulting an evaluation specialist or epidemiologist  if no one on your team has previous experience with data analysis or for more complex analyses.

The methods of data analysis differ for quantitative and qualitative data.

Quantitative data analysis

Two categories:

- **Inferential** analysis *(makes predictions - inferences - based on the findings)*
- **Descriptive** analysis *(describes the findings)*

Inferential analysis

It is more complex.

It looks at the data collected from evaluation participants and makes predictions for the broader intended audience. It can also be used to answer cause-and-effect questions.

Odds ratios is one of the most common types of inferential analysis

Odds ratios describe the likelihood that a specific group will have a specific characteristic in comparison to an alternate group. For example, answering the question *"Will communities who receive the "Turn on the Tap" campaign likely drink less bottled water than those who do not receive the campaign?"*

Descriptive analysis

Common types of descriptive analysis are described in the table on the next page.

Please see *Step 5 – Resources Section* for more guidance on inferential analysis and other types of descriptive analysis.

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Type of descriptive analysis[4]	When to use it[4]	Example
Frequencies *(numerical counts)* Describes how many times something occurred	o To calculate the **number** of participants/groups who: • Changed their behaviour, knowledge, motivation and/or skills • Were satisfied with the program/policy • Have a particular characteristics *(e.g. gender)* o When # **of responses** is small *(e.g. < 20)* presenting the data as a % could be misleading. *(E.g. stating that 60% of participants quit smoking and # of participants was 10. Thus 6 people quit and 6 people did not - a difference of 2 only people).*	7 out of 10 new mothers stated they feel confident in their ability to breastfeed their newborn
Percentages Describes information as part of a whole	o To calculate the **proportion** of participants/groups who: • Changed their behaviour, knowledge, motivation and/or skills • Were satisfied with the program/policy • Have a particular characteristics *(e.g. gender)* o When # **of responses** is **large** *(e.g. > 20)* presenting data as a % is easier to understand. *(E.g. Instead of reporting that 273 of 455 participants quit smoking, report that 60% of participants quit.)* o To **describe** relationships and **compares** results. *(E.g. 83% of workshop participants quit smoking, while 23% of the participants on the workshop waiting list quit smoking.* o To show the **distribution** of participants or to classify participants into categories. *(E.g. 25% of participants always smoke inside their home, 30% sometimes smoke and 45% of participants never smoke inside their home.)*	72% of participants buy food from their local farmers

[4] Taylor-Powell, E. (1996). Analyzing Quantitative Data. University of Wisconsin Extension Program, Development and Evaluation Unit. learningstore.uwex.edu/pdf/G3658-6.pdf

Type of descriptive analysis[4]	When to use it[4]	Example
Average *(Mean)*	o To describe the central characteristic of the participants/groups. I.e.: • Number of cigarettes/day • Duration of breastfeeding • Percentage of businesses that have a bottle water policy/municipality • Duration of physical activity opportunities per week in schools/school board o To summarize findings from rating scales. *(E.g. workshop participants, on average, rated the usefulness of workshop content as 4.2 on a 1-5 point scale.)*	On average students from the schools that implemented the physical activity program were physically active 45 mins/day
Most Common Value *(Mode)*	o To describe the most common characteristic of the participants/groups o To describe the most common rating from a rating scale. *(E.g. the most common rating given by participants on the usefulness of the workshop content was a 4.0)* o When working with a large # of responses o When the presence of outliers *(extreme values)* in the data makes calculating the average misleading. *(E.g. If 4 participants state their # of cigarettes smoked/day was 2, 3, 5 and 34; the average would be 11 cigarettes/day. The outlier, 34 cigarettes/day, made the average higher than a majority of the responses.)*	The typical family annual income of those families that accessed the food basket program was $20,000.
Range Describes the spread/variation of the data	o To describe the highest and lowest characteristic of the participants/groups and/or rates on a rating scale. o To provide a better understanding of the results when there is a variety of responses/characteristics and/or outliers *(extreme values)*. o To give more meaning (depth) to the average/most common value calculated. *Are all participants/groups similar to the mean? Are there any extreme cases/responses?*	After implementing a workplace physical activity program, employee absenteeism decreased by 1.15 to 4.56 days

Qualitative Analysis

Content analysis[5]

The most common method of qualitative data analysis

Content analysis is like putting together a jigsaw puzzle. First you group the pieces of the puzzle into categories *(e.g. edges of the puzzle, pieces that are part of a similar image)*. You then put all of the categories together to reveal the complete image.

Similarly, in a content analysis you examine the data to identify common themes and patterns *(i.e. group the data into categories)*. Then, reflecting on all of the categories, you put the "pieces" together and reveal the "story" that the data is telling.

Narrative analysis[6]

Useful when looking at qualitative data collected through the interview collection method *(e.g. a participant tells a detailed story of how the program has impacted their life and someone summarizes this story.)*

Highlights contextual factors that may be different for each participant

Additional Guidelines

Evaluation 101

Evaluation 101 - Step 5 provides further guidance on:

- *Selecting a Data Collection Method*
- *Data Collection Methods & Tools*
- *Sample Data Collection Tool from TEIP Community*

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An Important Distinction: What is the difference between research and program evaluation?

Research aims to discover 'universal truths' that can be applied beyond the confines of the research study. Research methods and tools are designed for this purpose.

Program Evaluation aims to discover 'local truths' in order to influence local decisions.

[5] My Environmental Education Evaluation Resource Assistant (2008). Step 6: Analyze Data. meera.snre.umich.edu/plan-an-evaluation/plonearticlemultipage.2007-10-30.4643560864/step-6-analyze-data

[6] Ratcliff, D (n.d). 15 Methods of Data Analysis in Qualitative Research. qualitativeresearch.ratcliffs.net/15methods.pdf

Guidelines: Build Evaluation Framework

1. **List *Priority Evaluation Questions & External Contextual Factors*** (*Step 4 - Chart A & B*)
2. **Select realistic and relevant *Indicators* for each evaluation question.**
   What will be measured?
   - Good indicators are relevant, easy to measure and reflect program outcomes.
   - Select both **qualitative** and **quantitative** indicators for each evaluation question.
   - Consult colleagues, evaluation specialists, an epidemiologist and/or the literature.
   - Consider the appropriate level of indicator. Do you intend to measure individual *(e.g. aboriginals)*, organizational *(e.g. workplace)*, community *(e.g. low-income neighbourhoods)*, or system-level *(e.g. provincial)* change.
3. **Identify *Evaluation Design.***
   When will the data be collected?
   - For each set of evaluation questions and indicators consider the most appropriate evaluation design.
4. **Identify *Data Collection Methods & Tools.***
   How will the data be collected?
   - Document the Data Collection Method and Data Collection Tool to be used.

   a. Use and/or adapt existing tools, where possible.
      - Document who you contacted and what data collection tools they will share.
      - Ask colleagues and search the internet for existing data collection tools. Document what you found and where you found it.
      - Document where tools are stored *(i.e. hyperlink, where the paper documents are stored or/and where the electronic document is saved)*
      - If you create your own tool, pilot-test it to assess its quality and sensitivity with a focus group.
        - Test for **validity** *(i.e. the tool measures what you want it to measure)*
        - Test for **clarity** *(i.e. it is easily understood by the intended audience)*
        - Test for **reliability** *(i.e. how consistently the variable can be measured and give the same data each time)*
5. **Identify *Methods of Data Analysis.***
   What will be done with the collected data? Now what?
   - For each evaluation question and indicator, consider what method of data analysis can summarize the information collected and help to answer the question.
   - Document the methods of data analysis that will be used for both qualitative and quantitative data for each evaluation question and for each indicator if it differs.

Evaluation Framework Template

Evaluation Framework for: (Insert Program Name)

Priority Evaluation Question(s) *(From Step 4)*	**External Contextual Factors** *(From Step 4)*	**Indicator(s)** **What will be measured?**	**Evaluation Design** **When will the data be collected?**	**Data Collection Methods & Tools** **How will the data be collected?**	**Methods of Data Analysis** **What will be done with the collected data?**
* *Is the smoking cessation program successful in getting participants to stop smoking?*	*Smoke-free by-laws* *Availability of other smoking cessation programs*	***Quantitative:*** *% who no longer smoke within 30 minutes of waking* *Reduction in # of cigs/day* ***Qualitative:*** *Description of strategies people use to quit smoking and stay smoke free*	*Directly before and after program implementation and 6-months after program implementation* *(Pre/post-test with 6 months follow-up)*	*Pre-survey during registration and post-program survey* ***TOOLS**: pre/post questionnaire* *6-months after post program survey* ***TOOLS:** follow-up questionnaire.* ***SURVEY METHOD** (e.g. mail-out or web-based) will be decided based on capacity and participant characteristics.*	***Quantitative descriptive analysis** (e.g. mean, percentages and range) using Microsoft Excel* ***Content analysis** of qualitative data*

* Evaluation questions for the Example Program Logic Model in *Evaluation 101-Step 3*

Step 6: Document the Evaluation Plan

The **Evaluation Plan** summarizes how the components of the evaluation framework will be completed within the given limitations of time, budget, expertise, and other resources.

Note: A detailed Evaluation Framework can substitute for writing an evaluation plan IF you are undertaking a very simple evaluation.

The evaluation plan acts as a personalized blueprint to keep your evaluation on course. It will become an excellent source of program documentation and may be an asset when corresponding with funding organizations.

Address each point in the ***Evaluation Plan Template*** to document your evaluation plan. Provide enough detail to inform reviewers who may be unfamiliar with your program and/or context.

Be as concise as possible to encourage broad readership.

Guidelines: Document the Evaluation Plan

1. **Select someone familiar with the program to write the Evaluation Plan.**
2. **Interpret the meaning of each heading in the *Evaluation Plan Template***
   - Use the questions under each heading of the *Evaluation Plan Template* as a guideline on what to include in that particular section.
3. **Seek assistance from other members of your evaluation team**
   - Your evaluation team, as well as representatives from your stakeholders may have pertinent information to contribute.
4. **Write your response under each heading of the *Evaluation Plan Template***
   - Identify the key elements to include in your response
   - Include data to support your answers where available
   - Ensure that your responses are comprehensive, yet concise
5. **Collect and attach supporting documentation for each response**
   - Attach copies of your program logic model, data collection tools, and Evaluation Framework.

Note: Writing an Evaluation Plan may take longer than expected

- A first-timer completing the *Evaluation Plan Template* may require 1-2 days to complete the work. Experience shortens the time considerably.
- The more complete and organized the program documentation, the easier it is to complete the evaluation.

Evaluation Plan Template

Name of Program:

Community/ Organization:

Plan prepared by:

Name:

Email:

Tel #:

Date:

Directions: Please provide approximately 1/2 page of information for all the following questions

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Program Description

Program Summary

Write a concise description of your program such that a reader can quickly grasp the reason for the program, the intended audience, the objectives, the major activities, how the program is delivered, who is involved and any other important or distinctive features.

Rationale for Evaluation

Write a concise description of the perceived need for the evaluation and the anticipated use of findings. Describe rationale for usefulness of information from the ***Evaluation Questions Charts***. Provide a copy of the ***Developing Relevant and Useful Evaluation Questions Charts***.

Overall Evaluation Objectives

What questions are being answered by this evaluation? What indicators will be looked at to answer the priority evaluation questions? Include a copy of the ***Program Evaluation Framework***. Remember to write S**MART** objectives (please see *Evaluation 101 - Step 3* for examples).

Methodology

Data Collection Strategy

Describe what type of information will be collected. Describe the evaluation design, data collection methods and the data collection tools. Explain the rationale behind your data collection strategy. Provide a copy of all data collection tools.

Method of Data Analysis

Describe how the data you collect will be analysed and the rationale behind that method of analysis. Document who will conduct the data analysis. Your completed ***Evaluation Framework*** will be helpful in completing this section.

Limitations of the Evaluation

Describe any cautions you have about the potential findings or the results of the evaluation *(i.e. how to incorporate the findings? What they may mean for the program.).*

Available Resources

Human Resources Required

Please describe and/or list all human resources *(personnel)* involved in completing the program evaluation. Include all members of the evaluation team and outsourced evaluation specialists. Describe the areas in which each contributed to the evaluation and what resources each provided. The headings below can be used to organize the information. Your ***Evaluation Team Worksheets*** will be helpful in completing this section.

Suggested Table:

Staff Member Position / Stakeholder / Outsourced Specialists *(i.e. Evaluation consultant)*	**Role in Evaluation** *(e.g. planning, program logic model, evaluation questions, implementation, reporting)*	**Types of Resources Contributed** *(e.g. champions in evaluation)*
Epidemiologist	*Analysis of Data*	*Champion of data analysis and access to analysis software*
>>	>>	>>
>>	>>	>>

Financial Resources

Develop a budget for the evaluation. Describe how much funding is currently available, as well as all funds that may come available in the future for this evaluation project. List the financial resources required for the evaluation project, including outsourcing costs, fees for data collection and analysis programs that may be used *(i.e. survey monkey: online survey software)*. The *Evaluation Resources Worksheet* may be helpful in completing this section.

Evaluation Work Plan

The Evaluation Work Plan acts as a "to do list" for the entire evaluation process. It outlines, in a table format, the:

- Evaluation deliverables
- Activities required for meeting each deliverable
- Individuals responsible for completing each activity
- Resources needed and available for each activity
- Timeline to complete each activity

When determining the timeline:

- If data analysis is outsourced, include sufficient time to review and revise.
- Build in time to disseminate evaluation results to stakeholders. Refer to *Step 9: Disseminate Findings & Modify Program*.

Suggested Table:

Deliverables	Activities	Persons Responsible	Resources	Timeline
Collection of data	*- develop focus group topic list* *- identify and invite focus group participants* *- hold focus group*	*Evaluation Coordinator*	*- location to hold focus group* *- telephone charges to call participants* *- food for focus group*	*July 2009- September 2009*
>>	>>	>>	>>	>>
>>	>>	>>	>>	>>
>>	>>	>>	>>	>>

Complete the Interior

Step 7: Collect and Analyze Data

At this point you have built the frame of your evaluation by creating an evaluation framework and an evaluation plan. Now it is time to put the plan into action by collecting and analyzing the data, and documenting your evaluation results.

Collect the Data

Provide participants with all the information they need to make a voluntary and informed decision to participate in the evaluation. The information should be presented in a format that is easy to understand. Participants from whom you will collect data have the right to be informed of the following:

- Purpose of the evaluation
- How long the data collection activity is expected to take.
- Description of what the evaluation activity involves
- How the information collected will be stored and reported.

Confidentiality

A confidentiality agreement should be signed by all individuals having access to the raw evaluation data. It states that signatories agree to not share any information with anyone outside of the evaluation team.

Once data collection is completed, store the data in a secure location. Ensure that only those individuals who have signed a confidentiality agreement have access.

Analyze the Data

This most important rule for any type of analysis is to **keep the purpose of the evaluation and the evaluation questions in mind**.

Step-by-step instructions on how to perform a quantitative data analysis using Microsoft Excel and how to complete a qualitative data analysis are available in *Step 7 –Resources*.

Step 8: Document Evaluation Report

The **Evaluation Report** documents the entire evaluation and can be used internally or shared to communicate the findings to a broader audience. Creating an Evaluation Report is a major step towards increasing the availability of practice-based learning.

The most important sections of the Evaluation Report are the ***Key Learnings*** and ***Recommendations***.

Determine key learnings

Ask yourself the following questions to identify key learnings from the evaluation:

- What is the answer to the evaluation question based on the results?
- How did we meet the process objectives?
  - Were the program activities executed as planned?
  - Did the program "reach" match expectations?
- How did we meet the outcome objectives?
  - What is the progress towards achieving the desired changes?
- If the process and outcome objectives are being met, why?
- If the process and outcome objectives are not being met, why not?

Determine recommendations 

The recommendations section of the Evaluation Report is the most important section. It provides a list of suggestions for how to enhance your program's ability to meet its objectives based on the evaluation findings.

Looking at the discussion section of the evaluation report, reflect on how the program can be modified in order to meet its objectives. For example, if the program objectives were not realistic your recommendations may be to change these objectives.

Additional Guidelines

Evaluation 101

Evaluation 101 - Step 8 provides further guidance on:

- *How to write the Evaluation Report*
- *Evaluation Report Template*

Important: Most of the information for the Evaluation Report has already been documented in the Evaluation Plan. Simply cut and paste the appropriate sections.

Do not prepare an elaborate Evaluation Report for a very small evaluation. However, if an evaluation is worth doing, it is worth documenting to some degree.

Hold Open House

Step 9: Disseminate Findings & Modify Program

Once the evaluation is completed, it is time to share the results with key stakeholders and to use the results to modify your program.

Disseminating findings supports the creation of a culture of evaluation and promotes knowledge exchange among health promotion and prevention practitioners.

Disseminate findings to both internal and external stakeholders.

Internal stakeholders

Individuals/groups whose buy-in is essential to support and implement recommendations *(i.e. program staff, evaluation team, colleagues within your division, board members, intended audience, funding agencies and other community partners)*

External stakeholders

Individuals/groups who have a vested interest in or working on the same issue(s) as your program *(i.e. other public health organizations, non-governmental organizations, federal, provincial and/or municipal funding agencies and researchers)*

The dissemination of evaluation findings, both internally and externally increases practice-based learning.

Important:
Disseminating the findings and modifying the program are done simultaneously. In other words, you do not need to wait until you are finished disseminating the findings before you modify the program; it is done at the same time and the processes complement one another.

Practice-based learning

The facilitation of continuous improvement via program evaluation and related knowledge exchange activities. These processes facilitate decision-making, learning and continuous improvement in health promotion and prevention practices in Canada.[7]

[7] Centre for Behavioural Research and Program Evaluation (2008). Towards an Enabling System for Knowledge Development and Exchange: Planning to Support Evaluation and Practice-based Learning - Project Overview.

Key Points for Creating a Dissemination Plan:

- **Tailor your messages** 

  Effective dissemination of evaluation results requires messages that are tailored to each target audience. Thoughtfulness in developing tailored messages will increase the likelihood of stakeholder buy-in and support.

- **Obtain feedback from internal stakeholders**

  Feedback from internal stakeholders helps to prioritize which recommendations should be implemented and to identify any unrealistic or missing recommendations. Refer to their suggestions when developing the action plan to modify your program based.

- **Disseminate lessons gained from modifying your program**

  Through the process of modifying your program based on the evaluation results, you will gain insights into what worked, what did not work and the critical success factor. These insights are practice-based learning that can benefit stakeholders.

Guidelines: Develop Dissemination Plan

1. **Use the *Dissemination Plan Template***
2. **Together with the evaluation team, list the stakeholders you want to reach**
   - Refer to the stakeholders documented on the *Evaluation Questions Worksheets*.
3. **Document <u>what</u> information stakeholders may want to know and <u>why</u>**
   - Refer to evaluations questions documented on the *Evaluation Questions Worksheets*.
   - Consider what information could motivate them to support the program or what information they will need to make decisions.
   - Consider how they are impacted by the results of the evaluation
4. **Document <u>how</u> you think stakeholders would want to receive the information**
   - Consider the communication style the stakeholders are comfortable with or commonly use. Ask them how they would like to receive the information.
   - Consider the terminology that the stakeholders commonly use.
   - Take into account the type of information the stakeholders understand. For example, do they prefer statistics or do they prefer case studies.
5. **Document by <u>when</u> they would like to receive the information**
   - By what date will the stakeholders need to know the information for it to impact their decision-making. Refer to the *Evaluation Resources Worksheet*.
6. **Determine and document a <u>timeline</u> as to when you will present the evaluation results**
   - Consider opportunities that are currently available for reaching stakeholders. For example, is there an annual conference coming up?

7. **Assign different members of your team to develop dissemination materials**.
    - Think about team members' strengths and assign accordingly.
    - Consider who has a close relationship with the stakeholder or who the stakeholder would like to hear from. For example, you may want to assign a front line practitioner with disseminating information to the intended audience and a program manager or director with disseminating information to the funding agency.

Key Points for Creating an Action Plan

- ### Developing an Action Plan

  The overall goal of the evaluation process is to improve the strength and quality of your program. A thorough evaluation process is worthless unless it is used to modify or enhance your program objectives, and to make strategic decisions about the program.

- ### Putting results into action

  Review the results, recommendations and feedback from stakeholders documented in the last step. As a team, discuss what has been learned from conducting the evaluation and next steps to incorporate the results from this process. Some questions to discuss as a team include:

    - What recommendations can be implemented?
    - What emerged as strengths of the program?
    - What emerged as weakness of the program?
    - What concrete changes can our organization make to improve program outcomes as set out in the program logic model?
    - How can the evaluation findings be used to secure funding for the program?
    - Are there stakeholders we can collaborate with to implement recommendations?

- ### Develop an action plan

  Develop an action plan to achieve program improvements. Identify someone to lead the program improvement plan and set a timeline to achieve the targeted improvements.

  Revise your program logic model to illustrate the modifications that will be made to the program objectives and outcomes based on the evaluation recommendations.

- ### Plan to re-evaluate the program

  Once a new action plan is determined for the program, a new evaluation process should be developed as well. Plan to re-evaluate your program to assess whether or not you have increased the effectiveness of your program and are meeting your program objectives. Ongoing evaluation increases both effectiveness and internal and external accountability.

Guidelines: Develop Action Plan

1. **Assign an evaluation team member to lead the action plan**
    - Select someone familiar with the program
    - Document all decisions on the *Action Plan Worksheet*
2. **Discuss and develop an agreement on priority recommendations**
3. **Discuss the *Activities/steps* for each recommendation**
4. **Set a *Timeline* for each recommendation and related activities**
5. **Assign who will be responsible for implementing each activity** *(i.e. evaluation team member(s) or relevant stakeholder(s))*
6. **Revise program logic model**
    - Illustrate any changes to be made to program objectives and outcomes.
7. **Plan to re-evaluate**
    - Document *Evaluation Plans* and timeline for each recommendation
8. **Present the action plan, revised program logic model and evaluation plans to the upper management of the program's host organization.**

Program Evaluation Tool

Dissemination Plan Template

Key Stakeholders	What *(information needs)*	Why *(usefulness of information)*	How *(communication style, terminology)*	When *(dissemination deadline)*	Timeline *(e.g. when you will disseminate the final report and interim reports)*	Team Member Responsible *(who will develop materials and contact stakeholder)*
Other Health Organizations	*Lessons learned (what worked and what did not work)*	*Prevent re-invention of the wheel (use lessons learned to create their own programs)*	*Presentation at health conferences*	*October 2009 (date of first conference)*	*October 2009 – February 2010*	*Evaluation Coordinator*

Action Plan Template

Priority Recommendation(s)	Activities/Steps	Individual(s) Responsible / Involved	Timeline	Evaluation Plan
Include a child care component to the nutrition program to increase access	- *Recruit child care volunteers* - *Identify location for child care* - *Develop guidelines for child care volunteer*	*Program Manager*	*February 2010 – April 2010*	*Process evaluation April 2010 – July 2010* *Outcome evaluation September 2010*

Program Evaluation Tool

Evaluation Glossary

Glossary of Terms

Academic Evidence	Peer reviewed publications published commercially and indexed by major public vendors *(e.g. Health-Evidence.ca, Pubmed)*.
Activities/Process Objectives	The services your program delivers or the main functions or tasks of your program staff. They are the means by which desired outcomes will be achieved. Describe process objectives/ activities of your program using action verbs. Do not include administrative aspects of your program such as human resources and payroll *(e.g. distributing promotional materials, train peer mentor physical activity leaders)*.
Community Partners	The stakeholders you collaborate with in developing and/or implementing a program or a comprehensive health strategy
Components	Closely related groups of activities or themes in your program. The number of components depends on the size of your program. For a large program, there could be many components in the program logic model, while the structure of a program logic model for a smaller program/project may be much less complex *(e.g. health education, policy development)*.
Data	The actual observations you make (information you collect from program participants).
Deliverable	The products created throughout the evaluation process. Usually outlined in your evaluation/program proposal.
Economic Evaluation	Determines the actual cost of operating the program, the cost benefit ratio, and if the same outcomes could be achieved at a lower cost.
Evaluation Assistant	Primarily responsible for data entry and data collection, as well as some support in formatting the analysis and report.
Evaluation Consultant	Senior evaluator with over five years experience in planning and evaluation. This person is responsible for the program logic model development and the preparation of the evaluation framework and plan.
Evaluation Coordinator	Responsible for data collection and conducting the analysis of the data under the supervision of the evaluation consultant.
Evaluation Plan	A document that gives a full rundown of what you intend on doing in the evaluation process, including how you will collect, measure, and interpret the data, and gives a timeline for the rollout of the task.
Final Report	A summary of the entire evaluation process and acts as a tool for dissemination.

Formative Evaluation	Consists of a set of activities designed to develop and pre-test program materials and methods. It occurs as a part of program planning and before any part of the program is actually implemented.
Practitioners	Include individuals involved with health promotion and primary prevention and those working in Public Health Units, Non-Governmental Organizations, Regional Health Authorities and Community Health Centres.
Primary Prevention	Maintaining health by removing the contributing factors of poor health and focusing on the determinants of health.
Implementation Objectives	Concerned with the program itself and its level or quality of services. Implementation objectives are the means whereby outcomes are to be achieved.
Indicators	The ways in which you will measure your objectives.
In-kind Resources	Contributions in goods or services rather than money *(e.g. volunteer hours, evaluation services, facilitation services, donated equipment, office space, software programs etc.)*.
Intended Audience	Individuals, groups, organizations, or communities that your program aims to reach. This includes clients, customers, consumers, or priority populations. The intended audience can be specified in terms of socio-demographic characteristics, or by health or social situations, problems, or behaviours *(e.g. ethnic communities, low-income families, small retail centres)*.
Intermediate Outcome Objectives	The intended results of the program that follows the achievement of short-term objectives and usually occurs within 2 to 5 years after the program is implemented. Intermediate outcome objectives include changes in skills, behaviours or health status that are thought to eventually affect the social, health or economic status of the broader community. Intermediate outcome objectives are anticipated, but usually not measured due to the difficulty and expense involved in longer-term follow-up *(e.g. achieved 30% smoking cessation rate at 2 year follow-up)*.
Long-term Outcome Objectives	The social, health and economic consequences of a program in the broader community. They tend to be the ultimate goals of the program. Long-term outcome objectives may be expressed as a change in practice or behaviour, or a change in condition or status such as decreased morbidity or mortality, or improved quality of life. Long-term outcome objectives are anticipated, but usually not measured *(e.g. reduced the rate of smoking related chronic diseases)*.

Organizational Culture	The set of values, beliefs, norms or assumptions of your organization and the individuals within it that is seen to be appropriate.
Outcome Evaluation	Considers whether the expected changes/outcomes are realized, and if the changes are in fact a result of the program activities.
Outcome Objectives	Concerned with changes in the person's thinking, behaviour, health, social circumstances, etc. May also be changes in organizations, communities, or systems of service.
Outcomes Objectives	The changes it is hoped that the program will achieve for each intended audience. Changes may target attitudes, behaviours, health outcomes, social circumstances, etc. They may also target changes in organizations, communities and service systems. There are three types of outcome objectives: short-term, intermediate and long-term.
Outsourcing	Contracting a process or work, such as analyzing the data, developing the evaluation plan or development of data collection tools, to a third-party individual or company. *(i.e. hiring a consultant or specialist to complete a component of the evaluation or the entire evaluation)*
Participant Satisfaction	Considers the degree to which stakeholders find the type/content of the program to be meaningful and useful. This is a form of process evaluation.
Process Evaluation	Considers if the people that the program was intended to be for were actually being served, and to see if the activities rolling out to be the same as planned.
Program Logic Model	An illustration of how the activities and outcomes of your program interconnect.
Reliability	How consistently the variable can be measured and give the same data each time.
Short-term Outcome Objectives	The direct results of the program on the intended audience that usually occurs within the first year after the program is implemented. These objectives may include increased awareness, increased knowledge, a change in attitudes or values, or improved skills *(e.g. increased awareness of the program, increased number of individuals who attempt to quit smoking)*.

Program Evaluation Tool

Evaluation 101

Evaluation 101

Step 1 – Select an Evaluation Team

Evaluation Specialist Skills & Experience[8]

Depending on the complexity of the evaluation plan, up to three types of evaluation specialists may be involved in the evaluation process: the **evaluation consultant**, the **evaluation coordinator** and the **evaluation assistant**.

Current program staff and volunteers can fill any of these roles if they possess a majority of the skills and experience needed *(See table below)*.

If you plan to hire evaluation expertise, this table can guide the recruitment process.


See *Step 1 - Tips & Resources* section for additional guidance on how to recruit and work with an evaluation specialist.

Evaluation Consultant: **Oversees the entire evaluation.** *(Responsible for program logic model development and preparation of the evaluation framework and plan.)*
☐ Masters or PhD in the health or social sciences
Experience with:
☐ Planning and conducting evaluations
☐ Supervising evaluation coordinator(s) or assistant(s)
Skills:
☐ Proposal development
☐ Communication and interpersonal skills
☐ Facilitation
☐ Project management
☐ Writing (including plain language writing)
Familiarity with:
☐ Evaluation design options
☐ Sampling approaches
☐ Development of data collection tools
☐ Sample size calculations
☐ Qualitative methods *(e.g. interviews, focus groups)* & analysis
☐ Quantitative methods *(e.g. bivariate and multivariate)* & analysis

[8] Rush, B. (2007). Feasibility Assessment of Outcome Evaluation for Local Health Promotion and Prevention Community Programs.

Evaluation Coordinator: **Manages day-to-day activities**

(I.e. data collection, data analysis, and drafting evaluation report - under the supervision of the evaluation consultant.)

- ☐ Bachelor's Degree with at least 3-5 years of project coordination experience or Master's Degree with at least 1-3 years experience
- ☐ Undergraduate training in research methods (quantitative and qualitative)

Skills:

- ☐ Communication and interpersonal
- ☐ Group facilitation and organizational
- ☐ Writing
- ☐ PowerPoint presentation
- ☐ Internet proficiency
- ☐ Proficiency in Word and Power Point
- ☐ Attention to detail

Experience with:

- ☐ SPSS
- ☐ Excel/Word in table and chart preparation
- ☐ Conducting interviews
- ☐ Quantitative data analysis including statistics
- ☐ Qualitative data analysis

Evaluation Assistant: **Primarily responsible for data entry and data collection**

(May also provide support in formatting the analysis and report.)

- ☐ Bachelor's or Community College degree

Skills:

- ☐ Communication and interpersonal
- ☐ Proficiency in Word
- ☐ Organizational
- ☐ Excellent attention to detail

Experience with:

- ☐ Excel or other software for data entry and preparation of tables and charts

Potential Roles for Evaluation Team Members

Team Member	Potential Roles[¥] ***Note:*** *Depending on the scope and level of your evaluation, all of these roles may not be required*
Program manager	▪ Manages the planning, implementation, evaluation and overall operation of the program ▪ Develops the evaluation team ▪ Finalizes decisions ▪ May play role of the evaluation consultant
Program coordinator	▪ Provides support to the evaluation consultant ▪ Provides information about the program ▪ May play role of the evaluation coordinator
Program staff	▪ Support evaluation consultant and or/ coordinator ▪ Provide information about the program ▪ May play role of evaluation coordinator or assistant
Individuals with evaluation expertise	▪ May play role of evaluation consultant or coordinator ▪ Provide feedback and suggestions on the evaluation plan and framework
Community partners & other stakeholders	▪ Provide information and the perspective of the organization/population they represent ▪ Provide evaluation supports *(e.g. resources, information, personnel)* ▪ Provide insight into what program elements will have the greatest impact on the intended audience
Volunteer(s)	▪ Provides support to the evaluation consultant, coordinator and/or assistant ▪ May play the role of the evaluation assistant
Evaluation consultant	▪ Develops the program logic model ▪ Prepares the evaluation framework and plan ▪ Supervises data collection and prepares evaluation report
Evaluation coordinator	▪ Manages day-to-day activities *(i.e. data collection, data analysis, and drafting the evaluation report)*
Evaluation assistant	▪ Enters the data ▪ Helps collect the data ▪ Helps format the analysis and report

¥ All members of the evaluation team will provide feedback and participate in team meetings.

Suggested Work Plan for Evaluation Team Meetings

The following chart provides a suggested work plan for planning evaluation team meetings to keep the evaluation process on track. Set your meeting dates based on the timeline developed earlier in Step 1 and adjust the meeting agenda as required.

Planning meeting dates in advance ensures that everyone can be available and provides added incentive to complete assigned tasks on time.

Agenda
Meeting #1 - Date: _____
Team Building ▪ Icebreaker exercise *(See Evaluation Thermometer and/or Evaluation Word Game)* ▪ Assess current practices and attitudes around evaluation ▪ Develop a common understanding of evaluation *(See Evaluation 101 Step 2)* ▪ Discuss background information on the program *(including the program logic model and the purpose of the evaluation)* o If a program logic model does not exist discuss and develop one for your program *(See Step 3: Develop Program Logic Model)* ▪ Discuss timetable, tasks and where members can contribute o Keep in mind your organizational capacity for evaluation *(See Step 2: Determine Evaluation Resources)* ▪ Other:
Meeting #2 - Date: _____
Evaluation Questions *(See Step 4: Define Evaluation Questions)* ▪ Brainstorm potential evaluation questions ▪ Determine the potential usefulness of the information ▪ Prioritize the evaluation questions and select priority questions ▪ Other:

Meeting #3 - Date: _____
Evaluation Framework *(See Step 5 Guidelines: Develop Evaluation Framework)* ▪ Develop from scratch or modify draft from the subcommittee*/evaluation consultant ▪ List priority evaluation questions ▪ Develop indicators ▪ Other:
Meeting #4 – Date: _____
Evaluation Methodology & Tools *(See Step 5: Develop Evaluation Framework)* ▪ Build on existing draft or start from scratch ▪ Develop evaluation design and data collection strategy ▪ Develop data collection tools and methods for analysis ▪ Other:
Meeting #5 - Date: _____
Finalize Evaluation Plan *(See Step 6: Develop Evaluation Plan)* ▪ Discuss timelines and tasks ▪ Discuss where members can contribute ▪ Other:
Meeting #6 - Date: _____
Review and Comment on Draft Evaluation Report *(See Step 8: Develop Evaluation Report)* ▪ Discuss and make suggestions on the draft evaluation report put together by a sub-committee* or an individual *(i.e. evaluation consultant)* ▪ Other:
Meeting #7 - Date: _____
Finalize Recommendations Arising from Evaluation Results and Discuss Next Steps *(See Step 9: Develop Dissemination Plan and Develop an Action Plan)* ▪ Other:

* Subcommittee can consist of evaluation team members that will be in charge of drafting and finalizing the documents (e.g. evaluation consultant, program coordinator, program manager, evaluation coordinator, evaluation assistant etc.)

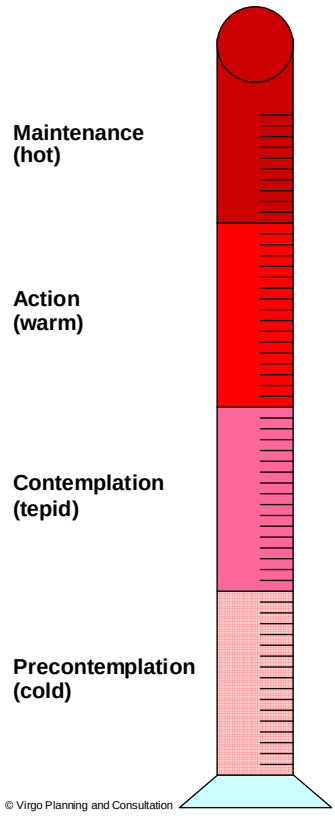
Evaluation 101

Step 2 - Assess Organizational Capacity for Evaluation

Assessment of Current Evaluation Practices and Attitudes

One way of gauging where people are in terms of practices of evaluation is to look at the *Evaluation Thermometer* developed by Dr. Brian Rush. It can be used to assess organizational practices and attitudes around evaluation.

EVALUATION THERMOMETER ©



Indicators

Maintenance (hot)
- we routinely share both positive aspects of the program as well as those areas that need improvement
- some of our job descriptions highlight roles and responsibilities for evaluation
- we always have two or more evaluation activities underway; outcome evaluation
- we routinely develop a logic model for all programs and services
- we always push for clarity and measurability of program objectives
- we routinely hold M&M meetings to discuss "mistakes and misgivings"; open attitude internally to negative findings

Action (warm)
- we often share with others those aspects of the program that need improvement
- we are involved in at least one evaluation activity; process evaluation
- we have an evaluation committee and a preliminary evaluation action plan
- our manager and some staff have been to a training program on evaluation
- we have developed a program logic model for the program or one component
- someone has taken a leadership role for evaluation
- we are beginning to take small but concrete steps towards evaluation

Contemplation (tepid)
- we often think we should be more open with others about those aspects of the program that need improvement
- we are working to develop a small resource library on evaluation
- we've been discussing the need for more evaluation skills and training for the ED and some staff
- evaluation seems to be a good idea, but we are worried about the time and costs involved
- we should like to do more evaluation activity, but don't know where to start; seems too big, too complex

Precontemplation (cold)
- we typically share only the positive aspects of our program with others
- evaluation is OK, but it's basically symbolic
- we know we are doing a good job; money is better spent on the program itself than on evaluation
- we don't see the need for information on results; it's the process that's really important
- we haven't really thought about program evaluation before

If your team falls below the red category (hot), then work needs to be done to develop confidence in and an appreciation for evaluation. The *Evaluation Thermometer* also helps to **identify champions** within the evaluation team to support the process of evaluation and is a useful **icebreaker** activity to build support among members of a newly formed evaluation team.

How to Use the Evaluation Thermometer Activity

1. **Get four sheets of paper in different intensities of the same colour** *(i.e. deep red, medium red, medium pink, light pink).*
2. **Cut each sheet into small squares** *(according to the number of people on your evaluation team).*
3. **Lay out sets of the squares on the table in front of each person of your team** *(a set = one square of each shade of the colour).*
4. **Give the team a description of each shade:**
   - **Deep Red:**
     You love doing evaluation. You have considerable knowledge, experience, and confidence in all or most aspects of evaluation.
   - **Medium Red:**
     You consider evaluation to be important, and you have some knowledge and experience however evaluation is not a routine practice and it requires a lot of effort to implement.
   - **Medium Pink:**
     You think program evaluation is a good idea, but you find it too complex and are not quite sure where to start in the planning. You worry that evaluation is too costly and time consuming.
   - **Light Pink:**
     You dread the idea of having to participate in evaluation planning and implementation. You think that if a program is going well, the money that would go into evaluation is better spent in the program itself.
4. **Invite each person to hold up the shade that best describes themselves.**
5. **Generate discussion by asking all those holding up the lightest shades to share their concerns and experiences around evaluation.**

   For example, some individuals may state that they find the evaluation concepts too overwhelming. Others may fear that an evaluation could produce results that might harm their program.

   This discussion helps to validate concerns. Assure them that in a participatory approach to evaluation, their contribution is important to each step.
6. **Ask those holding the darker shades to share how they can support the team and mentor others**.

   For example, some individuals can explain the benefits of evaluation to their team. These individuals can be the evaluation champions on your team.

A less complicated icebreaker is the **Evaluation Word Game**.

Ask team members to identify one or more words using letters from the word "evaluation" that express a personal belief or experience about evaluation *(e.g. evolve, late, love, no, none etc.)* Ask team members to share their words and why they chose it.

Understanding Common Types of Program Evaluation

There may be some barriers to evaluation to overcome with your team. For example: Members of the TEIP communities self reported that barriers to community-based evaluation included lower confidence in evaluation; confusion about the types of evaluation; and a reluctance to do outcome evaluation[9].

To overcome the barrier of confusion around the types of evaluation, below are the five types of evaluation the evaluation team should be aware of:

Formative Evaluation

- Activities designed to develop and pre-test program materials and methods
- Occurs as a part of program planning and before the program is fully implemented
- *Example: test the cultural appropriateness of program handouts.*[10]

Process Evaluation

- Whether the intended audience for a program is actually being served
- Whether program activities are implemented as planned
- *Example: evaluate the group facilitator's presentation skills.*

Participant Satisfaction

- Degree to which stakeholders find the type/content of the program to be meaningful and useful
- *Example: Ask participants if the location of the sessions was appropriate.*

Outcome Evaluation

- Measures the extent the anticipated outcomes are realized
- May attempt to assess whether changes measure are a result of the program activities
- *Example: % of people who delayed their first cigarette upon program completion.*

Economic Evaluation

- Measures the actual cost of operating the program, the cost benefit ratio, and whether the same outcomes could be achieved at a lower cost
- *Example: Comparing the cost-benefit of a new school nutrition program compared to the cost-benefit of the current school nutrition program.*[11]

The TEIP Program Evaluation Tools focus on **process** and **outcome evaluation**. Please note that this is not meant to downplay the importance of the other types of evaluations.

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[9] Rush (2007) Logic Models for Program planning and Evaluation.
[10] Nutbeam, D. & Bauman, A. (2006) Evaluation in a Nutshell: A practical guide to the evaluation of health promotion programs. McGraw Hill: Sydney.
[11] Rush (2007) Logic Models for Program planning and Evaluation.

Comparing Process vs. Outcome Evaluation

Process Evaluation	Outcome Evaluation
Assess the delivery and usage of the program under normal operation	Assess the effect the program has on the intended audience
Occurs during the implementation of the program	Occurs after the program has been implemented
Purpose is to improve the operation of the program	Purpose is to assess the impact
Example: *An evaluation of a breastfeeding program that is looking at the:* ▪ *Characteristics of the mothers who used program services*	*Example:* *An evaluation looking at the impact of a breastfeeding program on the:* ▪ *Length of time new mothers breastfeed their infants*

Evaluation 101

Step 3 - Develop Program Logic Model

Program Logic Model Tutorial

Basic Elements of a Program Logic Model[12]

Components

Closely related groups of program activities *(e.g. health education, policy development)*

The number of components depends on the size of the program. Large programs may have many components, while smaller programs may be much less complex.

Intended Audience

Individuals, groups, organizations, or communities that your program aims to reach *(e.g. ethnic communities, low-income families, small retail centres)*

This includes clients, customers, consumers, or priority populations. The intended audience can be specified in terms of socio-demographic characteristics, or by health or social situations, problems, or behaviours.

[12] Rush, B. (n.d.). University of Toronto Masters Course on Program Evaluation/ Logic Model

Activities/Process Objectives

The services your program delivers or the main functions or tasks of the program staff *(e.g. distributing promotional materials, train peer mentor physical activity leaders)*.

They are the means by which desired outcomes will be achieved.

Use action verbs to describe program activities. Omit administrative aspects such as human resources and payroll.

Consider including Planning and Evaluation as components in the logic model.

Outcome Objectives

The changes the program aims to achieve for each intended audience *(e.g. increased use of condoms amongst sexually active teenagers, elementary school vending machine policy created, decreased obesity rates)*.

Changes may target attitudes, behaviours, health outcomes, social circumstances, etc. Objectives may also target changes in organizations, communities and service systems. Good outcome objectives are **SMART**[13].

Specific - states what you want the intended outcome to be, where and for whom

Measurable - identifies the current value and level or amount of change expected

Appropriate - relates to the overall goals and activities of the program

Realistic - achievable given the context, timeline, issue and intended audience characteristics

Timely - addresses current health promotion concerns and priorities

SMART objectives are usually not included in the PLM itself; however it is good practice to provide the information in the Evaluation Plan or a written document which explains the PLM.

Short-term Outcome Objectives - direct results of the program on the intended audience expected to occur within the first year after the program is implemented (*e.g. increased awareness of the program, increased number of individuals who attempt to quit smoking*).

Individual Level Short-term Outcome Objectives:

a. Increased awareness
b. Increased knowledge
c. Change in attitudes or values
d. Improved skills.

Environmental / Community Level Short-term Outcome Objectives:

- Development of a physical activity school policy
- Increased exposure to information about the danger of smoking in cars with children

[13] Health Education Partners (n.d.). SMART Behavior Change Outcome Objectives www.healthedpartners.org/ceu/sm/smart_behavior_change_outcome_objectives.pdf

Intermediate Outcome Objectives

The intended results of the program following the achievement of the short-term objectives. Usually occur 2 to 5 years after program implementation[ר] *(e.g. 30% smoking cessation rate achieved at 2 year follow-up)*.

Intermediate outcome objectives include changes in skills, behaviours or health status that, over time, will impact the social, health or economic status of the broader community.

Although it is challenging to measure achievement of intermediate outcome objectives they should be included in the PLM.

Long-term Outcome Objectives

Reflect the social, health and economic consequences of a program in the broader community *(e.g. reduced the rate of smoking related chronic diseases*). These are the ultimate goals of the program.

Long-term outcome objectives may be expressed as a change in practice or behaviour, or a change in condition or status *(i.e. decreased morbidity or mortality, or improved quality of life).*[14]

These objectives are anticipated and included in the program logic model, but are not usually measured by a given program

Characteristics of a good Program Logic Model:

- Involves relevant stakeholders in its development to ensure a consensus regarding program components
- Accurately communicates all program components, audiences, program activities and their intended short-term, intermediate and long-term outcomes
- Explains the 'logic' of the program *(i.e. how program activities will lead to the intended outcomes as understood by evidence-informed practice and/or conceptual models)*.
- Serves as the foundation for the development of the evaluation plan
- Periodically revisited as the program is revised or updated

[ר] This is a suggested timeframe which may vary depending on the program and outcomes.

[14] Porteous, N. Sheldrick, B., Stewart, P. (2002). Introducing program teams to logic models: facilitating the learning process. The Canadian Journal of Program Evaluation: 17(3), 113-141

Developing a PLM

Program logic models can be created by the person most familiar with the program. However, it can be beneficial to collaboratively develop and/or refine the PLM with program partners and stakeholders. This may require more time, but can strengthen collaboration, capacity-building and lead to a common vision for the program.

Step-by-step guidelines for the collaborative development of a PLM and the TEIP Logic Model Template are located in *Step 3*.

Limitations of a PLM

1. Logic Models shows **what** is being done *(i.e. activities)* but not how well they are supported by internal factors critical to the success of the program *(e.g. staff competencies, infrastructure, resources available).*
2. Logic Models do not clearly state the external organizational and community contextual factors that may impact the success of the program. These factors *(internal, external and context)* need to be discussed and taken into consideration when brainstorming evaluation questions.
3. Some people prefer to omit the intermediate and long term outcome objectives from the logic model out of concern that they will be unfairly held accountable for outcomes that are out of their span of influence. In the TEIP approach, they are included in the logic model while the evaluation plan explains the limits for evaluating and attributing the achievement of outcomes to the program. [15]

Outputs are NOT the same as Outcomes.

Outputs are the countable evidence of the activities. They are the products and services produced by the activities *(e.g. # of completed workshops, # of vaccinations delivered, and #of schools participating)*.

There is a tendency to include Outputs in a PLM. This can be problematic, especially when outputs are confused with outcomes.

Outputs are more of an administrative detail. In the TEIP approach we omit outputs from the program logic model to avoid any confusion.

[15] Another approach is to use "attribution circles" within the logic model to show the differing levels of influence the program has over the achievement of short, intermediate and longer term outcomes.

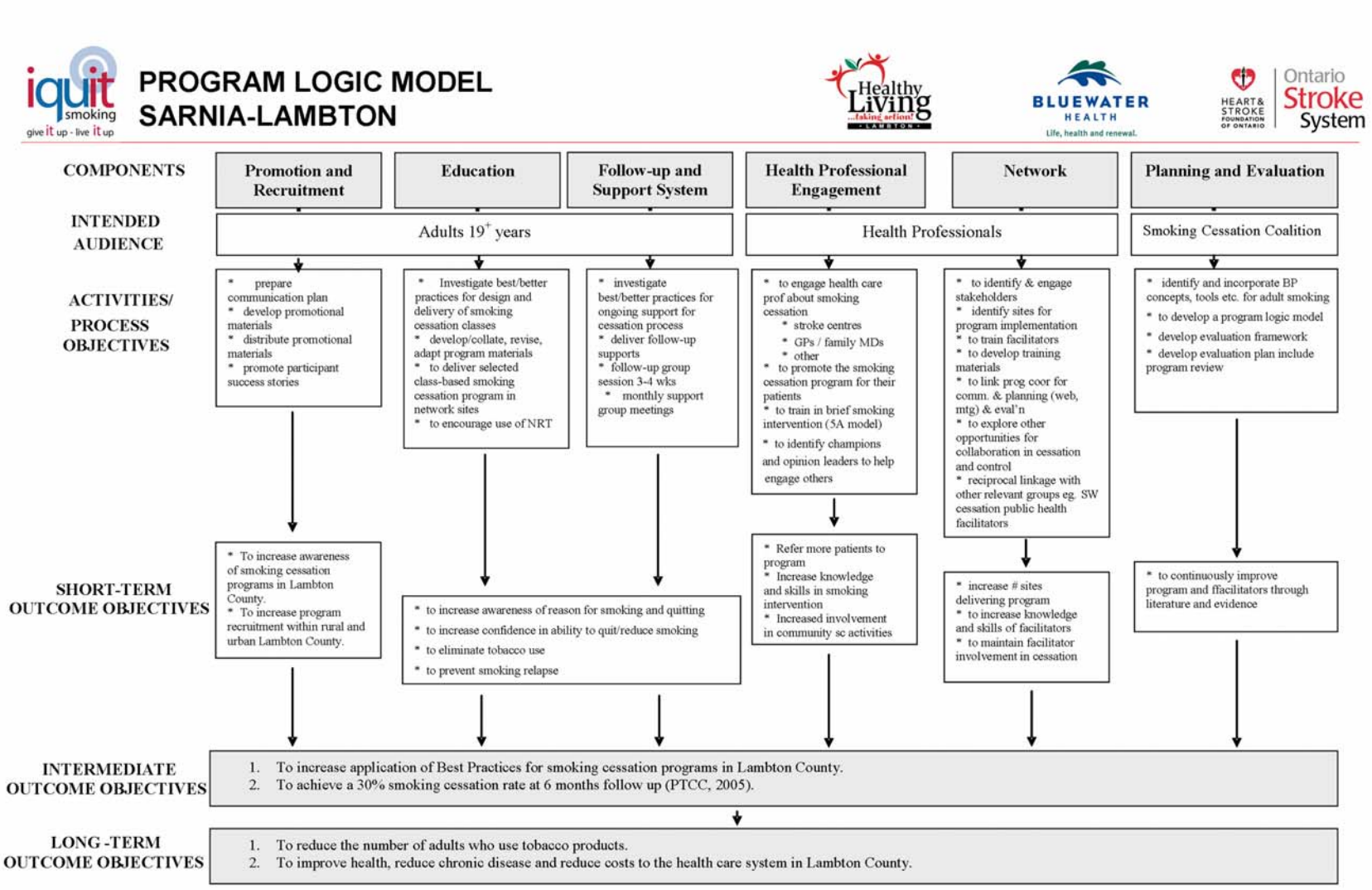
Program Evaluation Tool

SMART Outcome Objectives

Outcome Objectives	Specific	Measurable	Appropriate	Realistic	Time-limited
To increase the mean physical activity levels amongst participating elementary schools to 60 minutes/day by 2010	Exactly states the expected mean physical activity levels and the setting they apply to.	The mean physical activity levels can be measured by comparing pre and post levels.	Related to the goal of increasing physical activity levels in elementary schools	Aiming to achieve a mean physical activity level of 60 minutes/day is more realistic than aiming for 200 minutes /day.	The expected mean physical activity level should be met by the year 2010.
At least 80% of home pools within Halton Region are enclosed by a fence two years after the by-law is developed	Specifically states the % of home pools to be enclosed by a fence and identifies the geographical region.	The % of home pools following the by-law can be measured by comparing the total # of home pools in Halton Region and the proportion of pools enclosed by a fence.	Related to the goal of decreasing the number of drownings by children in home pools.	Aiming to achieve 80% compliance within two years of by-law development is a realistic timeframe.	A timeline of two years after the development of the by-law is specified.
By 2015, to decrease by 70% the proportion of schools within York Region that report bullying as a problem	Specifically states the % of decrease expected by implementing the anti-bullying program. The setting (schools) and location (York Region) are specified.	The % decrease can be calculated by comparing the proportion of schools reporting bullying issues before program to the proportion of schools for the year 2015.	Related to the goal of reducing school bullying.	It is realistic to expect a decrease of 70% in the reporting of bullying issues in comparison to an objective of a 100% decrease.	The expected decrease should be met by 2015.

Program Evaluation Tool

Example of a Good Program Logic:



Evaluation 101

Step 4 - Define Evaluation Questions

Process versus Outcome Evaluation Questions

Process Evaluation Questions

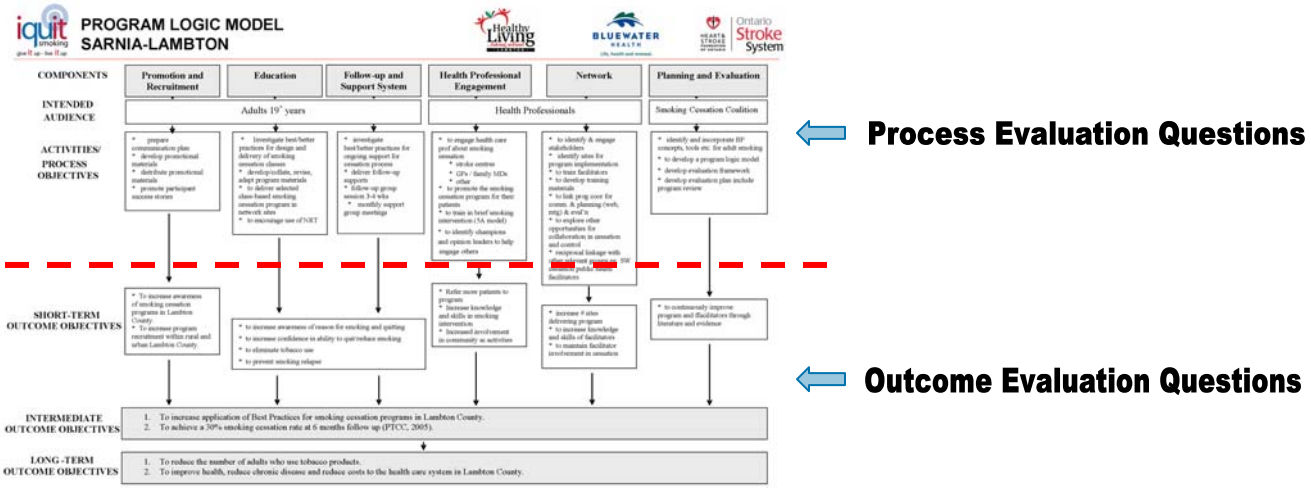
Assess the extent to which program activities were executed as planned. This often involves tracking the program "reach" whether participation matches expectations *(i.e. numbers, characteristics)*. Process questions are related to process evaluation.

Outcome Evaluation Questions

Determine the extent to which progress is being made toward the desired change in individuals, organizations, communities, or systems[16] as described in the outcome objectives of your program logic model. Outcome questions are related to outcome evaluation.

There tends to be confusion about the difference between process and outcome evaluation questions. An easy way to distinguish one from the other is to remember:

- **Process Evaluation Questions** measure the quality of the activities listed on the program logic model and the reach of those activities on the intended audience *(the top half of the program logic model).*
- **Outcome Evaluation Questions** measure the impact of the program on the intended audience as listed in the outcome objectives in the program logic model *(the bottom half of the program logic model).*



[16] W. K. Kellogg Foundation (2004). Logic Model Development Guide. www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf

Here are example of some common questions for both process and outcome evaluation[17]:

Process Evaluation Questions ask:

- Has the program reached the appropriate people?
- Are all the program activities going as planned? If not, why not?
- Does the program content reflect current evidence? Is there rationale for any adaptations of better practices?
- Were any changes made to the intended activities? If so, why?
- Are materials, information, and presentations of good quality? *(e.g. Are they clear, concise, at a correct literacy level and culturally appropriate?)*
- Are the participants and other key people satisfied?

Outcome Evaluation Questions ask:

- How effective has the program been at producing the intended changes?
- Can we attribute some of the changes to program participation?
- Are there any factors outside of the program that have contributed to *(or prevented)* the desired changes?
- Has the program resulted in any unintended change?

[17] Murray, C., Aylward, P., Cooke, R., Martin, M., & Sidford, S. (2008). Planning and Evaluation Wizard. som.flinders.edu.au/FUSA/SACHRU/PEW/Index.htm

Program Evaluation Tool

SMART Evaluation Questions

Evaluation Questions	Specific	Measurable	Actionable	Relevant	Timely
How did participants hear about this smoking cessation program?	Asks if the planned promotional activities are working	Measure by asking participants where they heard about the program	Answers will help program staff improve their promotional activities	Program staff need this information to know if their current promotional activities are working and if they need to adapt them	The question should be asked now before resources are used incorrectly
Did the regulation on fencing around home pools have an impact on drowning incidents involving children?	Asks if the regulation had an impact on drowning incidences involving children	Measure the drowning incidences among children before and after the regulation was implemented	Answers will help program staff to maximize their impact and decide whether to continue the policy	Program staff and stakeholders need this information to judge whether the program is effective and if resources are being used wisely	The question should be asked now because there is a high emphasis on accountability and if the policy is not having an impact, resources should be used elsewhere
Did the school bullying communication campaign reach the intended audience (children ages 8-12)?	Asks if the communication campaign is reaching a specific audience	Measure by examining the characteristics of those reached by the communication campaign and comparing to initial plans	Answers will help staff to know what changes need to be made to their program to ensure that it reaches those who were intended and perhaps of highest risk	Program staff need this information to know if they are reaching those at highest risk for bullying and for those that the communication campaign is intended for	The question should be asked now because there are limited resources and if the intended audience is not being reached they are not getting the messages and resources are going to waste
Are those individuals with low income able to equally access our nutrition program?	Asks if program is accessible to a specific vulnerable population	Ask individuals with low income questions about accessibility and usefulness	Answers will help staff make changes to ensure the program is equally accessible	Indicates whether information is reaching those at highest risk. This information can also be used to show funders that the program is a worthwhile initiative	Access and equity is an important program component that normally gets overlooked. If vulnerable populations are ignored the health gap may increase

Evaluation 101

Step 5 - Build Evaluation Framework

Developing indicators

Remember to develop appropriate process and outcome indicators related to your process and outcome evaluation questions.

Process indicators

Focus on the reach and scope of a program *(i.e. was the intended audience reached)*, the acceptability of a program *(i.e. was the program acceptable to the intended audience)* and if the activities were implemented as planned. Examples include*: characteristics of the participants who attended the community event; % of participants who checked "yes" in the question that asks them if they would refer the workshop to a friend;* and *activity implemented (yes/no).*

Outcome indicators

Measure the extent the program met the intended short-term, intermediate and long-term outcome objectives. Examples include*: # of collisions involving senior drivers after a driving policy was implemented;* and *% of participants who feel motivated to stop buying bottled water.*

Selecting a data collection method

There are many different data collection methods *(e.g. observation, focus groups, surveys, interviews and document review)*. The method that you choose will vary according to:

Evaluation question

What is the best method to collect the information to answer your evaluation question(s)? For example, if your evaluation question asks whether your program was implemented as planned, it may be more appropriate to choose a document review method *(i.e. reviewing the logs and diaries of the program activities)* rather than a focus group.

Evaluation design

What is the most feasible method for your evaluation design? For example, if your evaluation design is a pre-test/post-test with 6-month follow-up, it may be more feasible to do surveys than to do one-on-one interviews with each participant at three different occasions.

Characteristics of your participants

Is the method appropriate for the characteristics of your participants? For example, if your participants read at a low literacy level a survey may be inappropriate since it may be difficult for them to read and understand. On the other hand, a focus group may be more appropriate since the facilitator can verbally ask participants the questions.

Is the method culturally appropriate?

Evaluation team's capacity for data collection

What data collection method is feasible given the budget, timeline and resources available? For example, conducting a focus group may be more time consuming and resource intensive than a survey.

Data collection methods & tools

The data collection method determines the data collection tools required. The table below illustrates common examples of data collection methods and tools.

Data collection method	Data collection tool(s)
Observation	Observation guide Recording sheets or checklists
Focus group	Topic list
Survey	Web or paper-based questionnaire
Interview	Interview script (includes interview questions)
Document review	Logs and diaries

A good starting point when developing data collection tools is to ask for assistance or borrow tools from other groups that may be running a similar program to yours. You can modify an existing tool based on the specifics of your program.

IF you plan to design your own data collection tool:

- Collaborate with the people who will be using them.
- Find a balance between collecting sufficient information without creating too much work for the people you are collecting the information from.[18]
- Ensure every question asked in the data collection tool provides an answer to one of your priority evaluation questions.
- Ask yourself whether the information that you plan to collect will be used to make decisions.

[18] Public Health Agency of Canada (1996). Guide to Project Evaluation: A Participatory Approach. www.phac-aspc.gc.ca/ph-sp/resources-ressources/guide/index-eng.php

Sample Data Collection Tool from TEIP Community

Client Code:_____
Location Code: _____
Date Completed: _____

iquit Smoking Program
6-Month Follow-up Evaluation

The County of Lambton Community Health Services Department is gathering information from participants of our iquit Smoking Program. The purpose of this survey is to identify if there have been any changes in your attitude and behaviour towards smoking over the past 6 months. The information you provide will be kept confidential. Neither your name nor any other personal identifier will be used in any reports or publications. By consenting to complete this survey you are helping to measure the success of the program and how we can tailor it to better meet the needs of our community.

1. Did you smoke in the last 6 months?
   - ❒ Yes
   - ❒ No (go to question 4)

2. Do you currently smoke? (Currently includes within the last 7 days, including today)
   - ❒ Daily (go to question 4)
   - ❒ Occasionally (go to question 4)
   - ❒ Not at all

3. If "Not at all", how confident are you that you will remain smoke-free?
   - ❒ Not at all confident
   - ❒ Somewhat confident
   - ❒ Moderately confident
   - ❒ Confident
   - ❒ Very confident

4. What is the longest period of time you have quit smoking for?
   - ❒ Less than 24 hours
   - ❒ More than 24 hours but less than 1 week
   - ❒ More than a week but less than 1 month
   - ❒ 1-6 months
   - ❒ 7-12 months
   - ❒ 1-2 years
   - ❒ 2-5 years
   - ❒ More than 5 years
   - ❒ N/A

5. In the past 6 months, how many times have you made a serious attempt to quit smoking? (A serious attempt is an attempt that lasted for 24 hours or more).

   ❒ 0 ❒ 1 ❒ 2 ❒ 3 ❒ 4 ❒ 5 ❒ 6 or more

6. What method did you use to quit smoking? *(check all that apply)*
   - ❒ Just quit (cold turkey)
   - ❒ Tapered down
   - ❒ Nicotine Patch
   - ❒ Nicotine Gum
   - ❒ Nicotine Inhaler
   - ❒ Zyban/Bupropion
   - ❒ Individual counselling
   - ❒ Group program
   - ❒ Program offered at work/school
   - ❒ Champix / Chantix / Varenicline
   - ❒ Telephone counselling
   - ❒ Online Help
   - ❒ Hypnosis
   - ❒ Acupuncture
   - ❒ Herbal remedies
   - ❒ Family support
   - ❒ Peer support
   - ❒ Other _____
   - ❒ N/A

Evaluation 101

Step 8 - How to Write the Evaluation Report

1. **Understand what information is needed for each heading in the Evaluation Report**
   - Use the accompanying descriptors/questions under each heading in the *Evaluation Report Worksheet* as a guideline for what to include in each section.
2. **Seek assistance from other members of your evaluation team**
   - Evaluation team members and evaluation specialists may have pertinent information to contribute.
   - Assign different sections of the Evaluation Report to evaluation team members to complete, based on which section they are most knowledgeable about.
3. **Formulate and write your response under each heading of the Evaluation Report**
   - Identify key elements to include in your response.
   - Ensure responses are comprehensive, yet concise.
   - Keep your audience in mind and tailor the report so it provides the information your audience wants and needs to know.
   - Start the evaluation report with the most important information and highlight the important points. This will ensure that stakeholders read the information they need to make informed-decisions.
   - The Evaluation Plan, previously completed, contains much of the information needed for the Evaluation Report. Copy and paste where necessary.
4. **Collect and attach supporting documentation where appropriate**
   - Attach copies of your program logic model, data collection tools, and evaluation framework.
5. **Work through multiple drafts of the Evaluation Report**
   - Send drafts to your evaluation team and make changes to the report until everyone agrees with the final product.
6. **Finalize the Evaluation Report**
   - Delete the directions under each heading of the Evaluation Report.
   - Format the report to match your organization's formatting or the formatting of other program documents.

Evaluation Report Template

Name of Program:

Community/ Organization:

Prepared by: Name: Date: Email: Tel #:

Introduction

Briefly introduce the purpose of the evaluation. Leave the details for the rest of the report.

Program Description: Write a concise description of your program such that a reader can quickly grasp the reason for the program, the intended audience, the objectives, the major activities, how the program is delivered, who is involved and any other important or distinctive features. Provide a copy of your ***program logic model***.

Evaluation Questions: What questions are being answered by this evaluation? Include a copy of the ***Program Evaluation Framework***.

Methods

Data Collection Strategy

Describe what type of information was collected. Describe the ***evaluation design***, ***data collection methods*** and the ***data collection tools*** used. Also, provide the rationale behind your data collection strategy. Provide a copy of all ***data collection tools***.

Method of Data Analysis

Describe how the data was analyzed and the rationale behind that method of analysis.

Findings

Looking at the evaluation results, what is the answer to your evaluation question? Determine whether the process and outcome objectives are being met. If they are not met, then critically assess whether the objectives were realistic or whether something was missing. If the objectives were met, consider why that was the case.

Present your results from the different data gathering activities *(i.e. data collection methods)* as they relate to each evaluation question.

Qualitative results can be presented in a text or table format. Results can be organized by themes. Quotes from participants can be included to illustrate the main points.

Quantitative results can be presented in a graphic format, such as tables, charts or figures.

Discussions and Conclusions

The following are some points to consider in the discussion:

- Are the program objectives realistic? Is it realistic to see these changes in the amount of time that you have given? Does the evidence support the program objectives?
- Are there factors outside the program that may have had an impact on the success or the limited success of the program? *(Note: Refer to the contextual factors documented in the Evaluations Questions* and *Evaluation Framework Chart*).
- How do the results compare to previous evaluations of this or similar programs?
- Were the results of the evaluation different for different participants or program sites? If so, what characteristics could contribute to this difference?
- Did the evaluation result in any unexpected findings?
- Are the evaluation results consistent with the theories the program is informed by?
- What were the strengths of the evaluation?
- Were there limitations to the evaluation? What questions did the evaluation not answer? Was there something missing from the evaluation design?

Program Recommendations

Summarize the recommendations suggested to enhance the program based on the findings. Describe limiting factors *(e.g. budget, time, human resources)* that may prevent the adoption of all recommendations. Identify next steps and future program evaluation plans.

Dissemination Plan

Briefly document how the Evaluation Report will be used. How will the findings be disseminated? To whom will the findings be disseminated *(i.e. which stakeholders)*? Refer to *Step 9: Disseminate Findings & Modify Program* in writing this section of the report**.**

Acknowledgements

This section acknowledges anyone who assisted with the completion of the evaluation, whether through consultation, administration, or financial contribution.

Key Findings

Briefly summarize the results and recommendations. Complete this section last to ensure nothing is missed. Place this section at the front of the report *(i.e.* ***before*** *the introduction)*.

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Program Evaluation Tool

Tips & Resources

Step 1 - Select Evaluation Team

Select Evaluation Team

- Ensure the evaluation team is not too large to handle (3 to 5 people is ideal).
- Stakeholders lacking time to participate on the evaluation team can still play a role:
  - Review the initial evaluation plan
  - Pilot test the data collection tools
  - Review a draft of the evaluation report
  - Discuss the evaluation recommendations
- Methods to involve stakeholders include:
  - Send drafts for feedback through email
  - Survey key stakeholders for their feedback
  - Develop a subcommittee/work team or advisory group
- Team members may need to sign a confidentiality agreement stating they will not share information with anyone outside of the evaluation team. This is important if data will be collected from human participants

Evaluation Specialists

- The approximate costs[19], in Canadian dollars, for evaluation specialists are:
  - Evaluation consultant - $600/day to $1400/day
  - Evaluation coordinator - $300/day to $500/day
  - Evaluation assistant - $150/day to $250/day
- Assigning an individual or a consultant to have primary responsibility for coordinating the evaluation helps to ensure the evaluation is completed in a comprehensive and timely manner.
- Methods to find an evaluation consultant:
  - Post a request for proposals (RFP)
- Invite specific consultants or co-workers you have previously worked with
- Hiring an evaluation consultant is a similar process to hiring an employee[20]:
  - Review the resume – Does he/she have experience evaluating similar programs?
  - Contact references *(i.e. managers of programs evaluated by the consultant)*
  - Interview the candidate

[19] Rush, B. (2007). Feasibility Assessment of Outcome Evaluation for Local Health Promotion and Prevention Community Programs.

[20] Juvenile Justice Evaluation Center (2001). Hiring and working with an evaluator. Washington, D.C.: www.jrsainfo.org/pubs/juv-justice/evaluator.pdf

- Ask for samples of the evaluator's work *(program logic models, evaluation framework/plan, evaluation reports)*

Suggested Work Plan for Team Meetings (See *Evaluation 101: Step 1)*

- Ensure meetings are productive by creating and circulating an agenda in advance. Include all relevant documents *(e.g. draft evaluation plan, program logic model).*
- Identify a chair by discussing the role and the function of the chair with your team then thinking about the strengths of each member to identify who can best fulfill this role. Chair responsibilities include:
  - Conducting the meeting
  - Motivating participation during the meeting
  - Ensuring the meeting works through the agenda in a timely manner
- Identify a minute-taker to record the meeting. Minutes can be used as:
  - Reference for any future misunderstandings
  - Notes to team members unable to attend the meeting
  - Reminder of the action items, next steps and decisions agreed to at the meeting.
- Develop a Terms of Reference outlining:
  - Purpose of the evaluation
  - Evaluation team members and their roles
  - Timeframe for the entire evaluation process
- Send minutes of the meeting to absent team members and invite their feedback.
- Consider different meeting methods to increase attendance *(e.g. teleconference)*

Select Evaluation Team

- The Health Communications Unit developed a Stakeholder Participation Wheel to help identify stakeholders who are core, more involved and peripheral. The Stakeholder Participation Wheel can be found in their Introduction to Health Promotion Program Planning workbook (pg. 15), available at www.thcu.ca/infoandresources/publications/Planning.wkbk.content.apr01.format.oct06.pdf
- An example of a confidentiality statement can be found at iris.uwaterloo.ca/ethics/human/application/SampleSupportingMaterials.htm

Evaluation Specialists

- Requests For Proposals (RFPs) can be posted through the:
  - Canadian Evaluation Society (www.evaluationcanada.ca/)
  - Ontario Health Promotion E-Bulletin (www.ohpe.ca/)
  - Charity Village (www.charityvillage.com/)

- The Business Library provides Requests For Proposals templates which can be found at www.thebusinesslibrary.com/lib/specialresources/temprfp.php
- The Financial Management Board Secretariat, Government of the Northwest Territories developed a practical guide to working effectively with an evaluation consultant which includes a discussion in Section B, Finding and choosing your evaluation consultant, and a sample decision-making framework. This guide can be found at www.fin.gov.nt.ca/documents/forms-documents/consultantguide.pdf
- My Environmental Education Evaluation Resource Assistant (MEERA) provides information and lists other excellent resources on finding and working with an evaluator at meera.snre.umich.edu/plan-an-evaluation/plonearticlemultipage.2007-10-30.3630902539/finding-working-with-an-evaluator

Suggested Work Plan for Team Meetings

- The Imperial College Union provides hints on how to chair a meeting effectively: www.union.ic.ac.uk/resource/skills/chair.html
- Hints on how to be an effective member of a meeting can be found at: www.union.ic.ac.uk/resource/skills/meetings.html
- Meeting Wizard provides tips and guidelines to create effective meetings (scheduling s, agendas, chairing, taking minutes, ice breakers, scheduling software, and team building) (www.meetingwizard.org). Free online scheduling software saves time setting up meetings and increases the likelihood that all members will attend the meeting.
- UNESCO outlines guidelines for developing terms of reference for evaluations: portal.unesco.org/es/ev.php-URL_ID=24293&URL_DO=DO_TOPIC&URL_SECTION=201.html

Step 2 -Assess Organizational Capacity & Resources for Evaluation

Determine Evaluation Resources

Methods to contain evaluation costs include:

- Seek internal evaluation champions for your evaluation team who can contribute their expertise to direct any part(s) of the evaluation process.
- If you must hire outside evaluation expertise, determine how many days you can afford such assistance *(see approximate costs for evaluation specialists outlined in Step 1 - Tips & Resources*).
- Use in-kind resources *(e.g. program staff for data collection or data entry).*
- Ask stakeholder members on the evaluation team if they have access to resources from their organizations *(e.g. time or expertise).*
- Seek graduate students. Some post-graduate programs require completion of a student practicum placement. Determine student placement requirements ahead of

time, including the learning objectives students need to achieve to get the credit and the timelines for the placement.

- Train staff to use Microsoft Excel for simple data analysis.

Develop a Common Understanding of Evaluation

- Public Health Agency of Canada: Program Evaluation Toolkit (www.phac-aspc.gc.ca/php-psp/toolkit-eng.php)
- The Health Communication Unit: Evaluating Health Promotion Programs Workbook (www.thcu.ca/infoandresources/publications/EVALMaster.Workbook.v3.6.08.15.07.pdf)
- W.K Kellogg Foundation Evaluation Handbook (www.ojp.usdoj.gov/BJA/evaluation/links/WK-Kellogg-Foundation.pdf)

Determine Evaluation Resources

- A list of Master Degree Programs with a practicum placement can be found at www.phac-aspc.gc.ca/php-psp/master_of_php-eng.php

Step 3 - Develop Program Logic Model

- Dr. Brian Rush's Workshop for the TEIP Communities on Logic Models (teip.hhrc.net/docs/workshops/06Feb24BrianRushLogicModelPresentation.pdf)
- W. K. Kellogg Foundation: Logic Model Development Guide (www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf)
- The Health Communication Unit: Online Health Program Planner (www.thcu.ca/ohpp)
- Public Health Agency of Canada: Program Evaluation Toolkit (www.phac-aspc.gc.ca/php-psp/toolkit-eng.php)

Step 5 - Build Evaluation Framework

Indicators

Conceptual/theoretical frameworks exist to guide selection or development of indicators.

- **Kirkpatrick's four-level model** (coe.sdsu.edu/eet/Articles/k4levels/index.htm) is useful when developing indicators for a training/education program. For example, you may want to develop indicators that measure:
  - How participants react to the training
  - Change in participants' knowledge, skills and attitudes
  - Change in the participants' behaviours

- **Uptake of evidence-informed practices** - Kelly Skinner and others' "levels-of-use" model (www.phr.uwaterloo.ca/pubs/169-public-2007-10-03-329391.pdf)
- **Roger's Diffusion of Innovation** (www.rogerclarke.com/SOS/InnDiff.html).
- **Effectiveness of partnership** – Office of the Deputy Prime Minister's Strategic Partnership Taskforce's Partnership Assessment Tool (www.communities.gov.uk/publications/localgovernment/assessingstrategicpartnership)
- **Community Capacity** – Goodman RM et al. Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Education and Behaviour*, 1998. 25(3): p. 258-278.
- A summary of health promotion theories can be found in TEIP's ***Program Assessment Tool*** (teip.hhrc.net/tools/assessment_tool.cfm).

Data Collection Strategy

- Use multiple searching methods to locate existing data collection tools:
  - Post an inquiry on a listserv
  - Ask your colleagues, practice networks and known evaluation specialists
  - Search the web
  - Contact program coordinators/staff from other organizations who work in a related field
- Collect both quantitative and qualitative evaluation data in order to obtain a fuller picture of your program's impact.
  - Quantitative data will tell you what change and the magnitude of the change
  - Qualitative data will provide you with more in-depth information and will tell you why and how the changes occurred
- Pilot test data collection tools to assess readability, comprehension and cultural sensitivity for your intended audience.
  - Ask individuals representing the intended audience or someone who works closely with the intended audience to complete the data collection tool. Ask them to document any questions that were unclear, insensitive and/or any questions they thought should have been asked.
- An evaluation specialist can assist in developing or providing feedback on data collection methods.
  - Within your organization, an experienced epidemiologist or an individual with experience in developing data collection tools can provide feedback.
- Ensure your data collection method is **ethical**
  - The benefits must outweigh the risks
  - Be certain that no personal health information is revealed
  - Ensure questions are asked in a non-stigmatising, non-threatening way

- There should be no element of coercion
- Make results of the evaluation available to participants after the study
- Give participants the choice to not participate or to withdraw their participation at any time without repercussion

Methods of Data Analysis – See *Step 7 – Tips for Data Analysis*

Indicators

- The Heart Health Resource Centre (www.hhrc.net/pubs/skills/objective_indicators.pdf)
- Public Health Agency of Canada: Program Evaluation Toolkit (www.phac-aspc.gc.ca/php-psp/toolkit-eng.php)
- The Health Communications Unit provides consultative services on developing indicators (www.thcu.ca)

Sources of Health Promotion Indicators

- Health Canada website (search "indicators") (www.hc-sc.gc.ca)
- US Healthy People 2010 Local Health Indicators (www.healthypeople.gov/LHI)
- Canadian Council on Social Development (www.ccsd.ca)
- Canadian Tobacco Control Research Initiative (Indicators for smoking cessation) (ctcri.ca/en/index.php?option=com_content&task=view&id=30&Itemid=49)
- Federation of Canadian Municipalities Quality of Life Reporting System (www.fcm.ca)
- Association of Public Health Epidemiologists in Ontario (APHEO) (www.apheo.ca)
- Health Evidence Network (www.euro.who.int/Document/E88086.pdf)
- Victoria, Australia – Community Health Promotion Indicators (www.communityindicators.net.au/measuring_wellbeing)
- National Centre for Chronic Disease Prevention and Health Promotion (apps.nccd.cdc.gov/cdi/)

Evaluation Design and Data Collection

- Project STAR developed a Study Designs for Program Evaluation document which can be found at www.nationalserviceresources.org/files/legacy/filemanager/download/performanceMeasurement/Study_Designs_for_Evaluation.pdf
- The Ohio State University developed an Evaluation Handbook that lists the different methods of data collection on page 17 of the document (step 4) which can be found at ohioline.osu.edu/b868/pdf/b868.pdf

Quantitative Data Analysis

- ***Descriptive Analysis***
  - Taylor-Powell, E. (1996). University of Wisconsin Extension Program, Development and Evaluation Unit. (learningstore.uwex.edu/pdf/G3658-6.pdf)
- ***Inferential Analysis***
  - Trochim, W. K. (2006). Research Methods Knowledge Base: Inferential Statistics. This document provides information on different types of inferential analysis. (www.socialresearchmethods.net/kb/statinf.htm)
  - Texas State Auditor's Office. Methodology Manual. This document provides information on when to use inferential analysis, how to prepare the data, and information on the advantages and limitations of this type of analysis. (www.preciousheart.net/chaplaincy/Auditor_Manual/20inferd.pdf)

Data Collection Tools

- Survey Monkey is a software program that provides you with a survey editor you can use to create a survey using your web browser. This program also has collection features *(e.g. participants can complete the survey online)* and analysis features *(e.g. summarizes results)*. The basic account is free and upgrades can be purchased. (www.surveymonkey.com)
- Public Health Agency of Canada. Guide to Project Evaluation: A Participatory Approach. This resource examines various data collection methods and tools for public health program evaluation. (www.phac-aspc.gc.ca/ph-sp/resources-ressources/guide/index-eng.php)
- The Online Evaluation Resource Library offers a resource entitled Quality Criteria for Instruments. This resource offers guidelines to creating or identifying sound project evaluation instruments. (oerl.sri.com/instruments/instrcrit.html)
- Taylor-Powell, E. & Steele, S. (1996). University of Wisconsin Extension Program, Development and Evaluation Unit. Collecting Evaluation Data: Direct Observation. This resource offers guidelines on performing an observation data collection method and provides examples on the related data collection tools. (learningstore.uwex.edu/pdf/G3658-5.pdf)
- W.K. Kellogg Foundation. Data Collection. This resource provides information on points to consider when choosing a data collection method.(www.wkkf.org/Default.aspx?tabid=90&CID=281&ItemID=2810016&NID=2820016)
- The Health Communication Unit provides a Conducting a Focus Group Workbook. (www.thcu.ca/resource_db/pubs/982989842.pdf)
- The Community Tool Box provides information on conducting surveys. (ctb.ku.edu/tools/sub_section_main_1048.htm)

- Corporation for National & Community Services provides information on eleven ways to improve data collection. (nationalserviceresources.org/files/legacy/filemanager/download/performanceMeasurement/11_Ways_to_Improve_Data_Collection_AC.pdf)
- Performance Monitoring and Evaluation, TIPS, USAID Center for Development Information and Evaluation, Conducting Key Informant Interviews, 1996, Number 2. This recourse provides information and steps in conducting key informant interviews. (pdf.dec.org/pdf_docs/PNABS541.pdf)
- Penn State University, College of Agricultural Sciences, Cooperative Extension & Outreach, Program Evaluation website offers information on multiple data collection methods and examples of data collection tools. (extension.psu.edu/evaluation/data.html)

Step 7 - Collect & Analyze Data

Data Collection

- Ensure the person administering the data collection tool is skilled in the method chosen for your evaluation plan.
- Participants should not be pressured or made to feel uncomfortable when participating in a program evaluation.
- When collecting multiple data sets over time, enter the data into a spreadsheet *(e.g. excel sheet)* as soon as data is received.
- Fewer data entry errors occur when data is entered in small batches
- Add an identification number to each data collection tool, participant, group or data collection session.
    - Identification numbers help to keep track of the source of the raw data

Data Analysis

- Write the purpose of the evaluation and the evaluation questions on a sticky note and stick it on your computer screen where you can see it at all times as you analyze the data.
- On the master copy of the data collection tools in the margin write down the method of data analysis that will be used for each question.
- To reduce evaluator bias, have someone outside the program analyze the data and compare your results. Ensure that they have signed a confidentiality agreement.

Quantitative Data Analysis[21]

- **Code the data and input into a spreadsheet, database or statistical program**.
  - Develop a master coding sheet that identifies the codes used for each question of your data collection tool.
  - Assign numerical values to participants' answers. This provides easier analysis when using a software program. For example:
    - Code data as No = 1 and Yes = 2.
    - A "no" response is input into the spreadsheet as "1".
    - The percentage of participants who respond "no" is easily calculated.
  - Numerical responses *(e.g. age, minutes physically active/day)* are entered into the spreadsheet as is.
  - Code blank responses using a number that does not appear in other coding *(e.g. 99)*
- **Check for errors before data entry and double check data entry**. Look for:
  - Inconsistent data *(e.g. age stated as 56 and year of birth as 1983)*
  - Answers outside the range of codes *(e.g. 8 for a 1-5 response option)*
  - Out of the ordinary answers *(e.g. a participant states that they smoke 1000 cigarettes/day).*
- **Two people enter the data separately and results are compared**.
  - If data is entered into Microsoft Excel, merge the two workbooks and look for differences.
- **Do random spot checks of the data**
  - An individual who did not enter the data searches for incorrectly entered data by comparing random sections of the data entered with the raw data.
  - Look for errors such as transposed numbers *(e.g. 1.56 instead of 1.65).*

Qualitative Data Analysis

- **Organize and code the data:**
  - Write key points on Post-its or index cards and group them into themes.
  - Document themes and information in a table in Microsoft Word or Excel.
- **Two heads are better than one.**
  - Engage at least two individuals to analyze the data independent of each other to compare themes and to ensure the important themes are highlighted. This will strengthen the findings.
- **Select quotes to illustrate each theme**

[21] Offord Centre for Child Studies (2004). Working through the Data: Step 6. www.offordcentre.com/rsd/hac/report/06-5.html

- **Read, analyze and repeat**.
  - It may take several reviews of analyzing the data to identify key themes, patterns or insights.

Software Programs for Data Analysis

(**$** = *need to purchase software program,* **F** = *free software program)*

Caution: *When choosing a software program consider the issue of privacy (i.e. security of the data)*

Quantitative data analysis software programs include:

- **SPSS** (Statistical Package for the Social Sciences) (www.spss.com) **$**
- **SAS** (Statistical Analysis Software) (www.sas.com/technologies/analytics/statistics/stat/index.html) **$**

Qualitative data analysis software programs include:

- **AnSWR** (www.cdc.gov/hiv/topics/surveillance/resources/software/answr/index.htm) **F**
- **EZ-Text** (www.cdc.gov/hiv/topics/surveillance/resources/software/ez-text/index.htm) **F**
- **Survey Monkey** is a software program that can assist you with data collection and analysis. The collection features include the creation of a weblink to your survey, ability to track who responds to your survey and send follow-up reminders, and the option of setting collection restrictions. The analysis features include the ability to view a summary (quantitative analysis) of the responses, download your responses into a spreadsheet, and save results as a PDF. (www.surveymonkey.com) **F** **$**

Step-by-step Instructions

- **Relatively simple data analysis** can be done through **Microsoft Excel**: Leahy, J. (2004). University of Wisconsin Extension Program, Development and Evaluation Unit. (learningstore.uwex.edu/pdf/G3658-14.pdf)
- **Analyzing qualitative data:**
  - Taylor-Powell, E. and Renner, M. (2003). University of Wisconsin Extension Program, Development and Evaluation Unit (learningstore.uwex.edu/pdf/G3658-12.PDF)
  - The International Development Research Centre. Module 6: Qualitative Data Analysis. (www.idrc.ca/en/ev-106563-201-1-DO_TOPIC.html). In addition to step-by-step instructions, this module provides information on how to choose a software program to use.

Data Analysis

- My Environmental Education Evaluation Resource Assistant (MEERA) provides information and a list of resources on analyzing data (meera.snre.umich.edu/plan-an-evaluation/plonearticlemultipage.2007-10-30.4643560864/step-6-analyze-data)
- Trochim, W. K. (2006). Research Methods Knowledge Base. This resource provides information on data analysis concepts and methods. (www.socialresearchmethods.net/kb/analysis.php)

Quantitative Data Analysis

- Texas State Auditor's Office. Methodology Manual. This document provides information on how to prepare data for an inferential quantitative data analysis. (www.preciousheart.net/chaplaincy/Auditor_Manual/20inferd.pdf)
- Minter, E. & Michaud, M. from the University of Wisconsin Extension Program Development and Evaluation Unit developed a document called '*Using Graphics to Report Evaluation Results'*. This document explains why you should use graphics, examples of different types of graphics and when to use them. (learningstore.uwex.edu/pdf/G3658-13.PDF).

Qualitative Data Analysis

- Frechtling, J. and L. Sharp, (1997). National Science Foundation. This document provides qualitative advice on completing a qualitative data analysis. (www.nsf.gov/pubs/1997/nsf97153/chap_4.htm)

Step 8 - Document Evaluation Report

When developing recommendations:

- **Be realistic** - consider limiting factors, such as budget, which can act as barriers to implementing the recommendations
- **Stakeholders can provide useful insight** on what is realistic and effective given the limited resources and the context of the community you are working with.
- **Focus on quality rather than quantity** – a few recommendations with a large potential impact is preferable to many recommendations with little anticipated impact.
- **Be specific** – explain your rationale for recommending change and how it will enhance the program. Link these changes to your evaluation results.

- **Search the evidence for suggestions to enhance your program**.
  - The *TEIP Program Evidence Tool*[22] can be a source of support for your journey through evidence.
- **Examine process objectives separately from outcome objectives**
  - *Process objectives* consider the impact of how activities were implemented
  - *Outcome objectives* consider the impact of program components on intended outcomes

Step 9 - Disseminate Findings & Modify Program

When developing your messages remember:

- **Keep it relevant and action oriented** – tell stakeholders how the results relate to the actions and decisions that need to be made.
- **Keep it short and sweet** – tell the stakeholders only what they need to know.
- **Grab their attention** – outline the most important information first and present the information in a format that is attractive and matches the stakeholders' style.
- **Keep them informed** – provide key stakeholders with updates throughout the evaluation process with interim reports.
- **Tailor your communication style** for each stakeholder. For example, giving a presentation at a community meeting can be an effective method to disseminate findings to your intended audience. A poster presentation at a conference can be an effective way to disseminate findings to researchers.
- **Communications options include** *(but are not limited to)***:**
  - Posting on listservs
  - Presentations at conferences (*i.e. provincial or national Public Health Association annual conferences)* or community meetings
  - Publishing a peer-reviewed journal article
  - Writing newsletters, technical reports or news releases
- **Post your Evaluation Report online** *(e.g. Canadian Best Practices Portal).*

Develop Dissemination Messages

- The Community Toolbox provides information in the section titled "How Do You Communicate Your Evaluation Findings" at ctb.ku.edu/tools/en/sub_section_main_1376.htm

[22] Towards Evidence-Informed Practice (2008). TEIP Program Evidence Tool. teip.hhrc.net/tools/tools_evidence.cfm