# Cancer Centre for the Southern Interior
# **Evaluation Handbook**

*Prepared by:*

**Sharon Storoschuk**, MS, MPH
**Ingrid Pipke**, MA
**Chris Lovato**, PhD
*Centre for Community Health and Health Evaluation Research*
**Lynne Baillie**, PhD
*Cancer Centre for the Southern Interior*

*Artwork by:* **Leif Hansen**
*Formatted by:* **Kevin Walsh**

# Table of Contents

*Never doubt that a small group of thoughtful,*
*committed citizens can change the world.*
*Indeed, it is the only thing that ever has.*

**Margaret Mead**

# Evaluation Handbook Goal and Objectives

## Goal

To allow the community to evaluate their own primary prevention of cancer programs.

## Objectives

To provide a handbook for the community that will:

- increase their knowledge of evaluation terms and methods.
- increase the number of program goals and objectives that are *Specific, Measurable, Action-oriented, Realistic and Timed*.
- increase competency and comfort levels with carrying out an evaluation.

# How to Use This Handbook

The goal of this handbook is to make evaluation a user-friendly process. The concepts and language are simplified as much as possible. We follow the KISS principle: *Keep It Simple Simon*.

The intent of this handbook is two-fold:

- To provide you with information about the evaluation process: concepts, terms, tools and techniques, activities, and writing goals and objectives so that you will have a better understanding of what evaluation is all about.

- To provide you with a workbook in which you can develop your own evaluation plan.

The handbook takes you through each step. It describes the different stages in the evaluation process. It provides definitions for commonly used evaluation terms and concepts. And, it provides useful examples and exercises.

The exercises are designed for you to use with your specific program. By working through these exercises, you will be developing your own evaluation plan. Hopefully, by the end of the handbook, you will have a complete evaluation plan for your program.

The appendices contain additional information you may require in the future and a bibliography of reference materials that were used in developing this handbook. You may wish to refer to these handbooks and resources for further information or for examples of different types of evaluation and how they are carried out.

# Part 1 **Evaluating the Waddell Project**

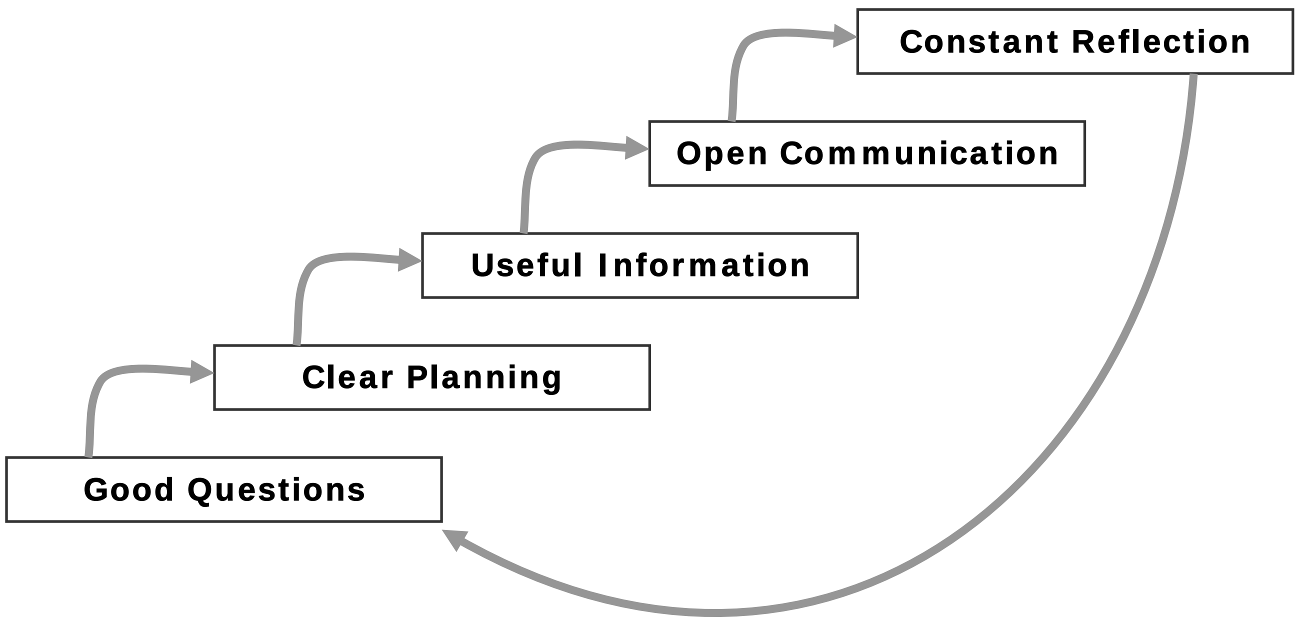
The Waddell Project came about through the growing recognition that many cancers are preventable, and that the health decisions that we make as individuals, families and communities can have a direct bearing on our own health and the health of those around us. The Waddell Project provides the support necessary for creating relevant and needed prevention programs by the people living and working in the community – community members, like yourself.

In the Project, each partner community is invited to collaborate in a research process to determine the health, cancer and cancer prevention concerns of its members. Armed with that information, the community then elects a Steering Committee which, in turn, advertises for, interviews, and hires a Community Coordinator to manage the day-to-day operation of the project within that community. The Community Coordinator and the Steering Committee work together to identify and prioritize the concerns voiced and to begin the program development phase. An important part of that development is the inclusion of a good evaluation plan.

The Waddell Project provides the support for each individual community to identify, develop and implement the primary prevention of cancer programs that best fits its own needs. The resulting programs belong to the community. In keeping with this, the question, “How do we know if we got it right?” must be asked and answered by the community. It is evaluation by the community for the community.

This manual has been designed by evaluation experts after talking with those communities currently involved in the Waddell Project. It is intended, as a guide for program developers to provide the information needed to know "if we got it right".

You will be given help in developing the evaluation cycle of:



# 1. Overview of the Evaluation Process

## a. Introduction

The purpose of this manual is to provide you, as community members interested in cancer prevention, with the information ***you*** require to evaluate ***your*** own primary prevention of cancer programs. It provides practical information so that you can design, carry out, and use the results of your evaluation, in a way that will improve your programs.

It is not unusual for people to feel a little overwhelmed by the thought of evaluation. However, good evaluation is essential to collect information or evidence which tells you and your community that the programs or services you deliver provide value to and make a difference in people's lives.

This manual takes you step-by-step through the design and implementation process. It also provides guidance for using the results of your evaluation to identify areas of success and to answer the question, "What do we need to do now?"

The information on evaluation design and implementation is based on the following four principles:

- Empowerment[1] – Empowerment is central to the Waddell Project. It "involves people assuming control and mastery over their lives in the context of their social and political environment"[2]. This evaluation manual has been designed to equip you, as a community member, with the tools and knowledge you will require to seek, gather and use the kinds of information necessary to provide prevention programs that respond to the needs and wants of your community.

- Participatory[3] evaluation – Many people are involved in designing and delivering the programs, as well as those community members who come to participate in them, and the funders supporting the project. All these groups – the stakeholders – need to work closely together to make sure that the right evaluation questions are asked and the best possible information gathered.

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[1] Patton, M.Q. (1990). Qualitative Evaluation and Research Methods 2nd Edition. Newbury Park, CA:Sage Publications

[2] Wallerstein, W. (1992) Powerlessness, empowerment, and health: Implications for health promotion programs. American Journal of Health Promotion, 6(3), 197-205.

[3] Health Canada's ***Guide to Project Evaluation: A Participatory Approach***

- Utilization – the intent of an evaluation is to provide you with reliable and accurate information that you can use to make on-going and future decisions about your program. As well, other agencies or groups who are carrying out similar types of programs can also benefit from the information that you gain as a result of an evaluation. To be beneficial, the results of an evaluation should provide useful information and recommendations.

- Communicative action[4] – this view sees change as a product of an empowering relationship between providers and recipients. That is, those who provide a program and its participants work together to determine the kind of changes that need to take place within their community. It is the basis of the Waddell Project philosophy whereby "…individuals and groups come to realize that, within the security of long-term commitment, support and assured community ownership, it is possible for them to engage in actions that will result in changing attitudes about health and prevention."[5]

[4] Habermas, J. (1984). The Theory of Communicative Action Vol 1. Boston: Beacon Press.
[5] Baillie, L, Bassett-Smith, J & Broughton, S. Using Communicative Action in the Primary Prevention of Cancer.

## b. What are the benefits of evaluation?

Evaluation is a process that involves collecting information or evidence that determines a program's **effectiveness** and **efficiency**. That is, the purpose of an evaluation is to provide evidence that a program has met or is meeting the goals and objectives that were decided upon.

To show that a program is effective, an evaluation provides evidence that participants benefited from the program. It answers the question, "What kinds of difference or impact did the program make in the lives of the participants?"

To show that a program is efficient, an evaluation provides evidence that a program and its resources were managed and delivered in a cost-effective manner. It answers the question, "Was the money for the program spent in the best possible way so that the program could achieve its objectives?"

As a result, an evaluation provides information that allows the community to make sound decisions on how a program can be improved to meet its needs.

*An evaluation provides benefits for all of its stakeholders.*
*For example, an evaluation can*:

- provide evidence on whether or not a program is achieving its goals and in the long-term, making a difference;
- identify any side benefits to a program or service;
- identify potential problems;
- identify changes that need to be made to the program;
- assist advisory committees, and staff to identify and make decisions and develop long-range plans;
- identify and assist in expanding effective service delivery;
- recognize the valuable input of people who are served by the program;
- assist in recruiting, retaining and identifying training needs for staff;
- assist in enlisting, motivating, and identifying training needs for volunteers;
- provide evidence on how efficiently resources are being used;
- assist in developing and providing reasons for budgets;

- assist in attracting potential new or additional funding agencies;
- provide feedback;
- attract potential supporters, participants and other individuals or groups who would like to be involved with the program;
- win support for innovative and creative approaches in delivering a program or providing a service;
- attract other agencies who wish to implement similar programs.

0 ***Exercise 1:*** In your group or working by yourself, please answer the following questions.

- How will an evaluation benefit ***your*** program?

- How will an evaluation benefit ***your*** community?

## c. Why use a participatory approach to evaluation?

Participatory evaluation "… *is a collaborative approach that builds on strengths and that values the contribution of everyone involved*."[6]

Participatory evaluation asks everyone involved to determine the success of the program. For the Waddell Project, this means that the community actively participates in the evaluation process. It also allows those requiring the information to develop and carry out the evaluation.

**Guiding Principles of a Participatory Evaluation Process** [7]

- It focuses on learning, success and action.
- It must be useful to the people who are doing the work that is being evaluated.
- It is ongoing. It includes ways to let all participants use the information from the evaluation throughout the project, not just at the end.
- It recognizes change in knowledge, attitudes, skills and behaviour.
- It recognizes shared interests among those doing the work, the people the work is designed to reach, the project funding agencies and the stakeholders.
- It depends on the community to define the specific evaluation questions, the measures of success, and realistic timeframes.

The individuals involved in the evaluation will define how they know whether or not a program is successful. They will also determine the extent to which a program has met its goals and objectives. As well, they will determine the extent to which participants or recipients of a program have changed their knowledge, attitudes, skills or behaviours as a result of participating in the program. And, they will determine how well the agency used its resources to carryout its program or activities.

All of those involved in the program and the community will receive information about the evaluation. They can then decide how to change the program if needed, or whether or not they want to stay involved in the program.

[6] Health Canada's ***Guide to Project Evaluation: A Participatory Approach***.
[7] Adapted from Health Canada's ***Guide to Project Evaluation: A Participatory Approach***.

Importantly, the intent of the evaluation process is to:

- identify criteria for success (i.e., Is it public participation? Goal achievement? Program or goal maintenance?);
- identify what is working well in terms of a project, program or service delivery according to program goals and objectives;
- identify those areas or processes that are falling short;
- provide recommendations on how to improve the program;
- provide useful information in a constructive manner on which to make future decisions;
- involve the community in a learning process.

0 ***Exercise 2:*** In your group or working by yourself, please answer the following questions:

- To make your evaluation participatory, who in the community should be involved in the evaluation process?

- How could you include these individuals or groups in the process?

- How could they benefit from their participation?

- How could you benefit from their participation?

## d. Why evaluate?

Undertaking an evaluation allows program developers to answer the following five fundamental questions about its programs or services:

1. **What?** *Did we do what we said we would do?*
2. **Why?** *What did we learn about what worked and what didn't work?*
3. **So What?** *What difference did it make that we did this work?*
4. **Now what?** *What could we do differently?*
5. **Then what?** *How do we plan to use evaluation findings for continuous learning?*

### *1. Did we do what we said we would do?*

In order to answer this question, the program must have the following features:

- clearly established goals and objectives;
- clearly identified measures of success, that is, what does success look like?;
- identifiable changes that will occur as a result of participation in a program;
- all activities within the program should be directed towards ensuring that the goals and objectives are met.

This question focuses on the work or the activities that the group carried out as part of its program or service delivery.

### *2. What did we learn about what worked and what didn't work?*

In order to answer this question, an evaluation process must be able to:

- identify what worked well in a particular program, that is, its successes;
- identify areas that were not as successful;
- provide information about what led to or prevented these successes from occurring.

This question helps you focus on strategies used, cost-effectiveness and efficiency of the strategies. It also allows you to assess the practicality and relevance of program goals and objectives. Plus, you can then examine the overall effectiveness of your program planning process. Based on this information *you* can make decisions about aspects of a program that should continue as is and about what can improve and how it might improve.

### *3. What difference did it make that we did this work?*

In order to answer this question, the evaluation process must allow you to:

- look at how successful the program was in changing knowledge, attitudes, skills and behaviours;
- identify unanticipated benefits or unexpected changes as a result of the program.

In other words, did your program have an impact? And, what kind of impact did it have? In order to answer this question, a program needs to have clearly established goals, objectives, and measures of success.

### *4. What could we do differently?*

In order to answer this question, you must be able to examine the information or evidence in order to make future decisions about the program. These decisions can focus on aspects of your program such as:

- clarifying goals and objectives;
- finding different strategies for carrying out a program;
- acquiring additional knowledge or skills required to carry out programs;
- developing more cost-effective ways of delivering programs or services;
- involving other individuals in the community.

### *5. How do we plan to use evaluation findings for continuous learning?*

In reviewing information or evidence gathered, you can then make decisions about how to use the findings while the program is being delivered. You can also consider the information before undertaking another or new program.

As well, evaluation findings can be useful for other individuals or groups who are considering or currently delivering the same or similar programs. It is important that you document and distribute your evaluation findings in such a way that others can benefit from the lessons learned in delivering a program. Your evaluation findings should be readily available to the community.

## e. Who should be involved in an evaluation?


When you plan an evaluation, it is important to identify the groups and specific individuals who should participate in an evaluation process. It is also important to clearly identify what their roles and responsibilities will be.[8] The important thing to remember is those who are involved in the evaluation should be as objective as possible. As a result, they should be able to provide new insights into how effectively and efficiently the program is operating.

One principle of participatory evaluation is that it encourages everyone who is involved in planning or implementing the program to be part of the evaluation process. It also encourages the recipients of the program to provide feedback. Different community members may participate at different times in the evaluation process. The following individuals and groups should be involved in an evaluation process.

[8] Depending on the scope of your program, you may also wish to think about hiring an outside evaluator to conduct either the entire or components of the evaluation on your behalf. See Appendix 2 for more information on using an outside evaluator.

**For the Waddell Project, the following groups are important:**

***Community Coordinator*** – this is the person who will be familiar with the program, its day-to-day operations, and all those involved.

***Community Steering Group Members*** – anyone who is involved in policy, program planning and direction setting for the program.

***Program Staff*** -- anyone involved in planning and implementing the program.

***Evaluation Sub-Committee Members*** – if required, this group would be responsible for overseeing the evaluation process. This group also makes sure that information on the evaluation process and results are fed back to individuals and the organization as a whole.

***Others*** – anyone else in the community or outside the community, either local, regional or provincial that is involved in delivery or evaluation of the program, who receives services from the program or who has a vested interest. For example, someone from the Ministry of Health interested in funding the program in the future, or, members from other communities interested in replicating your program. These stakeholders may have a direct or indirect interests in your program and should be identified somewhere in your program documents.

In following the principles of participatory evaluation, it is important that those conducting the evaluation take the following actions:

- involve and educate staff, volunteers, and the community in the process;
- communicate the process and results to all those involved;
- conduct the evaluation within the agreed to framework, time and budget;
- exercise impartiality in reporting the results, drawing conclusions, and making recommendations.

### *f. Who should use the findings?*

There are many different individuals or groups who can benefit from the results of your evaluation project. Ultimately, the community benefits the most from the results. This includes individuals that may be directly involved in the project such as your staff or supervisors, volunteers, participants, agencies that are assisting you in delivering your program, and your funding agency. These individuals or groups will most likely be interested in seeing what changes you decide to make, based on what you found out from your evaluation.

Other groups or individuals may have a more indirect interest such as other groups implementing similar programs, government agencies, existing or potential funding sources, current or potential partners, media or research and evaluation agencies. They will be interested in knowing about how your program worked, its successes, and why it was successful.

# 2. Evaluation in the Context of Program Planning

### *Starting from the Beginning …*

To be successful, the planning and evaluating of your program should go hand in hand. That is, you should be asking yourself evaluation questions as you design the program and think about its implementation. The following diagrams show how program planning and evaluation come together in the Waddell Project:

## a. Taking the project to the community

This diagram shows the planning and evaluation phases conducted by CCSI in bringing the project into the community and supporting the processes of community ownership. As you can see, the answers to each of the evaluation questions provide the basis for the next stage.

***CCSI Initiates***

**PLAN**:
Introduce Waddell Project to community

**EVAL**:
Is community interested in ownership?

***Community ownership increases***

**PLAN**:
Conduct community research

**EVAL**:
What are the community's attitudes, beliefs, and practices about prevention?

***Coordinator/Steering Group role increases***

**PLAN**:
Establish Community Steering Group and hire Community Coordinator.

**EVAL**:
Is research information adequate for community identification of program/resource areas?
What existing community frameworks are suitable to support the identified areas?

***Community ownership completed. These areas now the total responsibility of the community. CCSI's role should be consultative and financial support only.***

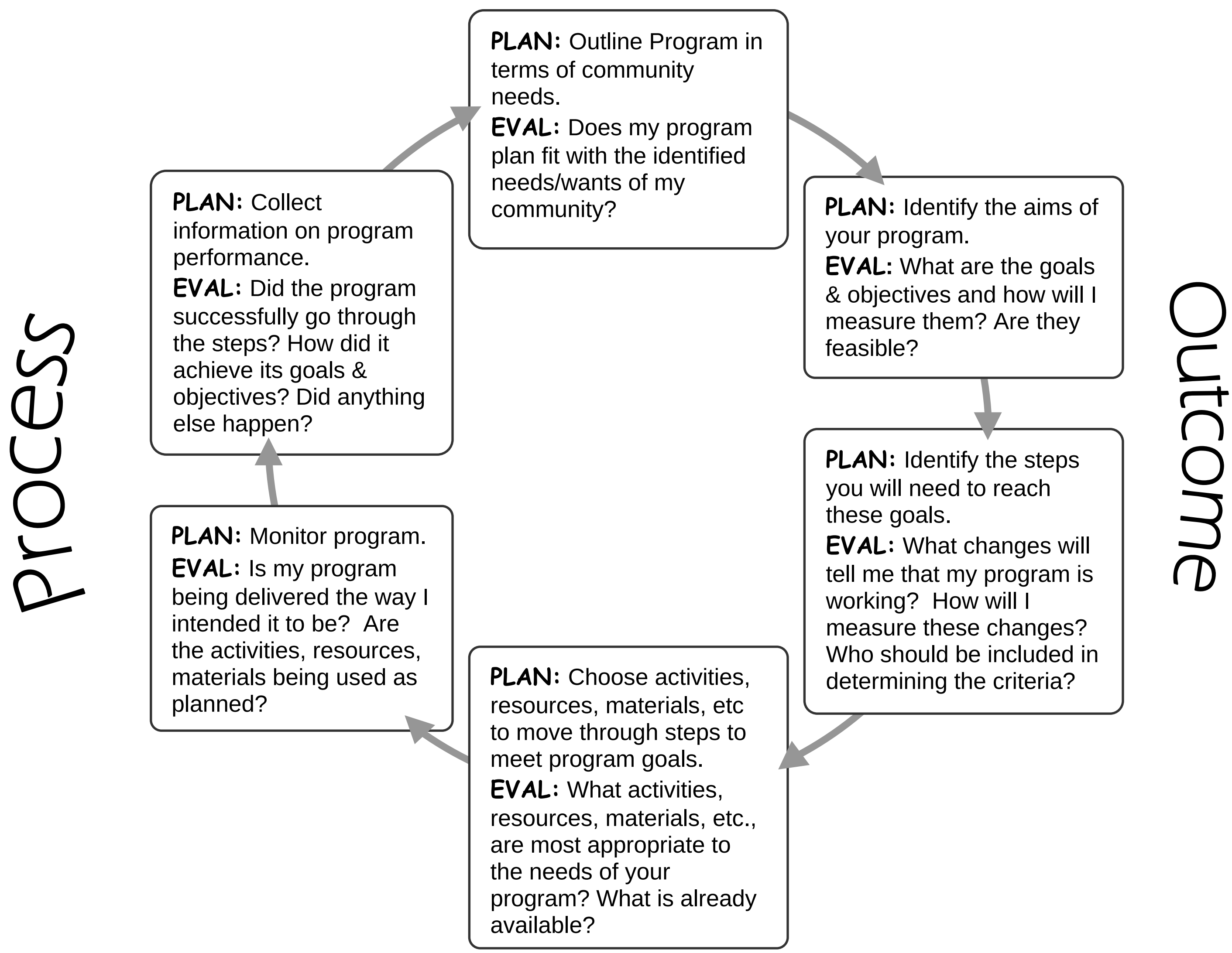
**PLAN**:
Support the design, development, implementation and evaluation of identified programs/resources/etc.

**EVAL**:
Are program development groups in place?
Are they defining program goals and objectives?
Have timelines been established?
Is reporting in place?

## b. Developing programs for your community

This diagram outlines the planning and evaluation phases that you will use as you work your way from ideas to action. As you can see, each side is labeled as either OUTCOME or PROCESS. Outcome questions answer the big questions: Are we making a difference? What does that difference look like? Process questions are no less important but can tend to be overlooked. They provide information about the *way* the program functioned: How was the program delivered? How was it received? What worked/ didn't work and why? One of the following sections provides more information about process and outcome evaluations, their importance, and how they work together.

The sequence of planning and evaluation stages should bring you full circle, ready to consider what your program should tackle next. In this way your program continually evolves and becomes more deeply a part of community life.



## c. Evaluation -- questions, questions, questions

Evaluations are about asking questions and then deciding the best ways to get useful answers. Before you start out on an evaluation, ask yourself the following questions:

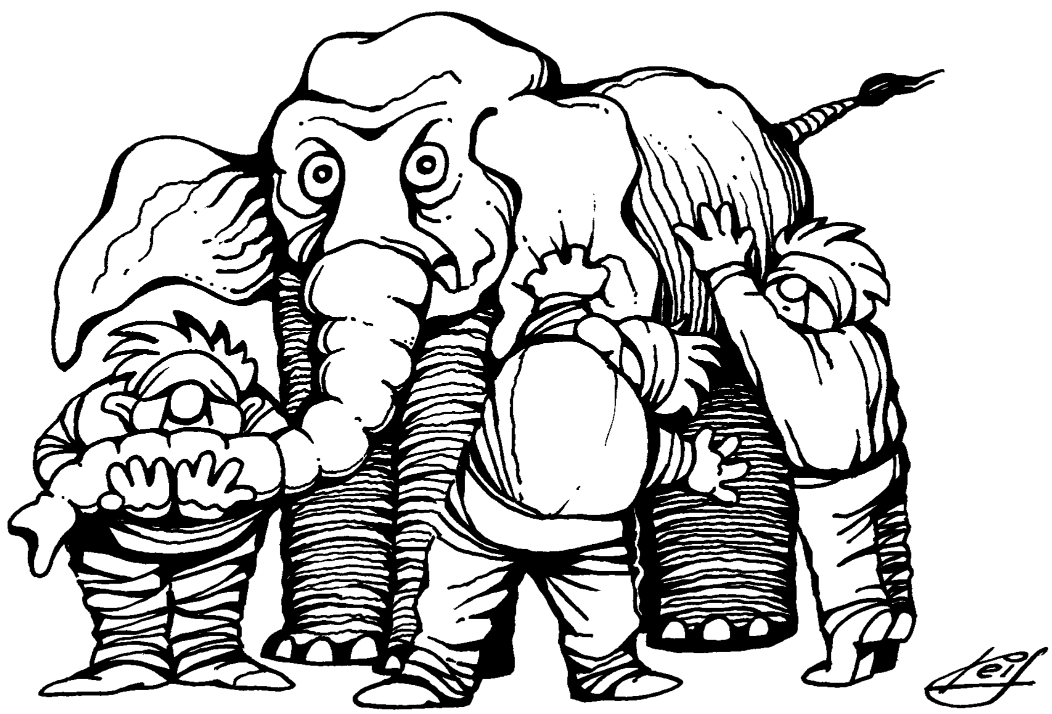
- Why am I doing this?
- What do I hope to learn?
- Will I be able to use the information I gather?

If the answers to these questions are fuzzy, you need to spend more time talking with the stakeholders and consulting with your program co-developers. **DO NOT PROCEED** until you have a clear understanding of where you want your evaluation to go. An evaluation that does not provide you with information that you and others can use is a waste of time, effort and money – and is also very frustrating. Time spent on the planning phase is well worth while. So is enough flexibility to allow you, as you see the information coming in, to change questions that turn out to be unhelpful or confusing.

It is important to understand that there will be trade-offs due to limited resources, limited time and the fact that social reality is too complex to be neatly pinned down in an evaluation plan (i.e., your evaluation won't take place in a social vacuum but within an existing situation). However, you can live with these trade-offs if you:

- Accurately identify and approach the **key** issues:
    1. Who are the primary stakeholder/interest groups for your evaluation?
    2. What is the main purpose of your evaluation?
    3. Who needs to be included in the evaluation process?
    4. What is the focus of your evaluation?
- Identify **key** factors external to your program that could influence it - positively or negatively - but that are beyond it's control.

## d. More than one perspective



In planning an evaluation, there are usually several different perspectives to be considered: those who design and deliver the programs tend to focus on different objectives than those receiving the program, who in turn have another viewpoint than those that administer or fund it. For example, funders will want to know how their money is being spent, while program designers will be interested in knowing if the program is being implemented as they intended.

Each stakeholder has a clear idea of what their part of the elephant looks like, but everyone's input is needed to describe the whole animal. That is why it is so important to get everyone together to come up with a single evaluation process that will provide a range of useable information.

How can this be done? Start by developing a sense of what program "success" or "effectiveness" would look like to those around the table. Find out how they would measure these and how they would know when their criteria had been met.

*The following section provides more information on defining measures of success, a step that is critical to your evaluation. The section also provides information on writing reports and making presentations that will provide information about the whole elephant while also specific information to groups with special interests in your evaluation.*

# PART 2 **THE EVALUATION PROCESS**

## 1. Definitions and Concepts

Before getting started, there are a few definitions and concepts that need to be clarified. These focus on the different types of evaluation and their importance.

### a. Levels of evaluation

There are two levels of evaluation: process and outcome. Both are important for a strong evaluation. This manual focuses mostly on outcome evaluation. People responsible for the program and funding agencies are most interested in knowing the effect that a program had on its participants. Outcome evaluations are more complex than process evaluations because they directly try to prove that a program is effective.

There are many terms used when discussing evaluation and it is worth mentioning some of the others that you may come across. Process evaluation is sometimes referred to as informative evaluation. Outcome evaluation is sometimes referred to as summative evaluation. Impact evaluation refers to the long-term, overall results of a program, such as a decrease in overall cancer incidence in Canada in 40 to 50 years.

This handbook uses the terms process and outcome evaluation defined as follows:

- Process evaluation looks at **how** the program is being used to reach its goals.
- Outcome evaluation looks at **how well** the program reached its goals.

## b. Process evaluation

Process evaluation looks at what was done to achieve the goals and objectives that you had set for your program. It focuses on how, when and which program activities were implemented. For example, process evaluation will answer the following questions:

- How many people participated in the program?
- Did the same people stay for the length of the program?
- Were all of the planned activities in the program carried out?
- Was the program carried out the way it was planned?
- Did the participants enjoy the activities?
- What were the major barriers to this program?
- What should be done differently next time?

Process evaluation is also a critical step in evaluating outcomes. It helps to interpret how or why you might have achieved your results. Process evaluation serves the following purposes:

- It monitors how a program is carried out;
- It provides information on who is accountable, that is, who is responsible for what;
- It provides information about why a program does or does not work;
- It provides information on when to best evaluate whether or not a program has been effective (for example, in some cases evaluating a program too early may not provide useful information);
- It provides information for revising program activities.

**For a process evaluation, it is important that you follow these steps**:

- Determine what information you will need to collect for each of the activities in your program.
- Develop or select a system for keeping records. For example, registering the participants in your program including names and addresses; keeping an activity log of what activities were carried out, when, where and who attended.
- Identify who will be responsible for carrying out the different activities involved in the evaluation.
- Collect and analyze evaluation data and information.  For example, How many people participated in your program?
- Conclude whether or not the process that you used to implement your program was successful.  For example, Did the activities in your program help to attain the effect you anticipated?  Did you receive positive feedback from your participants?
- Write and distribute reports.

## c. Outcome evaluation

People participating in a program often want to change in some way. They want to learn new information or skills or they want to change their behaviour.

In an evaluation, you want to identify how these participants changed their behaviour as a result of participating in your program. Or, you want to know whether or not they learned or changed in the way the program said they would.

Outcome evaluation describes the direct effects of the program activities. It assesses the effects of the program on the target population. That is, it looks at the impact that the program had on the group of people who participated in the program.

Outcome evaluation measures the short- and long-term changes in the participants' knowledge, skills, attitudes and/or behaviours that are a result of the program activity.

For example, outcome evaluation will answer the following questions:

- How much change did the participants' knowledge, skills, attitudes and/or behaviours change from the start of the program to the end?
- Are changes in the participants' knowledge, skills, attitudes and/or behaviours still present one year later or more?
- Is the program working?
- Are the program objectives being met?
- Is there a short-term and or a long-term impact?

**For an outcome evaluation, it is important that you follow these steps:**

- Clearly identify your measures of success, that is, using your objectives as a guide, be specific about what success looks like.
- Identify the tools that you will use and how you will collect your information (for example, identify what survey/questionnaire you will use and how you will distribute the survey/questionnaire to the participants).
- Identify and collect baseline information. That is, if you want to know how much participants changed as a result of participating in your program, you have to know the level or information or skill with which they started. As a result, you need to gather this information immediately before or just after the participants start in the program.
- Collect and analyze your information or data. Look at how or how much participants changed based on the information that you collected at the start of the program and at the end.
- Conclude whether or not the outcomes were achieved. That is, did the participants change and if so, did they change to the level that you had stated in your objectives.
- Write and distribute reports.

Outcome evaluations try to measure whether or not participant knowledge, attitudes, skills, and/or behaviour changed as a result of their participation in your program. If you are planning on conducting an outcome evaluation, you will also need to collect baseline or benchmark data so that you can compare results over the longer term. By showing in what way or by how much participants changed, you will be able to more strongly argue for future support for your program.

Outcome and process evaluation go hand-in-hand. Process evaluation provides you with information as to how, when and which program activities are implemented. Outcome evaluation tells you about the impact of the programs and its activities on the participants. You are expected to carryout both outcome and process evaluations.

You will notice that the actions or activities for carrying out a process or outcome evaluation are similar. The following table[9] summarizes the key points of both a process and an outcome evaluation that you will need to keep in mind as you plan your evaluation.

[9] *The Michigan Abstinence Partnership Evaluation Resource Guide*

## Process and Outcome Evaluation

| | ***Process Evaluation*** | ***Outcome Evaluation*** |
|---|---|---|
| ***Key Focus*** | • Looks at how you carry out your program. | • Looks at the effects that your program has on the participants. |
| ***Related Questions*** | • Did you implement your program or activity as you planned?<br>• What are the major barriers?<br>• How can you improve the activity or program?<br>• What can you do differently next time? | • Is the program working?<br>• Are goals and objectives being achieved?<br>• Are participants changing in their level of knowledge, skills, attitudes and/or behaviours? |
| ***Suggested Use*** | • To repeat program activities in the same way as they were first implemented.<br>• To identify potential problems in carrying out an activity and make necessary adjustments or changes. | • To assess change in participants' knowledge, skills, attitudes, and/or behaviours. |
| ***Measurement Tools*** | • Questionnaires or surveys asking participants how satisfied they were with the program. An activity log to keep track of how a program was implemented.<br>• An activity log to keep track of how the evaluation was implemented.<br>• Information gathered using focus groups & interviews. | • Questionnaires or surveys given to participant at the beginning and end of the program (e.g., pre-post survey) asking them about knowledge, skills, attitudes, and/or behaviours<br>• Incident reports.<br>• Statistics from other sources. |
| ***Strengths and Weaknesses*** | • **Can** assess how well your program is implemented.<br>• **Can** identify perceptions about your program's benefits.<br>• **Cannot** assess whether or not participants behaviour changed. | • **Can** assess actual change in the participants that can be used to draw conclusions about your program's effectiveness.<br>• **Cannot** assess how well the program is implemented. |

# 2. Five Steps for Program Evaluation

Now that we have discussed the definitions and background of evaluation, we turn to the practical hands-on steps of planning your program evaluation.

Evaluating a program is a process that involves five basic steps. This manual describes each step and provides examples.

**Step 1**: Clarifying Program Outcome Goals and Objectives

**Step 2**: Designing an Evaluation Plan

**Step 3**: Developing a Information Collection Plan

**Step 4**: Analyzing and Interpreting the Information

**Step 5**: Reporting Evaluation Findings

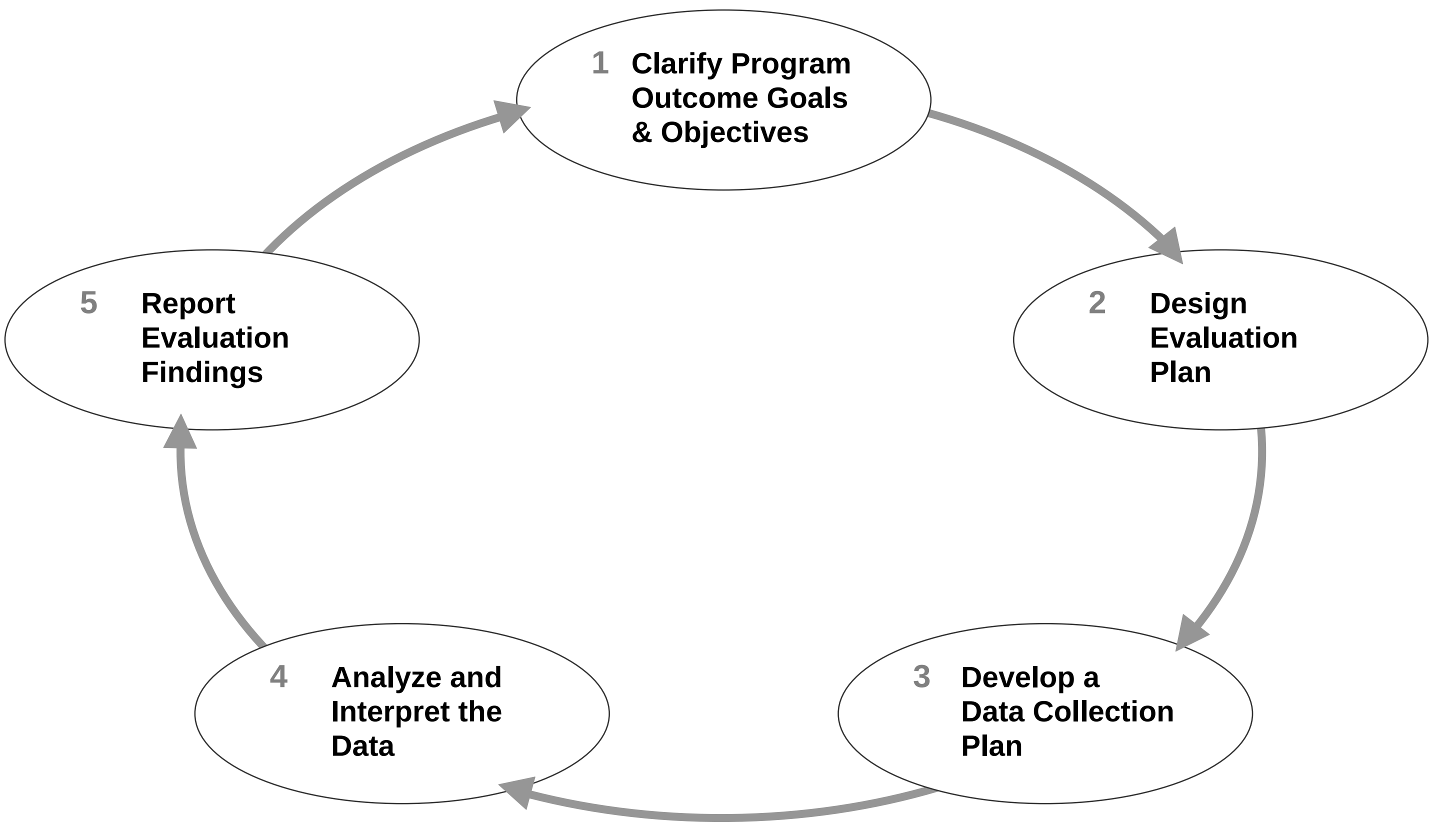
Figure 2 on the next page shows how these steps relate to each other.

It is important to remember that a program evaluation does not begin once a program has started or after it is completed.

> Ideally, a program evaluation plan should be designed at the same time as a project begins or as a program is in its planning phases.

This begins with establishing goals and objectives and it continues throughout the program implementation. Depending on the nature of the evaluation, it may also continue after a program is completed. For example, if an evaluation is designed to measure the longer-term impact of participation in a program, it may be carried out several years after individuals participated in the actual program. The timeframe for your evaluation is critical to the planning process.

## Figure 2:  Five Step Evaluation Model



# Step 1 Clarify Program Outcome Goals and Objectives


We have a purpose for whatever we do. In planning a program we have reasons for wanting this specific program and an idea of what we want to accomplish. These accomplishments can be called goals and objectives.

A program is successful when it accomplishes what it sets out to do, or, when it meets its' goal(s) and objectives. In order to evaluate a program's effectiveness and efficiency, the program goals and objectives must be clear and concise. In addition, as part of the planning process, it is important that you identify the measures of success or success indicators. That is, you will need to answer the question: what will success look like at the end of the program or project? Measures of success are the identifiable changes that individuals can expect to see as a result of participating in your program.

## a. What is a goal?

Goals can be described as *general statements of what a project is trying to do*.[10]

Goals are more general than objectives and often encompass the purposes of multiple objectives.[11] Measuring the objectives associated with that goal determines whether or not a goal is successful.

Examples:

> The health of youth in the Southern Interior will be improved by decreasing their incidence of skin cancer.
>
> The health of people living in British Columbia will be improved by decreasing youth smoking rates.

[10] Health Canada's *Guide to Project Evaluation: A Participatory Approach*
[11] *The Michigan Abstinence Partnership Evaluation Resource Guide*

## b. What is an objective?

Objectives can be described as *specific, measurable statements of desired change(s) that a project intends to accomplish by a given time*.[12]

Objectives are not just activities. They are statements that tell you what you hope to accomplish. They are the short-term steps needed to achieve the long-term goal. They should be specific, measurable, action-oriented, realistic and timed.

Examples:

> By the end of August, 2000, the use of sunscreen by teenagers aged 13 to 18 living in the Southern Interior will increase by 10%.
>
> Smoking rates of teenagers aged 15 to 18 living in British Columbia will have decreased by 5% by the year 2002.

**Good program objectives must meet two criteria**:

- they must identify the specific changes that a project is designed to accomplish.
- they must ensure that the changes are measurable.

**In general, a program or project will try to change individuals in the following areas**:

- Knowledge – by increasing the knowledge that participants have about a particular issue or subject.
- Attitudes – by developing attitudes so that participants will likely change their behaviour in a positive manner.
- Skills – by developing skills so that participants can behave differently.
- Behaviour – by maintaining or changing participant behaviour to reflect a healthy lifestyle.

Once you identify the type of change, then it is important to determine if you can measure how and by how much participants changed. That is, is the change measurable?

[12] Health Canada's *Guide to Project Evaluation: A Participatory Approach*

## c. How do you write clear and concise program objectives?

In writing program objectives, it is important to differentiate objectives from activities. Like goals, objectives provide direction. People will participate in activities (i.e., events or actions) in order to reach the objectives.

There are five important elements to writing clear and concise program objectives. Objectives should be: ***S**pecific, **M**easurable, **A**ction-oriented, **R**ealistic, and **T**imed or SMART*[13].

***Specific***: Objectives are specific if they allow you to more easily measure whether or not your objective was met. Write your objectives to reflect each of the program activities. Identify your specific or target audience. And, remember that each objective should contain only one main idea.

| When writing **specific** objectives, keep the following questions in mind. | |
|---|---|
| **Who is expected to change?**<br>**Who are you targeting?** | e.g., Children aged 6 to 12 years;<br>Adults living in Kelowna;<br>Sunbathers on the beach in the Southern Interior;<br>Participants in your program |
| **What do you want to change?** (e.g. attitudes, knowledge, behaviour) | e.g., Increase the use of sunscreen;<br>Change the defeatist attitudes of people regarding cancer prevention;<br>Decrease the number of teens that start smoking;<br>Increase the number of teens and adults who stop smoking. |
| **Where do you expect the change to occur?**<br>(e.g. the location, such as in the schools, community, city, state, etc.) | e.g., In Kelowna;<br>In all elementary schools in the Southern Interior. |

[13] *The Michigan Abstinence Partnership Evaluation Resource Guide*

***Measurable***: An objective is measurable if you can provide a "count" or state "how much". This is the size or amount of change – how much should the behaviour change? In order to determine whether or not your participants changed, you must be able to measure change on a given characteristic (e.g., knowledge, skills, attitudes, and/or behaviours).

As described before, in order to know whether or not participants changed, you have to know the level where they were at the start of your program. And then, you have to measure again at the end of the program to see if there was any change. You can gather this type of information using tools such as questionnaires or surveys or by using methods such as phone interviews or focus groups. An upcoming section provides more information on how to gather this information.

| When writing **measurable** objectives, keep the following questions in mind. | |
|---|---|
| **What short-term steps do you want to accomplish?** | e.g., An increase of 10%;<br>4 out of 5 people |
| **How would you measure the objective?** | e.g., Pre-post survey with question asking about a specific knowledge, skill, attitude, and/or behaviour.<br>*How many cigarettes have you smoked in the past 30 days?* OR<br>*In the past 7 days, how many times have you applied sunscreen?* |

***Action-oriented***: An objective is action-oriented if it describes the change and direction in which participants will change. That is, will there be a change in the participant's knowledge, skills, attitudes, and/or behaviours? And will this change increase or decrease? Will they increase their knowledge? Will they decrease their use of a negative behaviour? Use an active rather than passive voice to write your objectives. That is, use an action verb.

| When writing an **action-oriented** objective, keep the following question in mind. | |
|---|---|
| **How many or what percentage of recipients is expected to change?** | e.g., 5% of the students *will increase their knowledge* of sun safety;<br>80% of teens *will report never having smoked*;<br>30% more teens *will be using sunscreen* in August than did in May. |

***Realistic***: Objectives should be realistic. Meeting objectives depends on your program activities, your available resources, and what you can reasonably deliver. Look at the content of your activities, the length and how often you have contact with participants, and the money and people you have available to deliver the program. Then, consider whether or not your objectives are feasible.

| When writing a **realistic** objective, keep the following question in mind. | |
|---|---|
| **What makes you think the goal is doable?** | e.g., The program is comprehensive and intense.<br>And/or, research has proven this program is effective.<br>And/or, there are enough staff resources to implement it.<br>And/or, the program has been successful in another setting or with a different group. |

***Timed***:  Your objectives must be realistic in what you expect to change as well as the timeframe of your activity. They should state when you expect to see changes in participants' knowledge, skills, attitudes, and/or behaviours.

| When writing a **timed** objective, keep the following question in mind. | |
|---|---|
| **When do you expect the change to occur?** | e.g., end of the program;<br>in 6 months;<br>by the end of the school year. |

Example of a **goal** that is *SMART:*

> The incidence of cancer in the population living in the Southern Interior will decrease by 10% by the year 2030.

A goal that is <u>not</u> *SMART* :

> To decrease the incidence of cancer.

This goal is too general and does not specify a target audience, how much of a change will occur and by when.

Example of an **objective** that is *SMART*

> The positive attitudes towards not smoking of all junior high and high school students in Kelowna will increase by 5% in 6 months, as measured by a pre- and post- survey.

An objective that is <u>not</u> *SMART*:

> To change teens' attitudes about smoking.

Again, this objective is too general and does not specify how much of change, by when, or which teens.

0 **Exercise 3**: Write one goal and it's objectives for your program, using the "Writing *SMART* Goals and Objectives Worksheet".

# Writing *SMART* Goals and Objectives Worksheet

**Goal:**

| | Question | Answer |
|---|---|---|
| ***S**pecific* | ***Who*** is expected to change? | |
| | ***What*** do you want to change? (e.g., knowledge, skills, attitudes, and/or behaviours) | |
| | ***Where*** do you expect the change to occur? (e.g., in the schools, community, city, etc.) | |
| ***M**easurable* | How would you ***measure*** the objective? | |
| ***A**ction* | ***How many or how much*** change is expected? | |
| ***R**ealistic* | What makes you think the goal is ***doable***? | |
| ***T**imed* | ***When*** do you expect the change to occur? (e.g., end of program, in the next 6 months, etc.) | |

**Objectives:**

## d. What is program effectiveness or success?

A program is successful if it meets its goals. This is determined if a program meets its objectives. You must decide beforehand what signifies success. That is, you need to clearly define what success will look like. And you need to clearly state how you will measure that success.

Sometimes, as a result of your evaluation you might discover that there were unanticipated outcomes. That is, participants may have benefited in ways that you had not thought about. Or, there may have been unanticipated negative consequences as a result of participating in your program. In both instances it is important to identify these so that you can either enhance the positive outcomes and/or minimize the negative.

Following a previous example, success is described as an increase in teenage use of sunscreen. Success is measured by an increase of 10%. This is your measure of success. If after the program is completed, there is only an increase in sunscreen use of 8%, is the program still successful?

Describing and measuring the levels of success is critical in setting your objectives. As a result, all of your key stakeholders (program staff, steering committee, community members) should be involved in the discussion to determine these levels of success.

## e. What are measures of success?

Measures of success are the identifiable changes that you expect will occur as a result of participating in a program. That is, what will success look like?

Measures of success are sometimes called success indicators or success criteria. They often are based on a group's assumptions about the kinds of changes, such as, changes in knowledge, skills, attitudes or behaviours that can be expected as a result of the program.

There are several benefits to developing good success indicators[14]:

- It helps clarify project goals and objectives and ensure that they are measurable.
- It helps identify factors that are unique and that reflect community characteristics and needs (for example, the level of success for a smoking cessation program may be different for young people of different age groups or different genders).
- It helps focus strategies and work plans to address potential barriers to success.
- It helps increase commitment to provide answers about the impact that a program has.

The important thing about measures of success is that they answer the questions: What will success look like? Will you and I agree that this is what success means? They are also directly related to your goals and objectives.

While measures of success are important for your outcome evaluation, do not forget about your process evaluation. It is also important to consider what information you want to collect to tell you how your program was delivered.

[14] See Health Canada's Guide to Project Evaluation: A Participatory Approach for a more detailed description of success indicators, how to develop indicators, and indicators that are relevant to different types of programs and activities.

0 **Exercise 4:**

Use your *SMART* objectives to write a list of success indicators for evaluation of your outcomes.

1. ______________________________

2. ______________________________

3. ______________________________

4. ______________________________

5. ______________________________

How will you show that you were successful in implementing your program for your process evaluation?

6. ______________________________

7. ______________________________

8. ______________________________

9. ______________________________

10. ______________________________

## Step 2 Design an Evaluation Plan

Once you have identified your program goal(s), objectives, and measures of success, you can turn your attention to designing your evaluation plan. The success of your evaluation process depends on how well you plan before starting your implementation.

As part of your planning process, it is important to think about and provide answers to the following questions:

a. Who is your target population?

b. How will your evaluation findings be used?

c. What is the timeline for your evaluation?

d. What resources do you have available?

The answers will help you to determine the resources that you need to carry out your evaluation. It will also help to identify the strategies, methods, and the tools that you will use to collect your information or data.

## a. Who is your target population?

As part of your evaluation, it is important to identify your target population. That is, who should be participating in your program? And, are these in fact the individuals that participated in the program? In some cases you may find that the people who participate in your program are not the group that you actually had intended. As well, how can you reach these individuals to ask them to participate in your evaluation?

In order to make sure that you have reliable evaluation results, it is important to have a substantial number of individuals who participated in your program for the full duration. Did enough people participate in the program for the full-length of the program? For example, it would be very difficult to draw accurate conclusions about the success of your program if very few people participated in the evaluation or if they had not participated in the entire program.

As well, for a longer-term follow-up evaluation, you will need to have access to a sufficient number of participants who are able and willing to participate.

## b. How will your evaluation findings be used?

Evaluation findings can be used in several different ways:

- To make changes to and improve your program or service delivery.
- By funding agencies to justify providing new or on-going support for your program.
- To provide feedback to staff and volunteers on the success of their work or efforts.
- By other individuals or groups who are interested in implementing a program similar to yours.

How the findings will be used will influence your choice of evaluation strategies, methods, and tools, and will help determine what success looks like.

## c. What is the timeline for your evaluation?

The length of time that you have to carry out an evaluation will have an impact on the type of evaluation processes and tools that you choose. It will also have an impact on the resources that you will require to do the evaluation.

If you are conducting an outcome evaluation that includes a longer-term follow-up, you will need to factor this into your timeline. Or, if you have only a short period of time to implement and evaluate your program, you may need more people to help with the evaluation. You will need to plan your evaluation strategy accordingly.

## d. What resources do you have available?

The type of evaluation process and tools that you choose will have an impact on the resources that you require to carryout your study. Resources include staff, time limitations of the program, money, or office supplies. Think carefully about who you will need, what they will do, and how long it will take them to carry out the activities involved in the evaluation. You will need to think about and identify those people who will be involved in designing, collecting, analyzing and interpreting the data or information. In some cases, you may have all the people that you need. At other times, you may need to bring in external resources such as a consultant to help with specific tasks such as analyzing data.

It is also important to consider the level of previous experience that individuals have had in conducting an evaluation and the amount of time they have available for this initiative. As well, you will need to determine whether they need any additional skills training in order to do the required tasks.

And above all, ask the question: Are they interested in participating in the evaluation process? If not, it would be better to find individuals who are interested in and committed to being involved. As well, as mentioned earlier, it is important to keep in mind that individuals need to be able to step back and be objective about the evaluation process, particularly if they will be involved in activities such as designing questionnaires or conducting interviews or focus groups.

0 **Exercise 5:** In your group or working by yourself, please take some time to answer the following questions about your evaluation before moving on to the next section. Your answers will have implications for the evaluation processes, data collection plan, and tools that you decide to choose.

- Which activities are related to each objective?

- Who is your target population? How will you make sure that you have access to this group in the short and longer-term?

- How will your evaluation findings be used? Who will read the evaluation report? How will they benefit from reading the report?

- What is the timeline for your evaluation? What impact will this have on resources?

- What resources do you have available to design, collect, analyze and interpret the data?

- What kind of training might staff require to assist in carrying-out the evaluation activities?

# Step 3 Develop an Information Collection Plan

By the time you reach this step, you should have your goals and objectives written and an evaluation plan in place. You now know who you are targeting, what behavior, attitude or knowledge you want to change, and how you are going to do it. Next, you need to develop a plan for collecting your information. This section will help you develop that plan.

Your information collection plan should answer the following questions:

- What information needs to be collected?
- How will you collect your data, that is, what methods and tools will you use?
- Who will collect the information?
- When will the information be collected?
- Where will the information be collected?

To answer these questions, this section includes the following:

a. Two types of data methods: Qualitative and quantitative

b. What data or information needs to be collected?

c. How will you collect your information?

d. Who will collect the information?

e. When will the data be collected?

f. Where will the data be collected?

## a. Two types of collection methods: Qualitative and quantitative

First, there are two types of data methods, quantitative and qualitative. Some researchers believe that one type is better than the other. However, in evaluation both are important and useful. Which method you use depends on the questions you are trying to answer. It is important to choose the method that best suits the information you are collecting. Most evaluations use a combination of the two methods. And, both methods are used for collecting data for both process and outcome evaluations.

### *i. What are qualitative methods?*

Qualitative methods " *permit the evaluator to study selected issues in depth and detail*."[15] That is, qualitative methods are subjective and are used to find out the feelings, beliefs, and impressions of the people participating in the program and/or evaluation. They describe and explain.

Some characteristics of qualitative methods:

- They are used to gather detailed, in-depth information.
- They are not always generalizable to the entire population.
- They provide language, context, and relationships of ideas.
- They cannot be easily compared statistically.

The qualitative methods most commonly used are:

- focus groups
- telephone interviews
- in-person interviews
- observations
- case studies

[15] Patton, M.Q. (1990). Qualitative evaluation and research methods: 2nd edition. Newbury Park, CA: Sage Pulications. (p. 13)

### *ii. What are quantitative methods?*

*"Quantitative methods are ways of gathering objective data that can be expressed in numbers"*.[16] That is, quantitative methods are objective and involve collecting information in the form of numbers to be analyzed. Using quantitative methods can be beneficial because the results can be shown to be statistically significant.

Characteristics of quantitative methods:

- They provide structured data often collected from a large number of participants.
- They can generalize and quantify results.
- They can be compared statistically.

The quantitative methods most often used are:

- surveys/questionnaires
- counting systems or records.

[16] CDC (1998). Demonstrating your program's worth (p. 43)

## b. What data or information needs to be collected?

There are a number of different types of information that you will want to collect: demographic information, process information and outcome information.

i. **Demographic information** are important to describe your population. You will want to know exactly who participated in your program This information also allows for comparisons between groups to see if different changes occurred in different groups because of the program. For instance, you can analyze your data to see if there is a difference in how many females smoke compared to how many males smoke.

Examples:

age, gender, education level, income level, location, and cultural background

ii. **Process information** are important to describe how your program was implemented. That is, did you do what you said you would do? This can be helpful when you explain your results.

Examples:

number of sessions participants attended; number of participants who attended each session; where and when intervention took place; were there any other similar programs that the participants attended during the time of your program; was there any other event in the community that may have influenced the participants in your program.

iii. **Outcome information** are important to show if your program was successful. Your indicators of success and your objectives drive the decision about what data needs to be collected. Using these as a guideline you can choose what methods and instruments will be needed to collect the relevant information.

Examples of outcome data/information:

number of teens that smoke; how often do participants apply sunscreen; are people concerned about cancer; what are their concerns

## c. How will you collect your data?

Selecting methods and tools for collecting your information or data is very important. The following methods and tools are most commonly used in collecting the data or information needed to measure progress towards your objectives and goals.

- The most commonly used methods are conducting a focus group or interviews (in-person, by telephone), administering questionnaires or surveys, reviewing records, observing people, or using a case study.

- The most commonly used tools are: surveys or questionnaires, focus groups or interview questions (sometimes called an interview schedule), and records review.

- Evaluation tools can be modified from already existing tools or by creating new ones.

### *i. Surveys or questionnaires*

Surveys or questionnaires are instruments used to collect information to describe, compare and assess knowledge, skills, attitudes and/or behaviour. (For our purposes, there is no difference between surveys and questionnaires.) Most often when you use a survey or questionnaire you will want to collect data at different points in time. You can then compare the results to see if there were any changes in knowledge, beliefs, attitudes and/or behaviours.

The best use of a survey or questionnaire is when you:

- need uniform responses from a large number of people that can be compared.

- want easily measurable knowledge, belief, attitude and/or behavior information.

- plan to compare changes in responses before and after an activity.

Tips for <u>using</u> a survey or questionnaire:

- Use an existing standardized instrument instead of creating your own whenever possible.
- If comparing before and after, remember to ask for information that will allow you to identify subjects (this can be done anonymously by using the last 4 digits of their phone number, or making up an identifier; see example below).
- Include demographic information such as gender, age, grade, place of residence, income level, and education level.
- Include instructions that are easy to understand.
- Ask the same questions and use the same wordings on any pre- and post-surveys.
- Use language that your target audience will understand, and keep it simple.
- Make sure it is culturally sensitive (e.g., don't use language or slang that may be offensive to certain ethnic groups).
- Keep questions short and make the survey as short as possible.
- Use close-ended questions whenever possible.
- Be sure that each question addresses only one topic at a time.
- If you develop your own survey, pilot-test it to work out the wrinkles.
- If you plan to administer the survey or questionnaire by telephone, make sure your telephone interviewers have been well trained. Each interviewer should follow the same procedures and ask the same questions, in the same way. It is very important that interviewers do not influence the participant's answers in any way.
- If you are using a survey or questionnaire that someone else or some other agency developed, make sure that you ask permission to use their survey or questionnaire. This avoids any possible complications around copyright.

Tips for <u>administering</u> a survey or questionnaire:

- You must get consent from parents, school administration, and teachers if you are administering the survey in schools.
- Keep track of when, where, by whom and to whom the surveys are administered.
- Ensure participant anonymity and confidentiality. This can be done by using an identifier, which is a code made up of letters and/or numbers unique to the participant (see example below).
- Have enough time set aside for participants to complete the survey.
- Give exactly the same instructions every time the survey is administered.
- Reply to participants' questions in the same manner, such as, "Don't worry, just do the best you can. There is no right or wrong answer."
- Keep all completed surveys in a secure place, especially if they contain sensitive and confidential information.
- Promptly enter your data into your database.

**What is the difference between close-ended and open-ended questions?**

| ***Close-ended Questions*** | ***Open-ended Questions*** |
|---|---|
| • Respondents are given a set of answers to choose from; a list of possible answers is usually provided. | • Respondents can reply in their own words; they can express their thoughts, feelings, and emotions about a topic. |
| • Respondents are forced to choose from the alternatives provided. | • Respondents can provide their own responses. |
| • They are used to collect quantitative data or information. | • They are often used to collect qualitative data or information. |

**Example of a code used to identify participants' surveys while keeping their identity unknown**.[17]

Please read each sentence below carefully and write the correct letter for each question on the line. Print clearly.

First letter of your middle name (if no middle name, write "Z") ______
First letter of the month you were born in ______
First letter of your gender: "m" for male and "f" for female ______
First letter of your mother's first name (if unknown, write "X") ______

[17] Taken from the *School Health Survey*, University of Guelph & University of Waterloo.

### What is a standardized survey?

#### Using Standardized Surveys

A standardized survey means that it has been tested for reliability and validity. Although you are only collecting data for your program, it is important to think about how else you may want to use this data. One way is to compare it to data collected by other programs in either the same region or another region. To do such a comparison would require that the information in both regions is collected the same way. Using a standardized survey is an easy way of collecting this information.

For example, using a standardized survey would be helpful if you were collecting data on cancer prevention in your local community and you wanted to know how this compared to perceptions of cancer prevention in the rest of the Southern Interior of BC. Using a standardized survey allows you to make these types of comparisons. One example of a standardized survey is the *Canadian Community Health Survey-Draft* by Health Canada.

Data that is collected using the same standardized survey can be used locally and can be compared with data from other regions, other provinces and all of Canada if needed.

#### Where do I find standardized surveys?

The following are examples of standardized surveys that can be downloaded from the web.

*Canadian Community Health Survey-Draft,* Health Canada
Http://www.statcan.ca/english/concepts/health/content.htm

*Youth Risk Behavior Survey,* United States Center for Disease Control
http://www.cdc.gov/nccdphp/dash/yrbs/survey99.htm

## Tips for Using Different Kinds of Survey or Questionnaire Questions and Examples

<table>
<tr><td>Open-ended questions</td><td>
<ul>
<li>Use when you want people to express themselves freely.</li>
<li>Use when you want information about participants' ideas and perceptions.</li>
<li>Use when you cannot list all of the possible responses.</li>
<li>Use when you don't know how people will respond to a question.</li>
<li>Respondent can provide long or short answered questions.</li>
</ul>
Examples:
<ol>
<li>Why do you think people smoke?</li>
<li>Why do you smoke?</li>
<li>What are the risk factors for cancer in your community?</li>
<li>How many cigarettes do you smoke per day?</li>
</ol>
</td></tr>
<tr><td>Close-ended questions</td><td>
<ul>
<li>A list of answers is provided.</li>
<li>The participant must choose an answer from those already provided.</li>
<li>It is good to also have an "other" category to choose from, in case none of the answers provided are right for the respondent.</li>
</ul>
Examples:
<ol>
<li>Circle the grade you are in: 9, 10, 11, 12</li>
<li>Which cancer risk factors do you think are important?<br>(Circle all that apply).<br>
a. Environmental concerns<br>
b. Diet<br>
c. Exercise<br>
d. Cancer in family<br>
e. Exposure to cigarette smoke (smoking and second-hand)<br>
f. Other, please specify ____________</li>
<li>In a typical week in the past 3 months, how many hours did you usually spend walking to work or to school or while doing errands?[18]<br>
1 None<br>
2 Less than 1 hour<br>
3 From 1 to 5 hours<br>
4 From 6 to 10 hours<br>
5 From 11 to 20 hours<br>
6 More than 20 hours</li>
</ol>
</td></tr>
</table>

[18] *Canadian Community Health Survey-Draft*. Statistics Canada. April 2000.

| | |
|---|---|
| **Rating Scales** | • Use a rating scale when you want people to rate their preferences or perceptions.<br>• These have points at either end of a scale that are opposite of each other.<br>• Usually each point along the scale has a rating or agreement associated with it.<br>• Most scales have 5 or 7 points on the scale.<br><br>Examples:<br><br>1. In your opinion, smoking is:<br>Bad ❑ Very ❑ Some What ❑ Neither ❑ Some what ❑ Very Good<br><br>2. In our community, we have <u>no</u> concerns about cancer.<br>❑ Strongly Agree ❑ Agree ❑ Neutral ❑ Disagree ❑ Strongly Disagree<br><br>3. Rate how <u>important</u> cancer prevention is to you.<br>❑ Very ❑ Somewhat ❑ A Little ❑ Not at all<br><br>4. How likely do you think it is that smoking will lead to health problems for you? Check only one answer.[19]<br>❑ I have never smoked<br>❑ Very likely<br>❑ Somewhat likely<br>❑ Somewhat unlikely<br>❑ Very unlikely<br>❑ I don't know |

[19] *Tobacco Use Survey*. Health Behaviour Research Group, University of Waterloo.

| | |
|---|---|
| **Ranking Scales** | • These require the respondents to sort items by assigning a number, usually in the order of importance to them.<br><br>Example:<br><br>1. Please rank in order of importance which factors you think <u>will help prevent</u> cancer. Rank in order, where 1 is the most important and 7 is the least important.<br>__ exercising daily<br>__ eating a healthy diet<br>__ living in Vernon<br>__ living in Kelowna<br>__ having no family history of cancer<br>__ being a non-smoker<br>__ not drinking alcohol |
| **True or False** | • True or False questions give very limited options for the participants.<br>• These questions do not show subtle changes in attitudes.<br>• These questions need to be written very clearly and simply because any ambiguity will make it difficult to answer.<br><br>Examples:<br><br>1. Inhaling second hand smoke is just as harmful as smoking?<br>❑ True<br>❑ False<br><br>2. Eating salmon is bad for you because it contains fats that are harmful.<br>❑ True<br>❑ False |

The following are examples of standardized demographic survey/questionnaire questions taken from Statistics Canada's *Canadian Community Health Survey-Draft.* These types of standardized questions have usually been pilot-tested to make sure that the questions are culturally or racially sensitive.

**Demographic Questions from Statistic's Canada's Comm. Health Survey**

**Instructions***:* For each question, please circle the number that best describes you.

**Sex/Gender**

1 Male
2 Female

**Marital Status**

1 Married
2 Living common-law
3 Widowed
4 Separated
5 Divorced
6 Single, never married

**Educational Attainment**

What is the highest grade of elementary or high school you have completed?

1 Grade 8 or lower
2 Grade 9-10
3 Grade 11-13

What is the highest degree, certificate or diploma you have obtained?

1 No postsecondary degree, certificate or diploma
2 Trades certificate or diploma from a vocational school or apprenticeship training
3 Non-university certificate or diploma from a community college, CEGEP, school of nursing, etc.
4 University certificate below bachelor's level
5 Bachelor's degree
6 University certificate or diploma above bachelor's degree

## Ethnicity

To which ethnic or cultural group(s) did your ancestors belong?
(For example: French, Scottish, Chinese)

Mark all that apply.

1 Canadian
2 French
3 English
4 German
5 Scottish
6 Irish
7 Italian
8 Ukrainian
9 Dutch (Netherlands)
10 Chinese
11 Jewish
12 Polish
13 Portuguese
14 South Asian *(e.g. East Indian, Pakistani, Punjabi, Sri Lankan)*
15 Black
16 North American Indian
17 Métis
18 Inuit / Eskimo
19 Other – Specify

## Race

How would you best describe your race or colour?

Mark all that apply.

1 White
2 Chinese
3 South Asian
*(e.g. East Indian, Pakistani, Punjabi, Sri Lankan)*
4 Black
5 Native / Aboriginal Peoples of North America
*(North American Indian, Métis, Inuit / Eskimo)*
6 Arab / West Asian
*(e.g. Armenian, Egyptian, Iranian, Lebanese, Moroccan)*
7 Filipino
8 South East Asian
*(e.g. Cambodian, Indonesian, Laotian, Vietnamese)*
9 Latin American
10 Japanese
11 Other – Specify

### *ii. Focus Groups*

A focus group consists of 7 to 10 people with similar characteristics that come together to give you information by discussing a specific topic. There is always a facilitator who keeps the discussion on track, provides targeted questions and creates a non-threatening environment. The information gathered is used to answer questions about the perceptions, feelings, knowledge, attitudes and behaviors of the targeted group of people.

The best use of a focus group is:

- To collect information on knowledge, skills, attitudes and/or behaviours.
- To determine the perceptions, feelings, and manner of thinking of a specific group of people, e.g., what participants thought about a program, reasons that teens smoke.
- To provide insights into the attitudes, perceptions and opinions of participants.
- To gather information for a needs assessment or evaluation.
- To gather information about a new program or product, e.g., what do youth think about an ad campaign for skin cancer prevention, how does the community feel about cancer prevention information.
- As follow-up to a survey. More detailed information about the results of the survey can be obtained by gathering a smaller number of those surveyed to discuss and give insight about the results.

Tips for using a focus group:

- Use an experienced facilitator. If you don't have someone in your organization that has skills as a facilitator you may want to hire a consultant to carry out this task. Ask at your local college or community agencies if they could recommend someone. Or, training courses may be available through your local community college.

- A focus group typically contains 7 to 10 people.

- The members of the group should be similar to each other in certain aspects depending on the questions being asked. For example, you may want only females in the group, or just teens between aged 15, or only smokers.

- Ideally, the members of the focus group should not know each other well.

- Depending on the size and make up of your population, you may need to conduct more than one focus group, for the same topic, with different groups. For example, to discuss smoking in teens you may want a total of four focus groups: a group of females 14-15 years old, one with females 16-17 years old, one with males 14-15 years old, and a group of males 16-17 years old.

- Questions should be open-ended to promote discussion.

- Questions should be very focused. The facilitator should know the purpose of the focus group and have a list of predetermined, open-ended questions.

- All members of the group should be encouraged to talk. Avoid having one or two people who dominate the discussion.

- Introduce the purpose of the focus group to the participants so that they will have a context with which to answer the questions.

- The participants should feel comfortable and non-threatened so that they can say whatever they are thinking or feeling.

- Let them know that the information they provide will be confidential.

- If possible, tape-record the session. It is not always easy to remember exactly what everyone said after the session. It is also wise to have an assistant take notes.

- The facilitator should not make judgements about what is said. Therefore, he or she should not respond in a positive or negative manner but should stay neutral throughout.

Example of a focus group:

Below is an excerpt from a focus group. The interviewer is evaluating a patient education process, where patients were invited to talk about their experiences and their education needs during cancer treatment. There are six members of the group: four people who were participants in the process (B, K, A, & R), one spouse (J) and one interviewer (Int). Two things should be noted: a) the way that the interviewer tries to include everyone in the discussion – however, R remains silent during this excerpt, and b) the inclusion of exploring ways to improve the intervention process.

**Int:** *So, what you're actually getting at, as far as I can gather, is that it's about doing for others – and that's been a theme of yours all the way through.*

**B:** It's important. Maybe you can do something for somebody else. That's what I think K is saying. 'Cause, you know, you and I, we were pals the whole month we were here at the Lodge, really.

**K:** Yeah, right. That was important. You need to know that somebody is there with you, for you, you know.

**Int:** *I want to know what these guys over here think of the process … So, let me ask you the question – What has participating in this process meant for you?*

**K:** Been very useful, very helpful to me in getting my thoughts in sequence, talking about it. Not from the point of view of being the centre of attention, but ever since I had it, I've felt strongly that if it can happen to me it can happen to anyone … Talking to people informally about this … I've found this process really helpful in dealing with the "why me?" issues I had.

**A:** You realise the appalling lack of knowledge there is, and the appalling lack of funding for research that there is. I've been shooting stuff off on the email to any male over 45 that I can think of. Men need to take action the way that women did over breast cancer. Men avoid that medical stuff like the plague.

**Int:** *How about you, J?*

**J:** From my perspective, it's been great, because where he might not tell me what's in his mind, he told you that I was a help to him during this, but he really hadn't, hasn't said it to me! So I was guessing! At the same time, by volunteering to participate to do this – I know it sounds selfish – but one day it might happen to me – and I need to know.

**Int:** *Last time we met, we had an opportunity to talk about how you thought you had helped A., and it was very interesting.*

**J:** You're right, I didn't know I had helped him.

**A:** I hadn't said anything like that to her!

**Int:** *But he did tell you at that point?*

**J:** Oh, I kind of felt that what I was doing was right, but I didn't … maybe as you get on in a marriage you take a lot for granted. I'm sure we've just taken a lot for granted ...

but it was good to know that I was doing something for him when he was going through the treatments.

**Int:** *Is that something that we should think about – the role of the spouse?*

**J & A:** Definitely!

**A:** Definitely!  It's crucial to the patient *and* to the spouse.

**K:** But it depends very much on the spouse!

### *iii. Interviews*

Interviews can be useful in gathering information from participants, especially for long-term or follow-up information. The two kinds of interviews are telephone and in-person interviews.

**Telephone interviews**

The best use of a telephone interview is:

- For long-term, follow-up evaluation, for example, if you wish to speak with participants several months after they have completed the program.
- When it is difficult to get an entire group of people together at the same time.
- When your participants have private and easy access to telephones.

Tips for using telephone interviews:

- Use both open-ended and close-ended questions. Using open-ended questions lets the participant answer in his/her own words.
- Use language that your participants will understand. Make questions short and simple.
- Make sure your questions relate back to your program objectives and your activities.
- If possible, pilot-test your questions.
- Use trained interviewers. Interviewing is a skill and requires training to ensure consistency.
- Make sure the interviewers are consistent with asking questions. They should always read instructions and questions as they are written and according to a script.
- If you audio-tape your interviews, they will need to be transcribed. That is, the interviews need to be typed-out so that you can analyze the information and identify themes in what the participants said.

**In-person Interviews**

In-person interviews involve sitting down and talking with one or possibly two people about their thoughts and feelings about a particular topic. They are used to collect qualitative information.

The best use of in-person interviews is:

- To gather in-depth information from a small number of people.
- To gather information from someone who does not fit into a focus group setting. For instance, a supervisor, the CEO of a company, or a government official.
- When you need information about a sensitive topic that people may not be willing to discuss in a group.

Tips for using in-person interviews:

- Stay focused. Keep your participant focused on answering the questions you ask.
- Be prepared. Have all of the questions written out that you want to ask.
- Prioritize the questions so that the most important questions get asked.
- Do not use leading questions.
- Write down answers to questions and ask for clarification when needed.
- Use a skilled interviewer.
- If you audio-tape your interviews, they will need to be transcribed. That is, the interviews need to be typed-out so that you can analyze the information and identify themes in what the participants said.

**Example of an in-person interview** with a 15-year-old male who had tried smoking. The goal of the interview is to find out more about how youth transition from non-smokers to smokers.

Int: *How often have you smoked?*

R: Well since then, um, it's been cigars and, um, ... I, ah, ... occasionally we maybe, ah, have a cigarette but we'd get made fun of, we make fun of people who smoked.

Int: *Who smoked cigarettes?*

R: Yeah. Cause it, just cause it's stupid really. We make fun of them.

Int: *How are people who smoke different from people who do not smoke?*

R: Well, um, they, ah, they're a different bunch of kids.

Int: *How so?*

R: Well they're, um, the kids that, ah, in my school, and I don't want to generalize every school, but in our school they're, ah, they're more, um, ... well they're not into the same sort of stuff as we are. They're not into sports. They're not into hip-hop music. They have different parties than us. — they're mostly girls, mostly girls.

Int: *Really?*

R: More girls than guys. And, um, ... so I don't know we just make fun of them.

Int: *I'm just curious because you, how many cigarettes would you say that you had smoked overall?*

R: 12, 10. In grade five to nine.

Int: *So over like very, ah, rarely, when was the last time that you smoked one?*

R: Grade, ah, grade 8.

Int: *If* you *didn't like it, you know at the beginning when you first did it, why did you do it* ***again?***

R: Well I kind of liked it but I, I don't know it was kind of, this is gonna sound screwed up, I didn't like it yet I liked it.

Int: *Okay, let's try to understand —*

R: Right. I'll try and break this down. Um, I didn't, like smoking because, like I didn't like inhaling the smoke, like it didn't feel good but, um, I liked having a cigarette in my hand.

Int: *Why? How was it making you feel?*

R: Well around grade five was when we started hanging out with girls and, um, ... ah, ... it made us look better than some of the other kids. I mean I, are you seeing where I'm coming from here?

Int: *So on one hand you didn't like smoking it, right —*

R: No.

Int: *You know, like inhaling it or, but you liked the image of —*

R: Well I looked mature, I looked mature with a cigarette.

Int: *Okay. So that was one of the benefits you were getting out of doing it, right.*

R: Yeah.

Int: *Any other things?*

R: No. No. Cause my, my parents would, ah, I'd get in big trouble if I, ah, not now but in grade five they'd be pretty, ah, pretty concerned and, um, —

Int: *That you would take on smoking. If they knew that you were trying it.*

R: Right. I mean now they know we drink and all that but, ah, they, they don't care as much now. But it's more elementary school and, ah, I was more paranoid about what they'd think and, ah, I don't know, all this kind of fused together and

Int: *So you think that your parents influenced you —*

R: Big time. Cause my parents had more of a control over me, um, as compared to some of my friends too. And as a result some of these kids smoked more than me. This is a trend. Um, a lot of kids, ah, that, ah, maybe didn't get along with their parents quite as good or anything like that. You know, who wouldn't really care what they think, they'd smoke more.

Int: *Right. Well when you tried smoking and it's a long time ago, but can you remember if you had any expectations? What were you expecting to find in cigarettes that you, you know, you said I want to try it, I want to do this?*

### *iv. Document Review*

Reviewing documents is useful for keeping track of how the program has been carried out. Documents can also be reviewed to gather information, for example using school records to get information about absenteeism, or using statistics from the local health department on the number of cases of a disease reported for the last year.

The best use of a document review is:

- To track information about how the program was carried out. For instance, if you want to know how many participants attended, how many of the planned activities were carried out, how many surveys were filled out, how many days did it rain during a sun safety program, etc.

- To gather information that has already been collected. For instance, using a cancer registry to find out how many cases of breast cancer have been reported, using information from reports that have already been published.

Tips to using document reviews:

- Be consistent in how you extract information. Always record and interpret the information in the same way.

- Plan ahead by creating activity logs and ways of keeping track of information during the program so that you will have all of the information you require for the evaluation.

### *v. Observations*

Observations involve watching the participants during a program or while they are engaging in an activity. Observations tend to be time-consuming and can be too intrusive to participants and for this reason are used less often. For instance, if you wanted to know how many students smoked in between classes at the local high school, you could sit across the street from the main door and count the number who came out for a cigarette between classes. (Of course, they may get a little nervous if they see you sitting writing things down every time they came outside.)

The best use of observations is:

- When you need accurate information about how a program is operating. Observing different group leaders for an activity can give you insight into how the program is being delivered.

- When you want very specific types of data collection, e.g., counting the number of people on the beach who are wearing hats for sun protection.

Tips for using observations:

- Be clear about what you are observing and how you will use this information.

- Be very cautious when using this method. Make sure it is the best way to obtain the data you need.

- Make sure all observers are trained in recording their observations. Observer bias can greatly influence what data is recorded.

- Use other data for your evaluation as well. Observations alone will not provide enough information to evaluate your program adequately.

### *vi. Case Studies*

Case studies consist of describing in detail the experience of one person. Case studies are useful if you have very few participants, or for illustrating the program and participants' experiences in depth.

The best use of case studies is:

- To gain in-depth information about a participant's experiences, impressions, and feelings about the program.
- When you want to show the program's success to others.

Tips for using case studies:

- Choose participants that found the program useful and who have good insights.
- Write up the case study in a way that is easy to understand and read.
- Include important information and anecdotes.

The table on the following pages summarizes the information on methods and tools for data collection.

## Description of Methods and Data Collection Tools

| ***Method*** | ***When to use*** | ***When Not to use*** | ***Advantages*** | ***Challenges*** |
|---|---|---|---|---|
| Administering **surveys or questionnaires** | - When you need standardized responses from a large number of people.<br>- When you want easily measurable knowledge, skills, attitudes and/or behavior information.<br>- When you plan to compare changes in responses before and after an activity.<br>- When you need to quickly and/or easily get lots of information from people in a non-threatening way. | - When you need a lot of detailed information from a small number of people.<br>- When you want to emphasize context richness rather than numbers.<br>- When you need to tell a story. | - Can complete survey anonymously.<br>- Inexpensive.<br>- Easy to compare and analyze.<br>- Possible to administer to many people.<br>- Can get lots of data.<br>- Many sample surveys already exist.<br>- Can collect quantitative data to be compared. | - Might not get careful feedback.<br>- Wording can bias client's responses.<br>- Are impersonal<br>- In surveys, may need sampling expert (e.g., someone who can assist in choosing the individuals or groups who will receive the survey).<br>- Does not get full story. |
| Using **focus groups** | - When you want to learn about consensus or disagreement on a topic.<br>- When there is a small and homogeneous group of people that you want to interview together.<br>- When you are looking for a range of ideas related to a complex topic.<br>- When you want to tell a story. | - When you do not have someone with appropriate skills to conduct the focus group.<br>- When participants are not comfortable with each other.<br>- When participants have had too little involvement or interest in the topic. | - Can quickly and reliably get common impressions.<br>- Can be an efficient way to get a range and depth of information in a short time.<br>- Can convey key information about programs. | - Can be hard to analyze responses.<br>- Need good facilitator.<br>- Difficult to schedule 6-8 people together. |

| ***Method*** | ***When to use*** | ***When Not to use*** | ***Advantages*** | ***Challenges*** |
|---|---|---|---|---|
| Conducting **telephone Interviews** | - For long-term follow up.<br>- When it is difficult to get an entire group of people together at the same time.<br>- When your target population has telephones. | - When you need a lot of detailed information.<br>- When anonymity is important for getting honest answers to sensitive questions<br>- When your target population does not have telephones | - Can get full range and depth of information.<br>- Can develop a relationship with clients.<br>- Can be flexible.<br>- Can get a better response rate than mailed surveys. | - Can take much time.<br>- Can be hard to analyze and compare.<br>- Can be costly.<br>- Can bias client's responses.<br>- Requires trained interviewers.<br>- Provides less anonymity. |
| Conducting **in-person Interviews** | - To collect data from people with key information.<br>- To have open-ended discussion on a range of issues.<br>- To obtain in-depth information on an individual basis about perceptions and concerns. | - When anonymity is important.<br>- When you need quantitative information. | - Can be used to discuss sensitive issues that interviewee may be reluctant to discuss in a group.<br>- Can probe individual experience in depth. | - Can be time consuming.<br>- Can bias client's responses.<br>- Can be hard to analyze and compare.<br>- Requires trained interviewers.<br>- Provides no anonymity.<br>- Can be costly. |

| ***Method*** | ***When to use*** | ***When Not to use*** | ***Advantages*** | ***Challenges*** |
|---|---|---|---|---|
| Conducting a **document review** | - When you want to know about implementation of a program. | - When you are not sure if the data or information is reliable and/or valid. | - Can get comprehensive and historical information.<br>- Does not interrupt program.<br>- Information already exists.<br>- Few biases. | - Can take time to document.<br>- Information may be incomplete.<br>- Requires good and consistent recording skills on the part of program staff.<br>- Data restricted to what already exists. |
| Using **observations** | - To see firsthand how an activity operates and how the program is being implemented. | - When your presence would be disruptive to the participants. | - Provides firsthand knowledge of a situation.<br>- Can discover problems that parties are unaware of.<br>- Can produce information from people who have difficulty verbalizing their points of view.<br>- More objective. | - Can affect activity being observed.<br>- Can be time consuming.<br>- Can be labor intensive.<br>- Not always easy to code and analyze observational data. |
| Using **case studies** | - To fully understand or depict client's experiences in a program. | - When you have large numbers of participants. | - Can fully depict client's experience with program input, process and results.<br>- Powerful means to portray program to outsiders. | - Can be time consuming to collect, organize and describe. |

0 **Exercise 6:** Look at one of your objectives and decide which methods and tools would be the best to collect the data or information needed to show success.

**Objective**:

| **Method and tools** | **What questions would you ask?** |
| --- | --- |
| o Administer a pre- and post- survey | |
| o Use focus groups | |
| o Conduct telephone interviews | |
| o Conduct in-person interviews | |
| o Conduct a document review | What documents would you review? |

Now that you know what kind of information you need to collect and what instruments you are going to use to collect it, you can decide who, where and when to collect it.

## d. Who will collect the data?

Once you have decided what to collect and what tools to use, you need to decide who is going to collect the data. Will the program staff do it during the program, or will someone else come in to administer the survey? Will you hire a focus group facilitator? Whoever collects the data should be experienced in administering that particular method or using the tools.

Administering a survey requires the following considerations:

- provide proper instructions to the participants at the beginning of the survey
- provide the same instructions to every group
- answer questions in a neutral manner, encourage participants to do their best, and state that there is no right or wrong answer.

The following individuals might administer the survey: teacher, program staff, or a trained facilitator.

Conducting a focus group requires the facilitator to:

- have skills in group facilitation
- respond in a neutral way
- ask questions that are not leading
- answer questions in a way that does not influence the participants
- know when to prompt the participants for more
- keep the discussion focused
- know how to get everyone to participate in the discussion.

## e. When will the data or information be collected?

Deciding when to collect your information is important. You should consider the following factors when deciding to collect your data or information.

- If you are measuring *change* in knowledge, attitudes, and/or behaviours you will need to collect the information at different time periods so that you can compare the two.

- It is best to administer a survey or questionnaire just before you start your program (this is your baseline or benchmark) to get an idea of where your participants are at before they are exposed to any information. Then, administer the survey/questionnaire after the program ends to see what changes occurred in your participants due to the program.

- Ideally, you would administer a third survey/questionnaire 3 months, 6 months and/or 12 months after the end of the program to see if these changes are still present. If your program worked very well, changes would be seen as far as 12 months after the program.

- How often you can collect information will depend on your resources. Be realistic, nobody wants to be filling out a survey/questionnaire or attending a focus group every week, or every month.

- Focus groups can happen whenever you need the desired information. Just remember that the same participants should not participate in more than one focus group.

For example, you can administer a survey before and after the program is completed, 4 weeks into the program, or halfway through the program.

***What is baseline or benchmark data?***

When we talk about collecting baseline data, what we mean is data that is collected before a program is implemented.  This data shows us where participants are before they participate in any programs or are exposed to new information.  If the same questions are asked after the program, any changes to their answers may be attributed to the effects of the program. Having baseline data allows for comparisons over time.

For example, in April a group of people are surveyed and 40% say that they apply sunscreen everyday before going outside. This starting point becomes your baseline or benchmark. In your evaluation, you can then measure against this baseline.

In June, after the sun safety program has been carried out, 65% say that they apply sunscreen everyday before going outside.  You can report that there was a 25% increase in sunscreen use after implementing your program.

*Note*:  This is an example of quantitative data collection, however, if you were to question further and ask why they used or did not use sunscreen - this would provide you with qualitative information.

*Caution*:  You must be cautious about how generalizable these data are and how much of the change can be attributed to your particular program.  For instance, it may be that during the same summer the Canadian Dermatologist Association had an ad campaign on TV about the harmful effects of the sun and it's relationship to skin cancer, resulting in an increase in sunscreen use.

## f. Where will the data or information be collected?

Where you collect your information depends on who is collecting the information and when they will be doing this activity. In deciding when to collect your information, you should consider the following factors:

- The best place is the most convenient. That is, you do not want to make it difficult for the participants.
- Usually you collect your information where the program is delivered. However, this is not always feasible. Other options include through the mail and by telephone.
- You want it to be at a place where you have access to the maximum number of people.

For example, data or information can be collected wherever the program is held, at school, on the beach, or at the mall.

**Exercise 7:** Now it's time to write out a data collection plan for your program. On the next few pages are worksheets for answering the questions below for each of your objectives. (Use the objectives you wrote on page 46 and the success indicators on page 49.)

1. **What** specific questions are you trying to answer? What data or information do you want to collect?
2. **How** will you collect your data, that is, what methods and instruments will you use?
3. **Who** will collect the information?
4. **When** will the information be collected?
5. **Where** will the information be collected?

## Your Data or Information Collection Plan

Program: ______________________________________ Date: ___________

Objective:
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

What specific questions are you trying to answer? What data or information do you want to collect? (Refer back to your success indicators)

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

| **How** will you collect the data/info?* (Specific data collection instruments | **Who** will collect the data/info? | **When** will you collect the data/info? | **Where** will you collect the data/info? |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

* *Will you use a survey/questionnaire, focus group, interview, document review, and/or other method to collect your information?*

# Step 4 Analyze and Interpret Your Information


Congratulations, you have finished gathering the information you need for your evaluation. Now what do you do with it?

First, do not let data analysis intimidate you! It is only a way of organizing numbers and similar results in order to make a point and answer your evaluation questions. You can use simple math to show differences and similarities in the answers which participants gave to the survey or interview questions. Interpreting these results helps tell your story.

Remember, you are not alone in the evaluation process. You can always contact Lynne Baillie, Primary Prevention Coordinator, at the Cancer Centre for the Southern Interior if you have a question. She will be happy to direct you to resources.

This section addresses the following questions:

a. How do you interpret your information?

b. What data analysis processes do you use for qualitative data or information?

c. What data analysis processes do you use for quantitative data or information?

d. How do you interpret your results?

## a. How do you interpret your information?

If you have quantitative data from surveys or questionnaires, you will want to code it, enter it into a computer database and analyze it. If you have qualitative information from focus groups and interviews, you will want to code it by looking for similar responses and then summarizing your findings.

The first step in interpreting your information is to decide if you have the resources to do this yourself or if you will need to get outside help from a consultant (see Appendix 2 for information about working with an outside consultant). It is best to find someone as soon as possible so that they can have input, from the beginning of the program on how to systematically track the data you will be collecting. It will be a lot more difficult to make sense of your data or information if you have not carefully planned how to ask the evaluation questions and then analyze the information.

To analyze your data you will need the following resources:

- A computer with database software and analyses capabilities. Examples of software packages are Excel, Access, SPSS, and SAS.
- Someone who knows how to create a computer database file where you can enter your data.
- Someone who knows how to code and enter data.
- Someone who knows how to use statistical packages to analyze data.
- Someone who can interpret the results.

If you cannot find someone within your community committees who is willing to assist with each of these, then you will need to find a consultant willing to take on one or more of these tasks, or get training from your local community college or technical institute.

**The major steps involved in the data analysis processes are**:

- Preparing the data for analysis.
- Analyzing the data.
- Interpreting the results.

*Quantitative and qualitative data are treated differently throughout this process. This section will describe the above steps for both quantitative and qualitative data.*

## b. What data analysis processes do you use for qualitative data or information?

Your qualitative data may be in different forms, but most likely it will consist of written transcripts from focus groups or interviews. Because the analysis of this data is very subjective, you must be careful how you use it.

**The following are steps to use in analyzing qualitative information**:

- **Read through the whole interview transcript**. Note: Don't wait until *all* of your interviews are completed – qualitative analysis begins as soon as your research does. This way you can add or change questions to get better information, or to follow up hunches that you're developing.
- **Code and categorize the ideas**. Go through the transcript line by line. Every separate idea expressed by the participant should be noted. You can label these ideas using either your participant's or your own words–this is called "coding" your data. You will find that several of these "codes" naturally seem to hang together into larger units or categories. Some codes remain isolated, but they are repeated often enough to be upgraded to category status. The presence of other codes will confuse you, as they don't seem to "fit". In this case, you can decide whether or not it is relevant to your evaluation goals and objectives. If it is not–ignore it. You can always return to your transcripts for further analysis later, should you need to. If it is relevant, you can add more probing questions to your next interviews to get more details.
- **Understand what the participants are telling you**. As you work through the transcript noting ideas and grouping them together, you will find that you are developing a larger understanding of what your participant is telling you. This understanding is what you take with you to your next interview transcript, constantly checking for fit. When fit does not occur, don't force it – let the data continue to speak for itself. You may find that your original concept of the theme was not quite accurate enough and needs to be revisited. This is how a good understanding of the data grows.
- **Find the themes**. Eventually, you will have enough of an understanding of the data to reduce it down to a few "themes". These themes will provide you with the answers to your evaluation questions. A major advantage of qualitative evaluations is that you will also have an appreciation of the reasons behind the answers. It is this depth of understanding that makes all the extra work of qualitative analysis worth while.
- **Use quotes as examples**. Look for quotes that will provide a good example of the theme that you have identified. Remember that this process is very subjective; it is important to give your readers some evidence to justify your conclusions.

### In-person Interview Example

Following is an outline of the qualitative analysis process, using the transcript of the in-person interview provided on page 77.

#### Coding

Has smoked
Makes fun of smokers
Smokers are stupid
Smokers are different
Mostly girls
Last smoked in grade 8
Didn't like actual smoking (inhaling)
Liked having cigarette in hand
Thought that cigarettes made him look more mature
Parental influence
Parental expectation
His parents are more strict than other kids' parents
Kids who smoke don't tend to get along well with parents

#### Categories

1. Cigarette smoking is used as way of grouping other kids. He looks on smokers negatively, he does not want to be identified with the kind of things that smokers do/like.
2. He used cigarettes briefly when younger in order to look more mature, but didn't like inhaling.
3. Parental influence is very powerful in determining whether kids will smoke or not.

#### Themes

(although this is premature after only one page of transcription)

Experimentation with cigarette smoking can be a personal choice for kids. May not be peer pressure, but self-identification with a particular group.

Parents can play a big part in the decision whether to become a regular smoker or not.

### c. What data analysis processes do you use for quantitative data or information?

Quantitative information also comes in many forms. Analyzing it can be simple or complex depending on how you use the information, how much data you have and if it needs to be statistically significant. Statistically significant means that it is unlikely that a group of individuals would give the same response by chance. For our purposes we will keep data analysis simple.

**The steps involved in analyzing quantitative data are:**

- **Make a master copy of your data** and store it separate from your working copy. Sometimes accidents can happen. Always keep a master copy of your data.
- **Organize your data in a database**. Usually the question number goes across the top (a column for each question) and the participant numbers down the side (a row for each participant).
- **Tabulate the information**, that is, add up the number of ratings, rankings, yes's, and no's for each question.
- **Consider calculating means, or averages** for ratings and rankings, for each question. For example, "For question #1 the average ranking on a scale from 1 to 5 was 4.2".
- **Report ranges of answers**. When writing your final report, it is important to write the results but it is also important to report the range of answers, e.g., 20 people ranked "1", 30 ranked "2", 20 people ranked 3, etc. This allows your leaders to see how responses were distributed.

The following table provides examples of how to analyze your quantitative data.

## Statistical Ways to Analyze Quantitative Data

| | |
|---|---|
| **Frequency** | • This describes the number of times a particular response occurs. To calculate frequency you simply add the number of times a response occurs.<br>• For example, the number of participants who choose each response to a question.<br><br>1. What grade are you in?<br>❑ 8<br>❑ 9<br>❑ 10<br><br>Frequency is the number of respondents who checked the grade 8 box, the number who checked the grade 9 box and the number who checked the grade 10 box. There are 45 participants. 15 checked grade 8, 18 checked grade 9, and 12 checked grade 10. So the frequencies are, 15, 18, and 12, respectively.<br><br>2. Cancer prevention programs can help decrease your chances of getting cancer.<br><br>Strongly Disagree 1 — Somewhat Disagree 2 — Don't know 3 — Somewhat Agree 4 — Strongly Agree 5<br><br>Count the number of participants who respond to each point in your scale. For example, there were 25 participants: 4 responded "strongly disagree", 9 responded "somewhat disagree", 5 responded "don't know", 4 responded "somewhat agree", and 3 responded "strongly agree". |
| **Percentage** | • This describes the proportion of times a particular response occurs.<br>• It is the number of times a particular response occurs (frequency) divided by the total number of responses, and then multiplied by 100.<br><br>$\frac{\textit{Frequency} \times 100}{\text{Total no.}}$ = percent |

<table>
<tr><td></td><td>
Example:<br><br>
Using question #1 in the frequency example above, you have 45 participants.  15 are in grade 8, 18 are in grade 9, and 12 are in grade 10.<br><br>
15/45 x 100 = 33% are in grade 8<br>
18/45 x 100 = 40% are in grade 9<br>
12/45 x 100 = 27% are in grade 10<br><br>
For question #2, the percentages for the response rates would be as follows:<br><br>
4/25 x 100 = 16% responded Strongly Disagree (1)<br>
9/25 x 100 = 36% responded Somewhat Disagree (2)<br>
5/25 x 100 = 20% responded Don’t Know (3)<br>
4/25 x 100 = 16% responded Somewhat Agree (4)<br>
3/25 x 100 = 12% responded Strongly Agree (5)<br><br>
Note:  the percentages should add up to 100%.
</td></tr>
<tr><td>Mean</td><td>
• This is the average<br>
• It is the sum of the responses divided by the total number of responses.<br><br>
<u>Sum of responses</u> = mean<br>
Total no. responses<br><br>
Example:<br><br>
Using question #2 in the frequency example above, you had 25 participants:   4 responded “strongly disagree”, 9 responded “somewhat disagree”, 5 responded “don’t know”, 4 responded “somewhat agree”, and 3 responded “strongly agree”.  You have already scored the 5 responses on a scale of 1 to 5.  Therefore, (1+1+1+1) + (2+2+2+2+2+2+2+2+2) + (3+3+3+3+3) + (4+4+4+4) + (5+5+5) = 68<br><br>
68/25 = 2.72       The mean scale score is 2.72<br><br>
This mean tells you that the majority of the participants were more likely to respond that they disagreed then agreed with the statement: Cancer prevention programs can help decrease your chances of getting cancer.
</td></tr>
</table>

| | |
|---|---|
| **T-test** | • This compares two sets of data to determine if there is a difference between their mean or average scores, or, if it is just due to chance.<br>• This can be used to compare pre-survey data and post-survey data to see if there is a statistically significant change in participants' knowledge, skills, attitudes, and/or behaviours.<br>• It can be used to compare different groups, for example, males and females, youth and adults.<br>• T-tests are more complicated to calculate, therefore, it is best to use a computer. |

The following are a few things to remember when looking at your qualitative and/or quantitative information:

- **Regularly refer back to your objectives and evaluation questions to determine how to focus your data analysis.** You want your data analysis to answer these questions and show if and how well you accomplished your objectives. You can best accomplish this if you plan for your data analysis from the beginning of the evaluation process.
- **Be consistent in how you analyze your data**. If you decide that it is important to compare males and females, then do this for every question on the survey/questionnaire. If you decide to describe your results in percentages, then try to do this with the majority of your data so that the reader does not become confused.
- **Keep backup copies of your data.** It is easy to erase or change data while working with it on the computer. It is always best to have extra copies of the original data.
- **Use tables and graphs to display the results that you find**. These are visual ways of describing your results that can make them easier to understand and explain.
- **Explore different ways of looking at your data**. Sometimes data can be used in more than one way. For example, questions on a survey can be looked at in terms of how each gender answered, how different age groups answered, or how people living in different regions answered.
- **Compare the results of your data analysis to your success indic**ators. Did you meet the requirements for success?
- **Pay attention to data that was interesting but unexpected.** Did you find unexpected results? For example, even though your program targeted

smoking in youth, you find from your focus groups that because of your program many youth have now increased their physical activity to stay quit.

## d. How do you interpret your results?

Now that you have numbers and information about your program's success, how do you tell others about these results? The following are some tips and examples on how to interpret your data:

- **Keep it simple**. Trying to impress others with complicated explanations and numbers only results in confusion.
- **Refer back to your criteria for success to see if you met them**. Discuss reasons why or why not.
- **When discussing change, talk in terms of percent change**. For example, there was a 32% increase in knowledge about skin cancer; 14% of the youth changed their behaviors; 23% of the population changed to a positive attitude towards skin cancer prevention.
- **Be sure to include any unanticipated results and possible reasons for their occurrence**.
- **Make the numbers meaningful**. Do not add statistics to your discussion just because you have them. They should be relevant to your evaluation and your program.

Example:

Using the data from Question #2 in the examples used in *Statistical Ways to Analyze Quantitative Data* above, here are some examples of how to interpret your results.

2. Cancer prevention programs can help decrease your chances of getting cancer.

| Strongly Disagree | Somewhat Disagree | Don't know | Somewhat Agree | Strongly Agree |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

Question #2 is a statement designed to measure beliefs and attitudes about cancer prevention programs. It would be administered both before and after the program has been carried out. The data in the above example is from the pre-test. It showed that the majority, or 52%, strongly or somewhat disagreed, and less that one-third (28%) strongly or somewhat agreed with this statement. Twenty-percent stated that they don't know.

After the program was carried out the survey was given again and the following results were found for the same statement:

2/25 or 8% responded Strongly Disagree (1)
6/25 or 24% responded Somewhat Disagree (2)
2/25 or 8% responded Don't Know (3)
9/25 or 36% responded Somewhat Agree (4)
6/25 or 24% responded Strongly Agree (5)

The mean or average is (2x1) + (6x2) + (2x3) + (9x4) + (6x5) = 86

86/25 = 3.44

Therefore, these results can be interpreted in the following way:

First of all, I would present the results in a table:

| | Strongly Disagree (1) | Somewhat Disagree (2) | Don't Know (3) | Somewhat Agree (4) | Strongly Agree (5) |
|---|---|---|---|---|---|
| **Pre-test** | 4 (16%) | 9 (36%) | 5 (20%) | 4 (16%) | 3 (12%) |
| **Post-test** | 2 (8%) | 6 (24%) | 2 (8%) | 9 (36%) | 6 (24%) |
| **Percent Change** | -8% | -12% | -12% | +20% | +12% |

Next, I would see if the changes were in the direction that you wanted. In this case you wanted people's attitudes to change towards agreeing with the statement. In fact, they did. The greatest changes were in increasing the agreement response rates.

So how do we say this?

1. State the population you are talking about.

   Twenty-five people responded to a questionnaire sent out before and after a cancer prevention awareness program was carried out in their community.

2. Describe the question and the results found.

   They were asked to respond to the following question, *Cancer prevention programs can help decrease your chances of getting cancer,* using a five-point scale where "1" means "Strongly Disagree" and "5" means "Strongly Agree". What we found was that before the program was implemented half of the respondents (52%) disagreed with this statement, while 20% stated they did not know and only 28% agreed (see table). However, after the program this had changed so that almost two-thirds agreed (60%) and only 32% disagreed and 8% did not know (see table).

3. Draw conclusions based on these results.

   From the results we conclude that there was a shift from disagreeing that cancer prevention programs can help decrease your chances of getting cancer to agreeing with this statement amongst the 25 people who responded to our survey. This would suggest that participating in our program may have changed the beliefs of the people who participated.

As you can see, this is not an exact science. There are no right and wrong ways of presenting your results. What you should keep in mind are what questions are you trying to answer.

0 **Exercise 8:** In your group or working by yourself, please take some time to answer the following questions before moving on to the next section.

The following data were collected from a survey about smoking. Please answer the questions following the data.

19 surveys were filled out. 8 males, 11 females

**ages**: males 18, 22, 23, 19, 18, 24, 20, 21
females 18, 19, 23, 19, 18, 18, 25, 21, 22, 19, 21

**The following answers were given to the following questions:**

**What age were you when you first smoked?**

| Age first smoked | Males | Females |
|---|---|---|
| 13 | 1 | 1 |
| 14 | 3 | 3 |
| 15 | 0 | 2 |
| 16 | 1 | 0 |
| 17 | 1 | 0 |
| 18 | 0 | 1 |

**How many cigarettes do you smoke each day?**

| # cigarettes | Males | Females |
|---|---|---|
| <10 | 1 | 3 |
| 10-19 | 1 | 3 |
| 20-30 | 4 | 1 |
| >30 | 0 | 0 |

**When do you smoke your first cigarette of the day?**

| Smoke first cigarette | Males | Females |
|---|---|---|
| As soon as I wake | 2 | 0 |
| After breakfast | 2 | 3 |
| After Lunch | 1 | 2 |
| In the afternoon | 0 | 1 |
| In the evening | 0 | 1 |
| None of the above | 1 | 0 |

**Use the data above to answer the following questions:**

1. What percent of the respondents are female? Male?

2. What is the average age of the survey respondents?

3. What is the overall average age they first started smoking?

4. What is the average age the males started smoking? The females?

5. What percent of the females smoke 10 to 19 cigarettes per day?

6. What percent of males smoke their first cigarette <u>before</u> lunch?

7. Who appears to be heavier smokers, males or females? How can you tell?

8. Write a few sentences to interpret the above data.

*In the next step, Step 5, you will learn about how best to report your findings and report your evaluation results. Now that you have analyzed your data or information, you will need to describe your findings and write your final report. This section will provide more information on how to best report your findings as well as use tables and graphs in your report or presentations.*

## Step 5 Use and Report the Evaluation Findings

The final step in the evaluation involves reporting the results. It is important to use the results of your data analysis to explain whether or not your program was successful. After all, this is the main reason for doing an evaluation.

Many different individuals or groups will be interested in finding out about your program and its success. The following are things to remember about your evaluation report:

- Avoid conclusions that are not grounded in valid data.
- There are different ways of presenting your evaluation results. For example, a written report or presentation.
- You will want to use the information that you gathered in a way that will benefit your program, the participants, and the individuals involved in delivering the program.
- An evaluation is a learning process and as a result, it is important that you do something about what you learned.
- Overall, any report should be accurate, balanced and fair.
- It should be completed in a timely manner to provide useful feedback.

This section will answer the following questions to help you in reporting the results of your evaluation:

a. Who is the audience for your report?

b. What is the purpose of an evaluation report?

c. How can you present your report?

d. What goes into a written evaluation report?

e. What goes into a presentation?

f. What do you do now?

## a. Who is the audience for your report?

As mentioned earlier in this manual, there are many different individuals or groups who will be interested in and who can benefit from the information from your evaluation. These are the potential audience(s) for your evaluation report.

In writing your report or preparing your presentation, it is important to consider the following factors:

- Who is your audience and what type of information are they interested in?
- What is the level of detail that they would find useful?
- What level of language should you use?
- Who your audience is will also determine how often you should report on the outcome of your evaluation. For example, some groups will only be interested in the final outcome or results of your evaluation. Other groups such as staff or board members may wish to have more regular up-dates on where you are in the evaluation process.

The audience(s) for your report might include:

- your staff or supervisors
- community members or the general public
- government agencies
- existing or potential funding sources
- current or potential program partners
- board members for your organization
- school boards
- media
- research and evaluation agencies
- other organizations.

## b. What is the purpose of an evaluation report?

An evaluation report can serve several different purposes depending on the audience and why they need the information. This also means that a report may be written or presented in different ways, depending on the audience. For example, an evaluation report can be used to:

- Document the process and outcomes of your program;
- Develop new programs or expand your current program;
- Improve staff morale;
- Convince or gain support from other agencies or potential partners;
- Recruit new participants, volunteers, or potential employees for your program;
- Promote understanding or educate the community about your program and the issues which it addresses;
- Provide information to individuals who are involved in implementing similar types of programs;
- Explore the issues which underlie the need for your program and present information about these;
- Demonstrate accountability to a funding agency or stakeholder groups for how you chose to implement your program and use your resources;
- Maintain current funding or ask for new or additional funding;
- Promote public relations, particularly with your community or the general public.

## c. How can you present your report?

You can report your evaluation results in a number of different ways. How depends on who your audience is and what they would like to know about the evaluation process and what you learned. You can report your results in a written report, as a presentation, or as a combination of the two.

For example, written reports can include:

- Executive summary followed by full report
- Executive summary followed by a few key tables, graphs and data summaries
- Executive summary only (data available on request)
- Scientific journal article
- Newspaper article
- Newsletter
- Press release
- Brochure
- Office memorandum
- Poster

For example, oral presentations can include:

- Brief oral presentation with some charts
- Short summary followed by questions
- Discussion groups based on prepared handouts that focus on specific issues
- Work sessions or workshops
- Video or audio tape presentation
- Web-site
- Powerpoint presentations
- Written and oral combinations

0 **Exercise 9:** In your group or working by yourself, please answer the following questions:

| Who is your audience? | What information would they like to receive? | What is the best way of presenting the evaluation results to this group? |
|---|---|---|
| Audience #1 – Target audience | | |
| Audience #2 | | |
| Audience #3 | | |
| Audience #4 | | |

## d. What goes into a written evaluation report?

Preparing your evaluation report begins before you actually start to write the report. In completing the previous exercise, you have started to prepare your report. As you carry out your evaluation, keep careful notes of the activities that were part of the evaluation. As well, keep careful notes of the different decisions that you made about how you would carry out the evaluation. These will be important as you write your report.

A full, written evaluation report generally has eight major sections. The length of the report and each of the sections depends on the amount of detail that you think is important for your audience.

*Section 1: Executive Summary*

This is the first section of the report. It is a two to three page summary of the report and presents the highlights of the evaluation. In this section, you should briefly describe what was evaluated and why, the basic results, and your recommendations.

*Section 2: Table of Contents*

This section tells the reader what they will find in the report and where they will find the information. It includes a list of all the major sections, the major headings under each section, the appendices, and their page numbers.

*Section 3: Introduction*

This section outlines the purpose of the evaluation. That is, it describes the evaluation questions that you were trying to answer. It also describes the program that you were evaluating, its goals and objectives, and who was involved in the program. It may also contain some historical or background information about how the program first started and how it was funded. If your evaluation focused on both process and outcomes then you should outline the reasons for this and what you hoped to accomplish in carrying out the program.

*Section 4: Evaluation Plan and Procedures*

This section describes how you conducted your evaluation. It contains information on the goals and objectives of the evaluation. It describes the evaluation methodology; that is how did you carry out the evaluation? And, how well did it work?

It contains information about the tools, for example your questionnaire or your interview questions, that you used to collect information. You should also describe how you developed these tools. Or, if the tools were borrowed from another study or organization, describe this and your reasons for using these tools rather than developing your own.

This section will contain answers to the following types of questions. For example, did you use a questionnaire that some other agency had already developed? If so, why did you use this questionnaire? If you developed your own questionnaire, what steps did you follow? Did you pilot test the questionnaire? If you developed your own interview questions, what process did you use to decide which questions to ask? What questions did you ask? Did you train the interviewers to ask the questions? Finally, how well did these tools work in collecting the information that you thought were important?

This section also describes your methods or how you collected the information. For example, if you interviewed people as part of your evaluation, you will describe how many people you interviewed, who they were, who did the interviewing, and how long it took to do all the interviews. If you sent out a questionnaire, you will describe how many people were sent a questionnaire, how many people returned their questionnaire, and who received questionnaires and why these people were chosen. If you used focus groups, you will describe how many groups you used. You will also describe who participated in the groups, why and how these people were chosen, who facilitated the sessions and how the facilitator was trained.

In the appendix at the end of the report, include a copy of all the tools that you used.

*Section 5: Analysis*

This section contains information about how you analyzed your information. That is, this section describes the strategies and statistical procedures that you used in order to make sense of all the information that you collected. Did you calculate frequencies, and/or means? Did you use t-tests to compare groups or pre- and post surveys?

*Section 6: Results*

This section outlines the results. Using the analysis strategies, what did you find out? For example, if you used a questionnaire, how did people respond? If you interviewed people, what did they say? In writing about your results, think carefully about what information is important. This information should relate back to the goals and objectives of the program as well as your evaluation. You may also want to look for different patterns in the responses or any recurrent themes, particularly in interviews.

This section will also contain any tables, graphs or charts that are helpful in illustrating or describing your results. In presenting these, it is also important to interpret what these mean for the reader. That is, for each graph or chart that you use, it is important to describe what the graph or chart illustrates or means.

If you interviewed people or used focus groups and if you have some direct quotes from what people said, include these in your results. In using direct quotes, it is important that the quote illustrates or supports the results or findings. Also, in using a direct quote, it is very important to make sure that the person who made the comment cannot be identified.

In some cases, you may discover unintended findings as part of your results. That is, there may be results that you did not anticipate. It is important to report these results and also provide possible reasons as to why these results occurred. For example, there may have been external events or factors that had an impact on your evaluation study. And it may not have been possible for you to do anything about these. It is however important to note these in your results. For example, it rained 12 out of 20 days during your sun safety program, therefore you were only able to observe 60% of the participants on the beach that you anticipated.

In this section you will also want to note whether or not there are any limitations to your evaluation. This means, to what extent could your findings apply to participants or individuals in other programs similar to yours. It may be that your findings are unique to the participants in your program. Preferably, your results should be generalizable. That is, your results should apply to many other people participating in programs similar to yours, given the same kind of circumstances.

### *Section 7: Conclusions and Recommendations*

This section contains a summary of the evaluation and comments on how well the goals and objectives of the program were reached. As a summary, this section involves making some conclusions based on the results. In writing your conclusions, there are two important questions to keep in mind: Can you be sure that your program activity caused the results? And, how encouraging are the findings?

In organizing your conclusions, you might comment first on the strengths. That is, what were the successes and why are these important? Then, comment on the weaknesses of the program, based on the results from the evaluation. That is, what areas of the program need improvement and why? If you are commenting on how effective your program is, include information on the standard or criteria that you are using to make this type of judgement. That is, if your program is successful, what is the measure that you are using to say that your program is effective? This goes back to the measures of success that you had chosen when you were first planning your program.

It is also helpful in this section to include a description of the lessons learned. That is, despite whether or not your program was successful, what are the important things that you learned that will improve on the program for next time?

Based on the results and the conclusions, it is then possible to make your recommendations. In your recommendations, you will answer questions such as Should the approach of your program be changed? If so, in what way? Should your program change it's activities and why? Should there be different staff involved in delivering the program? Should there be any changes in how the budget is allocated to various parts of the activity? Would the activity be effective with other groups of participants? If so, with whom and how should it be replicated?

The recommendations provide valuable information on what you will do differently in planning the future of the program.

### *Section 8: Appendices*

The appendices contains the following types of information: copies of any evaluation tools such as questionnaires or interview questions, detailed tables of evaluation results, the references or bibliography, or other details that people might be interested in but which are not required in the main part of the report.

**Report Checklist**

*Section 1: Executive Summary.*

- Provide a two to three page summary of the highlights of the evaluation.
- Briefly describe what was evaluated and why, the basic results, and your recommendations.

*Section 2: Table of Contents*

- Tell the reader what and where they will find the information.
- Provide a list of all the major sections, the major headings under each section, the appendices, and their page numbers.

*Section 3: Introduction*

- Outline the purpose of the evaluation and describes the evaluation questions that you were trying to answer.
- Describe the program, its goals and objectives, and who was involved in the program.
- Provide historical or background information and how it was funded.
- Provide reasons for doing process and/or outcomes evaluations.

*Section 4: Evaluation Plan and Procedures*

- Describe how you conducted your evaluation.
- Provide information on the goals and objectives of the evaluation.
- Describes the evaluation methodology.
- Describe information about the tools that you used to collect information.
- Describe how you developed these tools.
- Discuss how well the tools worked in collecting the information that you thought was important.
- Describe how you collected the information.

*Section 5: Analysis*

- Describe the strategies and statistical procedures that you used in order to make sense of all the information that you collected.

*Section 6:  Results*

- Outline the results, that is, what you found out.
- Include any tables, graphs or charts that are helpful in illustrating or describing your results.
- Report and explain any unintended findings.
- Note any limitations to your evaluation.
- Assure anonymity and confidentiality.

*Section 7: Conclusions and Recommendations*

- Provide a summary of the evaluation.
- Determine how well the goals and objectives of the program were reached.
- Ensure conclusions are based on the results.
- Describe strengths of the program, that is, what were the successes and why these are important.
- Describe weaknesses of the program, based on the results from the evaluation. That is, what areas of the program need improvement and why?
- Describe lessons learned.
- Make recommendations based on the results and the conclusions.
- Describe next steps.

*Section 8:  Appendices*

- Include copies of any evaluation tools such as questionnaires or interview questions.
- Include detailed tables of evaluation results.
- Include references or bibliography.
- Include other details that people might be interested in but which are not required in the main part of the report.

## e. What goes into a presentation?

Your presentation should include most of the elements of the written report but in a shorter, simpler form. How much information you can include will depend on how long the presentation is. You should be able to summarize the evaluation in about 20 to 30 minutes. However, in some cases you may only have 10 minutes. You will need to highlight the most important findings.

In your presentation, include the following elements:

**Introduction**

- Background information
- Program goals and objectives
- Who conducted the evaluation

**Evaluation Plan and Procedures**

- Describe if you carried out a process and/or outcome evaluation
- Describe how you conducted the evaluation
- Describe the methods and tools that you used

**Analysis and Results**

- Briefly explain the analysis
- Briefly describe the most important and relevant results
- Use graphs and tables to explain results
- Describe the limitations of the evaluation

**Conclusions and Recommendations**

- Summarize the program's success according to your results
- Explain why it was successful
- Summarize successes and failures

- Describe lessons learned
- Discuss recommendations

**Next Steps**

- Describe what do you plan to do with the results

0 **Exercise 10:** In your group or working by yourself, please answer the following questions:

Once you finished your evaluation what are your next steps?

What changes do you anticipate that you will make to your program?

Who will you involve in making these changes?

What kind of resources will you need?

## f. What do you do now?

As described earlier in this manual, one of the most important principles of evaluation is utilization. That is, one of the important outcomes of undertaking an evaluation is doing something with the results. What will you do differently as a result of what you learned? What changes will you make to your program? How will you make these changes? What kind of a future will you, as administrators and staff, plan for your program and the people involved in delivering the program?

Evaluation findings can be used in many different ways including:

- **Disseminating or providing information** to individuals inside your organization as well as the community or individuals working in other organizations who are interested in your program and its outcomes.

- Using the information to **make changes or improvements** to your current program or planning your next project.

- **Educating and orienting new members** to your program, its goals and objectives, and the different activities.

- **Identifying training needs** or any technical assistance that you might need.

- **Publicizing** what your group has done on specific issues; make information that you learned about the evaluation available to the public.

- **Making policy** or providing information to government organizations that make policy that has an impact on the kind of work that you do.

- **Making day-to-day operational or administrative decisions** about how your program is run.

- **Making decisions about continued or additional funding**, whether from your current sponsor or from other organizations or agencies.

- **Starting critical discussions** about the work your group is doing and the programs or activities that you provide. As noted earlier, evaluation is a learning process. The intent is not to criticize. The intent is to look at how things can be improved.

- **Planning actions or activities** in response to specific issues.

- **Clarifying your program's goals and objectives**, clearly defining what you want to do and why you want to do it and deciding who will be involved.

- **Making decisions about your budget and the resources** that you need to deliver your program.
- **Proving that your program is worthwhile** and that it should be continued to groups, communities and other funding agencies.
- **Acknowledging your group's work** and the benefits of this work for the larger community.

# APPENDIX 1

## Glossary: Definition of Terms

***Audience (s).*** Those individuals or groups who will hear or read about the evaluation. This includes decision-makers and others who have a special interest or stake in the program or the results of the evaluation.

***Baseline***. Facts or data that describe a group of people before they become involved in or participate in a treatment or an intervention (e.g., program).

***Benchmark***. A starting point or baseline information that is necessary to measure the kind and level of change that has taken place as a result of participation in a program.

***Data***. Information collected to support a decision. Quantitative (numerical) and qualitative (non-numerical) information are important in program evaluation.

***Demographic Data***. Information that describes the population, usually on age, gender, education level, income level, location, and cultural background.

***Descriptive Statistics***. Information that describes a population or sample. Usually, these statistics use averages or percentages to describe the group of people.

***Effectiveness***. The ability of a program to achieve its stated goals and objectives and achieve the outcomes that it had identified. Assessing effectiveness is one of the major functions of program evaluation.

***Efficiency***. The ability of a program to use its resources in an economical manner. Program evaluation also focuses on efficiency and often looks at both effectiveness and efficiency together.

***Evaluation***. The process of gathering information or data that provides evidence that a program is meeting its goals and objectives. Based on this information, individuals or groups can judge or make an assessment about a program and can make decisions about how a program can be improved. Evaluation can also mean estimating or formatting an opinion based on data.

***Evaluation Plan***. A document that outlines what you will be evaluating, the type of evaluation (i.e., process and/or outcome), the target population, available resources, the steps in carrying-out the study, the tools used for collecting information, timelines, and how the findings will be used.

***Executive Summary***. A summary statement or overview of the contents of a full length report.

***Focus Group***. Usually 7 – 10 people, with similar characteristics, that come together to prove information by discussing a specific topic. A trained facilitator keeps the discussion on track, provides targeted questions, and creates a non-threatening environment.

***Goals***. A general statement of what a program is trying to achieve or accomplish.

***Indicators of Success***. The identifiable changes that will occur as a result of participating in a program.

***Measurement Tools.*** Questionnaires, surveys, or structured interviews which are used to collect information. Tools or instruments can be created specifically for the purpose of an evaluation or they can be adopted or adapted from other evaluation studies.

***Needs Assessment***. A systematic process for identifying discrepancies between current and desired conditions. Discrepancies often serve as a basis for developing program objectives.

***Objectives***. Specific, measurable statements of what an organization wants to accomplish within a stated period of time. Objectives usually describe what will be accomplished, by whom, when, under what conditions, and how success will be measured. Objectives usually describe immediate outcomes of a program's activities.

***Outcome Evaluation***. Information is collected to describe the immediate or direct effects of a program's activities. It assesses the immediate effects of the program on the target population and usually looks at changes in participant's knowledge, skills, attitudes, and/or behaviours that are the result of the program activity. Outcome evaluation looks at **how well** the program reached its goals.

***Participatory Evaluation***. A collaborative approach which means that people, including stakeholders, will work together to design and carry-out an evaluation.

***Population***. All of the people in a particular group.

***Process***. A statement(s) that describe a program's activities. Process data describes the specific steps and activities implemented in a program.

***Process Evaluation***. Information is gathered on the activities that were implemented to achieve the established goals and objectives. It measures how, when, and which program activities were implemented. The intent of process evaluation to make changes to the activities to ensure that goals and objectives will be reached in future programs. Process evaluation looks at **how** the program is being used to reach its goals.

***Qualitative Data***. Information that provides a description of the circumstances and conditions of the situation, work, event, or problems, for the purposes of making an assessment. Information usually reflects the feelings, beliefs, and impressions of people participating in the program. Information is usually non-numerical and is often collected through interviews.

***Quantitative Data***. Information that provides an account of the scope of the problem, work or event based on numbers or statistics. Quantitative data can be used to show that results are statistically significant. Information is usually collected by using questionnaires or survey or structured interviews.

***Random Sampling***. Drawing a number of items of any sort from a larger group or population so that every individual item has equal chance of being chosen.

***Reliability***. The extent to which a measure produces the same result, time after time, across different venues or different raters.

***Sample***. A part of a population

***Standardized Surveys***. These are surveys or questionnaires that have been tested for reliability and validity. Standardized surveys can be used to compare data that is collected across other programs in either that same or other regions.

***Surveys or Questionnaires***. Tools or instruments that are used to collect data or information to describe, compare, and assess knowledge, skills, attitudes, and/or behaviour.

***Stakeholder***. A person or group of individuals who have a direct or indirect interest or investment in a project or program.

***Target Population***. The persons or groups of people on whom a program is intended to have an effect. Objectives are usually written in terms of a target population.

***Validity***. A measure of the extent to which an instrument actually measures the trait or characteristic that it is supposed to measure.

# APPENDIX 2

## Hiring an Outside Evaluator

Depending on the scope of a program or the evaluation, agencies may chose to bring in an outside evaluator to assist in designing, implementing, analyzing data, and/or interpreting results.

If you are considering contracting with someone to conduct an evaluation or some component of the process, it is important to clarify the role and responsibilities of the evaluator. Some important considerations that need to be clarified prior to contracting with an evaluator include:

- Defining the relationship between the project sponsor and the evaluator.
- Identifying the work for which the evaluator will be responsible and agreeing on a detailed work plan.
- Identifying the credentials and experience that the evaluator will require.
- Identifying how the evaluator will be held accountable for implementing an evaluation framework and its principles.
- Identifying how any disputes between the project sponsor and evaluator will be resolved.

The book ***Demonstrating Your Program's Worth: A Primer on Evaluation for Programs to Prevent Unintentional Injury*** provides some insights into considerations when hiring a consultant. The book also outlines a number of characteristics including the fact that a consultant should:

- Be uninvolved in developing or running the program;
- Educate staff in the evaluation process and materials used as well as explain the benefits and risks of an evaluation;
- Remain neutral, avoid being influenced by produce particular findings, and remain impartial about the evaluation results;
- Have the appropriate experience both in terms of the type of program being evaluated and conducting the evaluation;
- Communicate with key personnel, provide the full results of the findings to staff and respect all levels of personnel; and
- Deliver the report and deliverables on time and within established constraints (for example, budget).

Even though these characteristics are directed at an outside consultant, they also are applicable to individuals within the organization or agency who are charged with carrying out an evaluation process. As noted earlier, this manual is developed specifically for agencies so that they can carry out their own evaluation study. However, in doing so and in abiding by principles of participatory evaluation, it is important that those conducting the evaluation involve and educate staff and stakeholders in the process, communicate the process and results to all those involved, conduct the evaluation within the agreed to framework, time and budget, and exercise impartiality in reporting the results, drawing conclusions, and making recommendations.

# APPENDIX 3

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