

step 2

Select Methods

At the end of this module, you will be able to:

- ▲ Establish the expectations of your program for each evaluation question that you identified in Step 1 by identifying **what** you need to know (Step 2a).
- ▲ Create a data collection plan by identifying **where** you will get information, from **whom** and **when** the data should be collected, and from **how many** people (Step 2b).
- ▲ Determine the **logistics** and **feasibility** of your evaluation methods (Step 2c).

In Step 1, you learned how to establish the purpose of your evaluation, describe your program using a logic model, consult with stakeholders and determine the evaluation questions that you need to ask in order to evaluate your program.

Step 2 will help you determine the best way to answer your evaluation questions by zeroing in on the specific data you need and the methods you should use to gather them. Throughout this module, you will use the *Methods Worksheet*. A completed *Methods Worksheet* from our example evaluation of the Parenting Program is displayed on the next page.

Open

Methods Worksheet

EXAMPLE

Methods Worksheet									
Evaluation Questions	2a Expectations of the Program (based on <i>Expectations Worksheet</i>)		2b Data Collection Plan						2c Logistics (based on <i>Logistics Worksheet</i>)
	"I expect to have..."		Does Data Exist?	Type of Tool	Who Could Provide the Data? (Source)	Who Can Gather the Data? (Collector)	Design	How Many?	Timeframe
1. How many people participated in the program?	1a At least 10 or more people attend each session in both east and west. 1b Minimum of 250 registrants in 25 series.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Attendance sheets Registration form	Program staff Participants	Program staff	Ongoing	All — 250 - 300	Sept. 1996 - May 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. How did participants find out about the program?	2a At least 50% referred from community resource centres.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Registration form	Participants	Program staff	Ongoing	All — 250 - 300	Sept. 1996 - May 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Did the program reach the intended target group?	3a At least 50% of participants' education is high school or less. 3b At least 95% have children 2 to 4 years old.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Registration form	Participants	Program staff	Ongoing	All — 250 - 300	Sept. 1996 - May 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Were participants satisfied with the series?	4a At least 70% of all participants rate the series as excellent or good. 4b At least 70% of parents with high school education or less rate the series as excellent or good. 4c Some suggestions were made for improvements in length, location, topics, and other areas. 4d At least 70% of all participants say they would recommend the series to a friend.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-completed questionnaire	Participants	Program staff	Specific time — complete questionnaire after series and by phone one month later	All	Sept. 1996 - May 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Did participants think that their parenting skills improved?	5a At least 70% of participants think their parenting skills have improved immediately after the series and one month later.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-completed questionnaire	Participants	Program staff	Specific time — complete questionnaire after series and by phone one month later	Stratified random sample of 10 series (100 parents)	January 1997 - May 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Did participants think that their knowledge about parenting increased?	6a At least 70% of participants think their knowledge about parenting increased immediately after the series and one month later.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Self-completed questionnaire	Participants	Program staff	Specific time — complete questionnaire after series and by phone one month later	Stratified random sample of 10 series (100 parents)	January 1997 - May 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Did parents' communication skills improve?	7a At least 70% of parents improved their communication skills.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Observation	Participants	Trained observer	Two observations; at beginning and after completion	Stratified random sample of 6 series (60 parents)	January 1997 - May 1997	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. Did staff think they were well prepared to implement the activities?	8a All staff think they were well prepared to implement activities.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Focus group	Program staff	Program manager	Assess at mid-point and after all series completed	All staff (8) in one group	January and June 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9. What suggestions did staff have to improve the delivery of the program?	9a Suggestions from staff relate to topics, location, participant and other areas.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Focus group	Program staff	Program manager	Assess at mid-point and after all series completed	All staff (8) in one group	January and June 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
10. Did staff implement activities as planned?	10a At least 75% of topics are discussed. 10b At least 30 min. of discussion on each topic covered. 10c At least 75% of all planned activities take place. 10d All resources that should be are distributed.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Activity logs	Program staff	Program staff	Ongoing	All 25 series	Sept. 1996 - May 1997	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

STEP 2 a

Establishing Expectations

In Step 1, you determined the specific questions your evaluation must answer in order to help you make a decision about your program. In this, the first stage of Step 2, you will establish your expectations for each question — what you want the program to achieve.

Expectations = "I expect to have . . . "

Think back to when your program began. You had some idea of what you wanted to see happen in terms of activities and outcomes, and a sense of what would constitute success. Perhaps you wanted your participants to come away feeling that it was a good experience, and that they had received something in the way of skills or knowledge that would be significant in improving their health.

To identify your expectations, you need to consider the following questions for each evaluation question.

- What would satisfy you that your program has been operating successfully and achieving what you intended? For example, in the Parenting Program evaluation, you wanted to make sure that you were reaching parents with a high school education or less.
- What is the minimum that you would accept before considering making changes to the program? In the example, you expected that at least 50% of participants in the Parenting Program had high school education or less.

These two questions reflect the two parts of an expectation — the "what" and the "how many." The "what" is the easiest part to identify. The "how many" is harder to establish, because you have to decide the level of the "what" that must be achieved in order to consider the program a success.

The *Expectations Worksheet* on the next page is designed to make the task of identifying your expectations easier by focusing on these two points. A blank copy is in Appendix B. When this *Worksheet* is completed, you will transfer the expectations to the first column of the *Methods Worksheet*. If you find it easier, you can work directly with the *Methods Worksheet*.

Determining Possible Expectations

In the first column of the *Expectations Worksheet*, list the evaluation questions that you identified in Step 1. Then do a bit of **brainstorming** and in the "What?" column, write down your expectations for each question as they come to mind. As the chart suggests, it usually helps to begin with the phrase "I expect to have . . .".

Deciding what to enter in the "How Many?" column is more of a challenge. You must arrive at your own answer, using a combination of your subjective viewpoint and some objective considerations. Keep in mind that "how many" can be a number or a percentage (quantitative data), or can be expressed in words such as "most," "many" or "the majority" (qualitative data). Among these considerations are the following:

Expectations Worksheet

Evaluation Question (Copy from Evaluation Questions Checklist)	"I expect to have . . ."	
	How Many?	What?
1. How many people participated in the program?	1a At least 10 or more 1b Minimum of 250	1a People attend each session in both east and west. 1b Registrants in 25 series.
2. How did participants find out about the program?	2a At least 50%	2a Participants referred from community resource centres,
3. Did the program reach the intended target group?	3a At least 50% 3b At least 95%	3a Participants' education is high school or less. 3b Participants have children 2 to 4 years old.
4. Were participants satisfied with the series?	4a At least 70% 4b At least 70% 4c Some 4d At least 70%	4a Participants rate the series as excellent or good. 4b Parents with high school education or less rate the series as excellent or good. 4c Suggestions for improvements in length, location, topics or other areas. 4d Participants say they would recommend the series to a friend.
5. Did participants think that their parenting skills improved?	5a At least 70%	5a Participants think their parenting skills improved immediately after the series and one month later.
6. Did participants think that their knowledge about parenting increased?	6a At least 70%	6a Participants think their knowledge about parenting increased immediately after the series and one month later.
7. Did parents' communication skills improve?	7a At least 70%	7a Parents improved their communication skills.
8. Did staff think they were well prepared to implement the activities?	8a All	8a Staff think they were well prepared to implement activities.
9. What suggestions did staff have to improve the delivery of the program?	9a Some	9a Suggestions from staff relate to topics, location, participants and other areas?
10. Did staff implement activities as planned?	10a At least 75% 10b At least 30 min. 10c At least 75% 10d All	10a Topics discussed. 10b Discussion on each topic covered. 10c Planned activities take place. 10d Resources that should be are in fact distributed.

Output versus input — What would be a reasonable output based on the input?

For example, in the Parenting Program, if a group session lasts for two hours with 1 nurse leader, a reasonable output might be having 10 or more participants. If there are 2 nurse leaders, however, the reasonable output might increase to 20 participants.

Age of the program — How old is the program? If the program is new and in its first year of operation, your expectations may be lower than at its half-way point or completion. For example, in the Parenting Program, if your question involves the number of participants, your expectation at the start of the program might have been 5 per session. However, now that the program has been running for five years, you hope to have at least 10 per session to justify the input (see above). If a program has been in operation for several years, the acceptable result may be to see numbers maintained, increased or decreased, depending on the population trends and the characteristics of your target group.

Previous experience or similar programs — How have similar programs fared?

What were their results? You may need to check with colleagues at other health units or review the literature about similar programs for information to help you define your expectations.

Present level of outcomes — What is a reasonable change for the program to achieve? For example, if participants know little about the subject, their knowledge as a result of the program may be expected to increase at a far greater rate than if their knowledge is already high.

Realistic expectations — Set expectations which you believe are achievable.

Push yourself to get the most out of the program, but don't set yourself up for failure. One hundred percent is rarely a realistic expectation.

You may find that you cannot identify expectations for some of your evaluation questions. This is most likely because the evaluation question is not clear and/or specific. Review the section in Step 1 on Checking the Feasibility of the Evaluation Questions and see if you can improve the questions.

Selecting Expectations and Checking Feasibility

Your second step is to **select** the expectations that you will use. Review each of your expectations on the *Expectations Worksheet* and apply the SMART principle that was introduced in Step 1.

SMART

Specific — Is the expectation specific? Is it clear?

Measurable — Will you be able to collect data to measure up against your expectation?

Actionable — Would you be able to take action, if necessary, in response to your result?

Relevant — Is it necessary to reach this expectation in order to evaluate your program?

Timely — Is this expectation realistic right now?

If an expectation does not meet these standards, then ask if it can be re-phrased. Consider revising it or consulting an expert in evaluation. If the revised expectation still fails the SMART test, then be prepared to eliminate it and move on with the others.

Once you have selected the expectations that you will use, copy both the evaluations questions and the expectations onto the *Methods Worksheet*.

STEP 2 b

Developing a Data Collection Plan

Now you must develop your plan for collecting your data. You will be able to do this using your *Methods Worksheet* with the help of the *Data Collection Guide* which follows. There is a blank *Methods Worksheet* in Appendix B.

To create your data collection plan, reflect on the following seven considerations for each evaluation question. The *Methods Worksheet* will walk you through each consideration.

1. Is all the data you need already available?
2. What type of data collection tool would provide the data?
3. Who could provide the data, if asked?
4. Who can gather this data?
5. What is the best design?
6. From how many people or things should data be collected?
7. What is the required timeframe for data collection?

When you have answered all of these questions, you will have outlined your method for collecting the data in a data collection plan.

The order in which you answer these seven questions can vary, depending on the evaluation question. This particular order was chosen for the *Tool Kit* as it is easy to use for most evaluation questions. Use the order that seems most natural for you; evaluators will usually start with the design question when assessing outcomes, whereas managers may prefer to start with the type of tool.

The *Tool Kit* will provide you with some information to help develop your data collection plan. If you would like more information, an excellent text is Lawrence Green and Frances Lewis' book called *Measurement and Evaluation in Health Education and Health Promotion*, published by Mayfield Publishing Company in 1986.

Selecting the Type of Tool

Begin to develop your data collection plan by considering **whether the data you require already exist**. If they do, then in the “Type of Tool” column in the *Methods Worksheet* write in the type of data collection tool that was used.

If the data are not readily available, then refer to the *Data Collection Guide*. Review the description of the tools in the first column to check for any that might be used to collect the data you need. Don’t worry at this point about whether the tool or data in fact exist. Just think about where they could or should be. Then indicate in the “Type of Tool” column of the *Methods Worksheet* the tool that could be used for each expectation. For example, in the Parenting Program, if you want to know how many people participated in the program you would ask: “Where could I find data about how many people participated in our program?” Attendance sheets would probably hold the answer, so you enter this in the “Type of Tool” column.

Usually, you will be interested only in data which have come directly from your program. However, if your question is about short- or long-term outcomes, then the needed data may already exist elsewhere. If you find an evaluation report that featured a program and setting similar to yours, and the methodology was sound, you can use its results to help answer your outcome evaluation question. It is important to do a thorough literature search and check with others managing similar programs prior to collecting new data about your particular program.

There could be more than one tool suitable for an expectation. The decision about which tools and methods are preferred is based on a number of factors. The description of the data collection tools can help you decide which one is right for you. Note that each description indicates whether the data provided by the tool consists of numbers (“N”) or words (“W”). Both methods are useful. If your expectation has numbers or percentages in it, make sure that the tool will actually give numbers or percentages.

When selecting your tool, consider the quality of the data that it will produce. You want the tool to give you data which are as close to the truth as possible (validity). You also want the tool to give consistent answers if you ask the same person the same questions at different times (reliability). Check the disadvantages column in the *Data Collection Guide* for problems with getting valid and reliable data, and choose the most appropriate tool for your expectation.

Step 3 will go into assessing reliability and validity in more detail. You also need to consider the resources required for each tool. Refer to the *Logistics Guide* for each tool in Appendix D to identify the requirements and compare them to your available resources.

When selecting the tool, it is important to consider the characteristics of the people from whom you are collecting data (e.g., age, language, culture, disabilities) and the setting in which the evaluation is being conducted. For example, in the Parenting Program, face-to-face interviews that require parents to wait after a session

Data Collection Guide		
Description	Advantages	Disadvantages
Activity Logs (N,W) Staff record of day-to-day activities in program, e.g., topics covered, materials distributed, session format (lecture, discussion group, drop-in, etc.)	<ul style="list-style-type: none"> • low cost • can be developed or modified to meet evaluation needs • easy for staff to complete 	<ul style="list-style-type: none"> • reporting detail and consistency of completing log data may vary among staff • analysis can be unwieldy (e.g., analysing written information in diaries) • changes in definition and kinds/types of data may make it difficult to compare data from different time periods • some data may be confidential and may require special consent
Administrative Records (N) Data (possibly computerized) associated with the program's operations <i>Financial</i> — Cost of materials, rentals, staffing, etc. <i>Facility/Equipment Utilisation</i> — Location and use <i>Personnel</i> - Assigned staff: numbers, time <i>Computerised Activity Reporting System</i> — Activities and staff time	<ul style="list-style-type: none"> • low cost • easiest data to understand • usually exists 	<ul style="list-style-type: none"> • may be incomplete, inaccurate or inappropriately organised • not usually comparable to other organisations or programs • limited to data currently being collected
Charts (N,W) Charts and records on individual participants	<ul style="list-style-type: none"> • low cost • easily available 	<ul style="list-style-type: none"> • some data may be confidential and may require consent • data may not be recorded consistently from chart to chart • analysis can be unwieldy (e.g., analysing written information in charts) • need to ensure people abstract data from chart in the same way
Registration Forms (N,W) Record of detailed participant personal data and other information (e.g., where heard about/referral to program) Attendance Sheets (N) Sign-in sheets or staff-recorded	<ul style="list-style-type: none"> • low cost • easily available • can develop or modify to meet evaluation needs 	<ul style="list-style-type: none"> • some data may be confidential and may require consent • changes in definition of terms and kinds/types of data may make it difficult to compare data from different time periods
Population Database (N) Existing sources of data on the population, e.g., Census or vital statistics (computerised on HELPS — Health Planning System — for public health)	<ul style="list-style-type: none"> • useful for calculating a population rate • description of catchment area population • often inexpensive source of data 	<ul style="list-style-type: none"> • often several years behind current year • limited to existing data • may need computer expertise
N = Data provided consists of numbers		W = Data provided consists of words

Data Collection Guide (continued)		
Description	Advantages	Disadvantages
Face-to-face Interviews (N,W) Responses to an interviewer's predetermined questions (in person)	<ul style="list-style-type: none"> allows for a full range of attitudes to be expressed can probe for more detail 	<ul style="list-style-type: none"> respondents may not have time to reflect properly on each question time- and resource-intensive requires skilled interviewers
Self-completed Questionnaires (N,W) Questionnaire completed by the respondent (can be handed out to the respondent or sent by mail)	<ul style="list-style-type: none"> takes less time and is less costly than face-to-face interviews and telephone surveys avoids interviewer bias data can be collected relatively quickly if done in person (not for mail surveys) allows a large number of respondents to be surveyed respondents may feel more comfortable answering sensitive questions 	<ul style="list-style-type: none"> questions must be well-structured and may limit participant responses richness of detail is limited to added comments instructions or questions cannot be clarified response rates usually relatively low if a mail survey, but varies depending on topic and participants literacy level may restrict ability to use may need to translate
Telephone Survey (N,W) Responses to predetermined questions asked over the telephone	<ul style="list-style-type: none"> requires less time and expense than face-to-face interviews nonverbal interviewer bias reduced instructions and questions can be clarified eliminates personal risk to the interviewer 	<ul style="list-style-type: none"> respondents may not have time to reflect properly on each question easy for respondents to break interview before completion can be seen as invasive, but less so than a face-to-face interview respondents may not truthfully answer sensitive questions cannot reach if no telephone (this may or may not be a problem depending on the target group)
Observations (N,W) Skills or behaviour observed directly	<ul style="list-style-type: none"> allows observation of nonverbal behaviour and skills occurs in natural environment 	<ul style="list-style-type: none"> little control over other factors that may affect the data information difficult to quantify (turn into numbers) expensive, therefore limited to small sample sizes
Focus Groups (W) A group interview with predetermined questions	<ul style="list-style-type: none"> allows investigation of wide ranging set of perceptions about a topic can collect in-depth information and opinions about particular issues all participants have opportunity to contribute structured coverage of topics can be inexpensive if existing groups used 	<ul style="list-style-type: none"> a limited number of structured questions can be utilised some lines of questioning can stall with particular groups some participants may dominate personality conflicts among group members can arise only represents the participants involved and may not be generalisable can be expensive if it involves a large number of groups
Case Study (W) A story-like narrative describing an activity or participant	<ul style="list-style-type: none"> rich in detail useful to understand the context of a program 	<ul style="list-style-type: none"> takes time to complete variation in how people record details of program not generalisable

N = Data provided consists of numbers

W = Data provided consists of words



will get less participation than a self-administered questionnaire completed during a session. The response rate is critical — you want your data collection group to represent all the people in the program, not just a particular subset.

You might consider more than one source of data to get different perspectives on the same question. In the Parenting Program evaluation, to find out whether the parents communication skills increased, you could use observations of the parents, ask their children for their opinion, and ask the opinion of the nurse giving the series. This approach is called “triangulation of evidence.” It is both more complicated and more powerful.

If you would like to use data which has been collected for reasons other than for your program, then you must carefully assess whether this is permitted under the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA). In general, an individual must be notified if data is to be used for a purpose other than for what it was originally intended. It is always important to respect the confidentiality of any data collected about individuals.

Determining the Source of the Data

The next step is to identify **who can provide the data** (i.e. the source). Ask yourself, “Who or what has the data right now, or might be able to provide it if they were asked?” This might include members of the actual target group (participants), the staff who run the program, other staff, people in your administration, other internal stakeholders or external stakeholders. There may be more than one group that can provide the data. Would it be easier to get the data from one group over another? Write your answer in the column “Who could Provide the Data?” of the *Methods Worksheet*.

Determining the Data Collector

Consider **who can gather the data** (i.e. the collector). Ask yourself, “Who has the capacity, including expertise and time, to collect the data?” For example, “Who can administer a questionnaire, conduct a focus group, or collect the attendance sheets?” Again, this might include the program manager, the staff involved in delivering the program, other staff volunteers, or you may even require an external evaluator. If there is more than one group, who can get the data easier and faster? Write your answer in the “Who Can Gather the Data” column of the *Methods Worksheet*.

Design, Number, Timeframe

The next step is to develop the evaluation design, determine the number of people or things to provide data and establish the timeframe for data collection. These considerations are somewhat different for process and outcome evaluation. The first section deals with process evaluation; the second addresses outcome evaluation.

Process Evaluation

Design

The design of your process evaluation depends on whether:

- *all* the people or things provide data on an *ongoing* basis;
- a *sample* of people or things provide data on an *ongoing* basis; or
- *all* or a *sample* of the people or things provide data at *specific times*.

The following considerations will help you make your decision.

- a) **Ongoing with All** — The design for process evaluation is usually ongoing, because you can often collect data in the course of the program's operations. For example, if your program has ongoing registration and runs several 6-week sessions over the course of the year, your data collection via registration forms is considered ongoing. Once the form is designed and the process of registering is established, the data will be collected automatically all year long.
- b) **Ongoing with Sample** — Often, however, it is impossible to include everyone who can provide data because of expense or timing. Sometimes it is not even necessary to include everyone in order to get an accurate picture. In either case, you may try to get data from a small group, or sample, of those who have it. Selecting the sample and determining the number required is complicated, so if you decide to use a sample you should consult with your health unit epidemiologist or evaluation specialist. This step requires special expertise, but not a lot of time. Bring your *Worksheets* with you to help the epidemiologist or evaluation specialist. Appendix D includes a brief description of both sampling methods and how to determine sample size.
- c) **Specific Times with All or Sample** — Some tools require that the data be collected only at one specific time. If you use focus groups, for example, your evaluation design usually involves one data-gathering session with each group involved.

As you make your decision on the design for each evaluation question, indicate it in the "Design" column on the *Methods Worksheet*.

Number of People/Things

The number of people/things from whom or which you collect data goes hand-in-hand with the evaluation design. If the design is ongoing, then put the number of the expected participants or things in the "How Many?" column in the *Methods Worksheet*.

If the design utilises a sample, the key is to know just how many need to be included in order to be sure that you are getting an accurate picture. As outlined above, you should consult with your health unit's epidemiologist or program evaluation specialist to determine the exact number.

If the design involves specific times, then enter the number of people expected to be participating at that point in time.

Timeframe

The timeframe defines the point at which the data will be collected in your program. If the data collection is to be ongoing, and you are including all the participants involved, then the timeframe is the same as the timeframe of your program (September to May, for example). If you are using a sample, consult the epidemiologist or program evaluation specialist for the timeframe.

If, on the other hand, the data is to be collected at a specific point in time, then the timing will be based on the evaluation questions and expectations. You need to consider when the best time would be to collect the data. For example, if you plan to conduct a focus group with the staff delivering the Parenting Program, then consider doing this half-way through (perhaps end of January) and again at the end of the program (May).

Outcome Evaluation

There are many methodological issues to consider when studying questions about outcomes. Therefore, it is wise to consult with an epidemiologist or program evaluation specialist as you design this part of the evaluation.

Design

One of the challenges in measuring outcomes is knowing whether the changes you've observed are a direct result of your program. Occasionally you can use an "after only" design if you're sure that the outcome is related solely to your program (or if you are asking participants their opinion about the impact of the program, as in the Parenting Program example). Generally, though, there are a *number* of possible influences. In order to determine the impact of *your program* on the changes observed, you must be able to set up some form of a comparison. The two simplest designs to accomplish this are the "before-and-after" design, or the "comparison group" design.

Before-and-after (Pre-test and post-test) — With this design, you test the participants before they are exposed to the program, and re-test after they have participated. The difference measured may be attributed to your program, however, other influences may have had an effect.

Comparison Group — With this design, you establish two separate groups to be tested. The first is the comparison group and is not exposed to the program; the second consists of a group of participants. Comparing the results of the comparison group with the participating group will tell you the extent to which the changes observed are the direct result of your program.

Number and Timeframe

There are many factors to consider if you use one of these designs. If you use a before-and-after or comparison group design, consult your epidemiologist or a program evaluation specialist for both the necessary number of people and the timeframe.

If you do decide to use an “after only” design, you must decide how many people to include. If it is everyone, enter the number from the expectation into the “How many?” column and the duration of the program in the “Timeframe” column. If you use a sample, consult the epidemiologist or program evaluation specialist.

Once you’ve decided the design, number and timeframe required for your evaluation questions, you have completed your Data Collection Plan. You are now ready to move on to Step 2c and consider the logistics of collecting the data.

STEP 2c

Developing the Logistics Plan and Assessing its Feasibility

For each data collection tool you plan to use, it is important to consider the various tasks involved in developing the tool, then gathering and analysing the data. The *Logistics Guides* in Appendix D identify these, who could take responsibility for them, suggested timelines and details about required equipment and supplies.

Once the necessary tasks are identified, it is crucial to assess their feasibility given your current resources. The *Logistics Worksheet* prompts you to think about the resource requirements for each task. There is a blank *Logistics Worksheet* in Appendix B. An example *Logistics Worksheet* has been completed for a self-completed questionnaire for the Parenting Program evaluation.

Start by finding the *Logistics Guide* in Appendix D for your type of data collection tool. Copy the various tasks from the *Guide* into a blank *Logistics Worksheet* from Appendix B.

Open

Logistics Worksheet for Self-Completed Questionnaire

step 2

step 2

Tasks	Resources Required											Feasible?	
	Human Resources							Other Expenses			Time		
	In-House			External				Equipment, Supplies & Administration	How Much Will It Cost?	Are the Funds Available?	Date Required	Can It Be Done In Time?	
	Who Could Do It? Name(s)	How Long Would It Take?	Do They Have Time?	Who Could Do It?	How Long Will It Take?	How Much Will It Cost?	Are the Funds Available?						
• Check for existing measures or tools, then develop a new tool or modify an existing one	Laura Simpson	20 hrs.	Yes					• Tool Worksheet	NA		August 3, 1996	Yes	Yes
• Assess quality of tool	Laura Simpson	6 hrs.	Yes					• No additional supplies	NA	Yes	August 10, 1996	Yes	Yes
• Prepare instructions for people handing out the tool	Laura Simpson	4 hrs.	Yes					• No additional supplies	NA		August 17, 1996	Yes	Yes
• Train people handing out the tool and provide instructions	Laura Simpson and 8 Parenting Program PHNs	1 day	Yes					• Printing of the tool • Refreshments and lunch for 9 people	\$190	Yes	August 19, 1996	Yes	Yes
• Pre-test tool and revise if necessary	Laura Simpson and 1 Parenting Program PHN	1/2 hr. per series; 1 series	Yes					• Completed data collection tool • Printing of the tool	\$250	Yes	August 24, 1996	Yes	Yes
• Reproduce tool	April Colorado	1 day	Yes					• 300 tools x 2 pp x \$.05 x 2 times • 300 consent forms x 1 pp x \$.05 x 1 time	\$60 \$15		August 27, 1996	Yes	Yes
• Distribute tool	Parenting Program PHNs	10 min. per series	Yes					• No additional supplies	NA		August 31, 1996	Yes	Yes
• Gather completed tools	Parenting Program PHNs	"	"					• No additional supplies	NA		Ongoing — at the end of the last session for each series	Yes	Yes
• Analyse data				Fred Frzinsky	Data entry: 2.5 hrs. Data analysis: 2 days	\$20/hr. x 17 hrs. = \$340 \$300/day x 2 days = \$600 Total: \$940	Yes	• Quantitative Data Analysis Worksheet and/or Quantitative Data Organization Worksheet plus Qualitative Data Analysis Worksheet • Data Interpretation Worksheet • Copy of the tool	NA		May 19, 1997	Yes	Yes
• Interpret the data • Make decisions • Write and disseminate the report	Laura Simpson and Barb Labey	10 days	Yes					• Data Interpretation Worksheet • Action Plan Worksheet • Report Worksheet	NA		June 18, 1997	Yes	Yes

Next, you must **consider the resources** required for each task. These include human resources (both internal and external), equipment, supplies and administrative resources and — last but not least — time.

The following questions will help you determine whether your plan is feasible, given the resources you have.

- Do you have the expertise and time in-house to do all parts of the plan?
- Will you require someone outside of your organisation to do any of the work? If so, what will it cost and do you have the money to pay for it?
- What are the other costs involved? For example, if new tools are required, what will it cost to develop them?

To help illustrate, assume that you plan to use a self-completed questionnaire.

Starting with the first task in column 1, “develop data collection tool,” you must **consider the human resources** that you have available to develop the questionnaire. First, consider in-house resources. Ask yourself, “Do we have the expertise in our organisation to create this tool?” and enter any names that come to mind. Next, consider the time that these people will need to develop the questionnaire, and finally, whether they have the time to do it. If the answer is “no” to any of these three questions, then you will need to consider external resources.

If you plan to use external resources, the first two questions are the same, but the cost of hiring someone outside of your health unit to prepare the questionnaire must now be factored in. This involves two considerations: “How much will it cost?” and, “Are there funds available to pay for it?”

Once you have determined who will do the task, then you must **consider other expenses** that are involved in developing the tool. In the case of developing the self-completed questionnaire, only the *Tool Worksheet* is required. Not all tasks will be as inexpensive, however. As you move down the list of tasks in the first column, you will find it necessary to account for other, and sometimes more significant, expenses such as printing and mailing.

In the next section of the *Logistics Worksheet*, **consider the timing**. In the first or “Date Required” column, note the actual dates by which this task needs to be done, and in the second column decide whether the deadline is achievable.

Now look across the entire line and **decide whether it is feasible** to complete that task. If, for example, no one in your unit has the time available to develop the self-completed questionnaire, but you can afford to pay someone to develop it, and it can be ready by the deadline, then you can say “Yes, it is feasible to develop the questionnaire.” If, however, you find that you have the expertise and time in-house to develop the questionnaire, but it cannot be done by the date needed, then your decision would have to be “No, it is not feasible at this time.”

Complete the *Logistics Worksheet* for the tool, working across the page for each task. Don't worry — it will quickly get easier. Then check to ensure that all tasks are "Yes" in the feasible column. If the answer is "No," you will have to reconsider whether you should use it. Review the problem task and decide whether anything can be done to change the "No" to a "Yes." If not, then you will know that using this tool is not feasible.

Complete a *Logistics Worksheet* for each data collection tool you are considering using and decide which tools are feasible for your evaluation.

Key Points

- ▲ An expectation for your program consists of two parts — the "what" and the "how many."
- ▲ When determining your expectations, you should consider the following:
 - Output versus input;
 - Age of the program;
 - Previous experience or similar programs;
 - Present level of outcomes; and
 - Realistic expectations.
- ▲ Creating a data collection plan is an important step in ensuring that the tools you select will provide the right data to answer your evaluation questions.
- ▲ The evaluation design, the number of people or things data are collected from and the timeframe for the evaluation are closely linked elements in your data collection plan.
- ▲ The two simplest designs to measure outcomes are: before-and-after (pre-test and post-test) and comparison group.
- ▲ Developing a logistics plan will tell you whether it is feasible to use the tools you've selected.

Quiz Yourself

- ▲ In determining the expectations for your program, “how many” is expressed in a number or a percentage for quantitative data. How is it expressed for qualitative data?
- ▲ What are the seven things you need to consider for each evaluation question when creating your data collection plan?
- ▲ There could be more than one tool suitable for the same expectation. If so, how would you decide which one to use?
- ▲ When is it possible to use an “after-only” design?
- ▲ There are several cases when you should consult an epidemiologist or evaluation specialist. Can you name two?

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