GUIDE: Evaluating a Population Health Project
Purpose of Resource

The purpose of this resource is to provide learners with step-by-step guidelines and information to support comprehensive evaluation of population health initiatives and programs. Trainers may choose to provide this resource as additional supplementary information to support learners understanding of evaluation principles and completion of relevant assessments.

Units of Competency

This resource supports learning and completion of assessments for the following units of competency:

- HLTPOP503C Plan a population health project
- HLTPOP504C Evaluate a population health project

Acknowledgement

This resource has been adapted from a range of existing resources of which have been referenced at the end of this guide.
What is Evaluation?

There are a variety of academic definitions for evaluation such as:

“The process by which we decided the value or worth of something. For health promotion, this process involves measurement and observation and comparison with some criterion or standard” (Hawe, Degeling and Hall, 1990)

"Evaluation is the systematic assessment of the operation and/or the outcomes of a program or policy, compared to a set of explicit or implicit standards, as a means of contributing to the improvement of the program or policy." (Weiss, 1998)

“The systematic gathering, analysis and reporting of data about a program to assist in decision making.” (Ontario Ministry of Health, Public Health Branch, 1996).

In simple terms, evaluation is the process of assessing whether your project has met its objectives. It involves observing, documenting, measuring and comparing.

Evaluation should be built into your project during the planning phase. When it comes to developing your evaluation plan, you will first need to look at your activities (process evaluation) and the effect (process/outcome evaluation) these activities have had.

Why is Evaluation Important?

There are many reasons why evaluation is important for population health projects. Some project workers may be pushed to do evaluation by external requirement such as funders or partners or they may be pulled to do evaluation by an internal need to determine how the program is performing and what can be improved. While push or pull factors can motivate staff to conduct good evaluations, program evaluation efforts are more likely to be successfully implemented when staff see the results as useful information that can help them do their jobs better.

Population health workers need to make on-going decisions about the programs they deliver through evaluation processes by:

- Assessing how the project is going.
- Determining whether objectives and strategies are being met.
- Assessing if the project is making a difference.
- Identifying areas to improve by assessing what worked well and what didn’t.
- Supporting advocacy to justify the need for further funding and the continuation/extension of the project.
- Being accountable to funders and community members involved.
- Comparing the project with other similar projects.
Providing a tool for other people to learn from when developing their own projects (continuous quality improvement).

**Who might be interested in your evaluation?**

Before developing your evaluation plan, it may be useful to consider who could be interested in it, what they want to know, and why. There are a number of people or groups who may be interested in the evaluation of your project. Some examples are:

**You**

- To make changes to improve the project as you go along.
- To find out if the project has been successful.
- To be able to argue the importance of the project to others (eg. potential funders).

**Participants/Volunteers**

- To find out if the project has been effective and made a difference.
- To help ensure continuation of the project, or aspects of the project that were successful.
- To know that their views have been incorporated into the evaluation.

**Funding Bodies**

- To know how the funds were spent.
- To know if the project has done what it said it would do.
- To know what difference the project has made.
- To know what the main outcomes are.
- To know what the lasting or on-going benefits will be.
- To find out if your project could be replicated elsewhere.
- To know why the project should be kept going, or changed, or whether something else should be done with the money instead.

**Future Projects**

- To know what helped and hindered your project.
- To know what your project was able to achieve.
- To gain insight from your hindsight.

The benefits of evaluation are far greater than simply meeting accountability requirements.
Types of Evaluation

There are three main types of evaluation: process, impact and outcome evaluation.

**Process Evaluation**
Process evaluation covers all aspects of the process of delivering a program. It involves reviewing the activities (or strategies) of your project such as looking at what has been done, who has been reached, and the quality of the activities. It helps to distinguish the causes of poor program performance. Process evaluation seeks answers to questions such as:

- Has the project reached the appropriate people?
- Are all the project activities going to plan? If not, why not?
- Were any changes made to the intended activities? If so, why?
- Are materials, information, presentations of good quality?
- Are the participants and other key people satisfied?

Some examples of process evaluation measures might involve comparing actual and planned performance along all or some of the following:

- The location where services or programs are provided (e.g. rural, urban).
- The number of people receiving services.
- The proportion of the intended target group that received the services.
- The economic status and racial/ethnic background of people receiving services.
- The quality of services provided.
- The actual events that occurred while the services were delivered.
- The factors (both positive and negative) that affected implementation.
- The amount of money the project used.
- The direct and in-kind funding for services.
• The staffing for services or programs.
• The number of activities and meetings.
• The number of training sessions conducted.

The main methods used for process evaluation include reviewing key project planning documents to assess the extent to which the activities have been implemented, other qualitative methods (e.g., focus groups), and data collection to measure program reach. ‘Reach’ is the percentage of key stakeholders, settings or members of the community affected by the program.

Program reach can be easily determined using the following calculation:

\[
\text{Number affected} \times 100 = \text{REACH} \\
\text{Number eligible}
\]

Some aspects of reach (e.g. program attendance) may be measured as part of the impact/outcome evaluation. Other aspects addressed by process evaluation include the quality and appropriateness of the processes undertaken during its implementation.

**Impact Evaluation**

Impact evaluation is used to measure short and medium term program effects and can be used at the completion of stages of implementation (i.e. after sessions, at particular intervals and/or at the completion of the program). This evaluation involves assessing the extent to which your project has met its objectives. For this reason, it is crucial that program objectives are developed and written in a way that enables later assessment about whether and to what extent they have been achieved. Writing ‘SMART’ objectives is covered in the CheckUP resource, “A Guide to Developing a Population Health Project Plan”.

Impact evaluation measures how well the objectives were achieved and outcome evaluation measures how well the goal has been achieved.

Some examples of impact evaluation measures might involve assessing:

• If the program impacts and outcomes been achieved
• What impact the program has had on populations facing the greatest inequalities
• What unanticipated positive and negative impacts/outcomes have arisen from the program
• If all strategies have been appropriate and effective in achieving the impacts and outcomes
• The critical success factors and barriers to achieving the impacts and outcomes
• If the cost was reasonable in relation to the magnitude of the benefits
• If levels of partnership and collaboration have been increased
Outcome Evaluation

Outcome evaluation looks at what occurred as a result of your program. It measures the longer-term effects of programs and to what extent an overall program goal has been achieved. The long-term effects may include reductions in incidence or prevalence of health conditions, changes in mortality, sustained behaviour change, or improvements in quality of life, equity or environmental conditions.

Outcome Evaluation seeks answers to questions such as:

- To what extent has the project met its overall goal/s?
- How effective has the project been at producing changes?
- Are there any factors outside of the project that have contributed to (or prevented) the desired change?
- Has the project resulted in any unintended change/s?
Evaluation Planning Framework

Evaluation planning should be conducted in parallel with program planning. There are many guidelines that can assist you in developing an evaluation plan. This resource is based on the evaluation planning framework developed by Garrard et al. (2004) in the *Planning for healthy communities: reducing the risk of cardiovascular disease and type 2 diabetes through healthier environments and lifestyles*. This simple framework assists in identifying the stages of evaluation development and implementation.

**Step 1: Clarifying the Program**
- Define program goals, objectives and activities
- Define population of interest
- Establish measurable program indicators

**Step 2: Evaluation Preview**
- Engage stakeholders
- Clarify the purpose of evaluation
- Identify key evaluation questions

**Step 3: Design the Evaluation**
- Specify the study design
- Specify the data collection methods
- Identify and develop data collection tools

**Step 4: Develop Evaluation Plan**
- Workplan
- Timeline
- Budget

**Step 5: Collect the Data**
- Identify tasks to be completed
- Identify who undertakes tasks
- Determines when tasks need to be done
- Identify resources required

**Step 6: Analyse and Interpret Results**
- Summarise process, impact and outcome key findings
- Identify key themes and information - qualitative data
- Undertake statistical calculations - quantitative data

**Step 7: Disseminate Lessons Learnt**
- Prepare evaluation report/s in appropriate formats
- Identify dissemination strategies
Step 1: Clarifying the Program

A comprehensive program description clarifies all the components and intended outcomes of the program which will help focus your evaluation on the most central and important questions. Note that in this step you are describing the program and not the evaluation.

This step is about describing the program not the evaluation.

A comprehensive program description includes the following components:

Define the goal

- What is the purpose or mission of the program?
- What is the important public health problem you aim to address with your program?

Define the populations of interest

- Who is your program trying to reach?
- Describe the population your program is intended for (age, gender, ethnicity, where they live)
- What is the best way to communicate with and reach them?
- Are they all similar or do they have some differences?
- Are there any sub-groups of interest?

The characteristics of the target population influence choice of data collection methods.

Define the outcome objectives

- Outcome objectives explain what is going to occur as a result of your efforts. For example, the number of trained volunteer nutrition educators will increase by 50% over the next year.
- These objectives are assessed in a number of ways. For example, to measure an increase in the number of trained educators you will need to know how many there were at the beginning of the project and at the end of the project. To measure satisfaction, you may ask participants to rate their experience with the program.
Define the strategies/key activities and outputs

- Strategies are the key activities that will be undertaken to achieve the desired outcomes in the target groups. Activities will vary with the program.
- Outputs are the direct products of activities, usually some sort of tangible deliverable. Outputs can be viewed as activities redefined in tangible or countable terms.

Establish measurable indicators

Developing an evaluation plan involves identifying a range of indicators that will measure the success of your goals, objectives and strategies. Indicators are measures of progress and change that result from your project. They provide guidance about what type of information needs to be collected to measure success.

Some indicators will involve collecting data along the way to measure how things are going and enable you to make improvements if required. Others will require you to collect data at the end of the project.

Indicators are usually expressed in numbers. For example:

- Number of resources disseminated.
- Number of participants in the program.
- The proportion of 20 to 30 year olds.
- % of participants highly satisfied with the program.
- % of participants who have reduced their overall body weight by 10% or more.
- % of people who have stopped smoking.
- Number of phone enquiries.

Indicators can also be expressed without numbers. For example:

- Training materials produced.
- Documents, policies or other resources developed.
- Contract signed.
- Networks established.

There are a variety of criteria or standards that you can base your indicators on such as:

- Mandate of regulating agency (e.g. % of children immunised by the year 2010).
- Key audience health status (e.g. expected rates of morbidity or mortality).
- Values/opinions expressed (e.g. quality of service - % rating excellent).
- Advocated standards (e.g. standards set out by professional organisations).
- Norms established via research (norms established by previous evaluations e.g. % participation rate).
- Comparison or control group (significant differences between intervention group and control group).
The main types of indicators include process, impact and outcome indicators.

Process indicators measure how well your activities/strategies are going and often fall into 3 main groups:

*Implementation* – What has been done?

- Resources developed.
- Workshops undertaken.
- Policies developed.
- Media coverage received.

*Reach and Scope* – Who and how many have been involved or accessed resources?

- Number and types of resources developed.
- Number of resources disseminated.
- Number of workshops undertaken.
- Number of participants at workshops.
- Proportion of ethnic groups, age groups etc.

*Quality* – How well things have been done

- % of participants satisfied with resources developed.
- % of participants satisfied with workshop content and delivery.
Table 1 is an extract from Victorian Government, Department of Health (2010) *Evaluation framework for health promotion and disease prevention programs* providing some examples of process indicators which may be useful when developing indicators for your own programs.

Table 1: Some examples of strategies/key activities, outputs and reach indicators for process evaluation

<table>
<thead>
<tr>
<th>Activities</th>
<th>Outputs/reach indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Establish program governance and administrative arrangements</td>
<td>Contracts with project implementators established</td>
</tr>
<tr>
<td></td>
<td>Project advisory group/steering group established</td>
</tr>
<tr>
<td></td>
<td>Contract with evaluators established</td>
</tr>
<tr>
<td>2. Establish performance monitoring and reporting arrangements</td>
<td>Project milestones identified</td>
</tr>
<tr>
<td></td>
<td>Key indicators identified for program monitoring and reporting</td>
</tr>
<tr>
<td>3. Identify effective and efficient interventions</td>
<td>Evidence reviewed</td>
</tr>
<tr>
<td></td>
<td>Interventions selected</td>
</tr>
<tr>
<td></td>
<td>Evidence incorporated into action plan</td>
</tr>
<tr>
<td>4. Develop integrated health promotion implementation and action plans</td>
<td>Community assessment conducted and reported</td>
</tr>
<tr>
<td></td>
<td>Action plans finalised</td>
</tr>
<tr>
<td>5. Settings and supportive environments (for example, legislation and policy change)</td>
<td>Percentage (of those eligible) and range of stakeholders involved in new/improved legislation and policy change (reach)</td>
</tr>
<tr>
<td>6. Community action for social and environmental change</td>
<td>Percentage (of those eligible) and range of stakeholders/settings involved (reach)</td>
</tr>
<tr>
<td>7. Health education and skill development</td>
<td>Percentage (of those eligible) and range of stakeholders/settings involved (reach)</td>
</tr>
<tr>
<td>8. Social marketing and health information</td>
<td>Evidence on effective social marketing messages and methods reviewed</td>
</tr>
<tr>
<td></td>
<td>Key marketing channels/methods identified (for example, newspaper, Internet, telephone helpline, point-of-sale displays and so on)</td>
</tr>
<tr>
<td></td>
<td>Marketing materials developed</td>
</tr>
<tr>
<td></td>
<td>Campaigns implemented in targeted areas</td>
</tr>
<tr>
<td></td>
<td>Percentage of target group aware of funded social marketing/health information activities and resources (reach)</td>
</tr>
<tr>
<td>9. Screening, individual risk factor assessment and immunisation</td>
<td>Percentage of target group participating in each activity (reach)</td>
</tr>
<tr>
<td>10. Capacity building strategies, including: partnerships, leadership, resources, workforce development and organisational development</td>
<td>Percentage (of those eligible) and range of stakeholders/settings involved (reach)</td>
</tr>
</tbody>
</table>

*Note: Definitions for activities 5–10 are available in the Integrated Health Promotion Resource Kit (Department of Human Services 2003a).*

Impact/outcome indicators

Impact/outcome indicators measure how well you achieved the changes that your project was aiming for. Therefore how well your project achieved its objectives and long term goals. Impact indicators relate to your objectives and outcome indicators relate to your goal.

Impact indicators are much easier to determine as they relate to more immediate changes, for example, the percentage of people who have quit smoking. Measuring health outcomes are more difficult as it often relate to a much longer term goal such as reducing the incidence of smoking related disease.

For this reason, measuring health outcomes generally occurs in very large scale, long term projects which significant funding and often undertaken by large organisations.

Smaller projects often focus only on evaluating the impact of their objectives.

Examples of impact/outcome indicators:

- Changes in awareness, knowledge, skills.
- Increases in the number of people reached.
- Policy changes.
- Changes in behaviour.
- Changes in community capacity.
- Changes in organisational capacity (skills, structures, resources).
- Increases in service usage.
- Improved continuity of care.
Table 2 is an extract from Victoria Government, Department of Health (2010) *Evaluation framework for health promotion and disease prevention programs* providing some examples of process indicators which may be useful when developing indicators for your own programs.

**Table 2: Example impact and outcome indicators for nutrition, physical activity and obesity programs**

<table>
<thead>
<tr>
<th>Impacts and outcomes</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased health literacy</td>
<td>No agreed indicators available</td>
</tr>
<tr>
<td>Strengthened individuals/communities/partnerships</td>
<td>No agreed indicators available</td>
</tr>
<tr>
<td>New/Improved healthy public policy and organisational practice</td>
<td>No agreed indicators available</td>
</tr>
<tr>
<td>Increased physical activity</td>
<td>Proportion of adults aged 18 years and over who did the recommended levels of physical activity in the past week*</td>
</tr>
<tr>
<td></td>
<td>Proportion of children and young people who do the recommended levels of physical activity every day*</td>
</tr>
<tr>
<td>Decreased sedentary behaviour</td>
<td>No adult indicator currently available</td>
</tr>
<tr>
<td></td>
<td>Proportion of children and young people who use electronic media for more than two hours per day†</td>
</tr>
<tr>
<td>Increased healthy eating</td>
<td>Proportion of adults meeting recommended levels of fruit and vegetable consumption*</td>
</tr>
<tr>
<td></td>
<td>Proportion of children and young people who eat the minimum recommended serves of fruit and vegetables every day*</td>
</tr>
<tr>
<td>Increased breastfeeding</td>
<td>Proportion of infants exclusively and fully breastfed at three and six months of age</td>
</tr>
<tr>
<td>Decrease in energy-dense, micronutrient-poor foods and drinks</td>
<td>No agreed indicators available</td>
</tr>
<tr>
<td>Increased water consumption</td>
<td>No agreed indicators available</td>
</tr>
<tr>
<td>Healthy environments—built, social, natural, economic</td>
<td>No agreed indicators available</td>
</tr>
<tr>
<td>Reduced prevalence of overweight and obesity‡</td>
<td>Proportion of adults who are overweight or obese</td>
</tr>
<tr>
<td></td>
<td>Proportion of children and young people who are overweight or obese</td>
</tr>
<tr>
<td>Reduced mortality and morbidity</td>
<td>Disability-adjusted life years§</td>
</tr>
<tr>
<td>Improved quality of life</td>
<td>No agreed indicators available</td>
</tr>
</tbody>
</table>

‡ Measured height and weight is the gold standard for measuring this but is not currently part of an ongoing monitoring system.

The following template can be used to assist in clarifying your program.

<table>
<thead>
<tr>
<th>Name of Organisation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Project/Program:</td>
</tr>
<tr>
<td>Brief Description of Project/Program:</td>
</tr>
<tr>
<td>Goal:</td>
</tr>
<tr>
<td>Population of Interest:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Longer-Term Outcome Objectives</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-Term Outcome Objectives</td>
<td>Indicators</td>
</tr>
<tr>
<td>Outputs</td>
<td>Indicators</td>
</tr>
<tr>
<td>Strategies/Key Activities</td>
<td>Indicators</td>
</tr>
</tbody>
</table>
Step 2: Evaluation Preview

This step involves a number of activities including engaging stakeholders, clarifying the purpose of the evaluation and identifying key questions and evaluation resources.

Engage stakeholders

Stakeholders are individuals and groups who have an interest in the evaluation. Stakeholders may include program staff, volunteers, program participants, other community members, decision-makers, and funding bodies. The active participation of all major stakeholders is a critical component of successful program planning and evaluation. Without this, it is difficult to develop an evaluation plan that will meet the needs and expectations of all key players. Engagement with stakeholders may be through an advisory or management group, short-term consultations or meetings.

To assist with this component of the evaluation plan, consider undertaking the following:

- Identify all stakeholders of the program.
- Identify all stakeholders of the evaluation.
- Determine what they would want to know from the evaluation.
- How rigorous they expect the results to be.
- How can you meet their information needs.
- You may need to prioritise stakeholder needs due to budget limitations.

Clarify the purpose of the evaluation

Planning for evaluation needs clear vision and purpose. The purpose will determine the type of evaluation you conduct. To determine the purpose for the evaluation, the following questions will assist:

- What do you want to achieve?
- What questions need to be answered?
- Who is the evaluation for?
- What information do they want?

For example, if your evaluation purpose is to assess whether the format of a health eating education event was appropriate to the target audience, you would conduct a process evaluation of the event. If the purpose is to assess whether the program was effective in increasing participants’ awareness of healthy eating or whether they had improved their eating habits since the event, you would conduct an impact evaluation.
Identifying key evaluation questions

The next step in the evaluation process is developing a set of questions the evaluation will seek to answer. Evaluation questions should be developed in key areas such as:

- Reach.
- Appropriateness.
- Implementation
- Effectiveness.
- Efficiency.
- Maintenance.

The number of key evaluation questions should be no more that fifteen questions at most however some evaluations may include as few as two or three questions. Some example generic questions for evaluation of health promotion programs that can adapted for specific programs are provided in Table 3 below:

**Table 3: Sample generic evaluation questions**

<table>
<thead>
<tr>
<th>Process Questions</th>
<th>Has the program been implemented as intended?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What factors (positive and negative) have affected the implementation?</td>
</tr>
<tr>
<td></td>
<td>What proportion of the target group has received the program?</td>
</tr>
<tr>
<td></td>
<td>Has the uptake of the program varied by socio-economic position, Indigenous status, non-English speaking background and/or location?</td>
</tr>
<tr>
<td></td>
<td>Have program participants been satisfied with the program?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact/Outcome Questions</th>
<th>Have the program impacts and outcomes been achieved?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What impact has the program had on populations with the greatest inequalities?</td>
</tr>
<tr>
<td></td>
<td>What unanticipated positive and negative impacts/outcomes have arisen?</td>
</tr>
<tr>
<td></td>
<td>Have all strategies been appropriate and effective in achieving outcomes?</td>
</tr>
<tr>
<td></td>
<td>What have been the critical success factors and barriers to achieving the impacts and outcomes?</td>
</tr>
<tr>
<td></td>
<td>Is the cost reasonable in relation to the magnitude of the benefits?</td>
</tr>
<tr>
<td></td>
<td>Have levels of partnership and collaboration increased?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implications for Future Programs</th>
<th>Should the program be continued or developed further?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>How can the operation of the program be improved in the future?</td>
</tr>
<tr>
<td></td>
<td>What performance monitoring and continuous quality improvement arrangements should be maintained into the future?</td>
</tr>
<tr>
<td></td>
<td>How will the program be sustained beyond the funding timeframe?</td>
</tr>
<tr>
<td></td>
<td>Will resources be required to continue or further develop the</td>
</tr>
</tbody>
</table>
Identifying evaluation resources

This step explores the resources available for designing an evaluation within your budget and capacity. There are many aspects you will need to consider when assessing your evaluation resources including:

- **Budget** - How much money has been allocated for this project?
- **How many interested staff are available with the skills you need?**
  - Consider the amount of time available to devote to evaluation activities, special skills of staff, interest in the project, and interest in learning new skills.
- **Support of partner organisations**: are they willing to provide resources and staff towards evaluation activities?
- **Available equipment**, such as a photocopier, phones, computers and software.
- **Are volunteers available to participate and can they be trained?**
- **How much time do you have before you need the information?**
- **How much time do you have during the project to put towards evaluation activities?**

**Maximise the potential of evaluation by ensuring it generates new and worthwhile information**
Step 3: Design the Evaluation

This step involves 3 components:

- Choosing the study design.
- Identifying data collection methods.
- Locating and developing data collection tools.

Choosing the study design

Choose a study design that gives the best level of evidence (see Appendix 1 for information on levels of evidence) within the resources and budget available.

Having identified the key questions to be answered by the evaluation, you will need to identify what information would be needed to answer these questions and the overall evaluation design that would generate this information.

Identifying data collection methods

The selection of data collection methods depends on a number of factors, including the purpose of your evaluation, the questions the evaluation is seeking to answer, financial resources, time and skills.

There are many different ways in which you can collect/gather data and information for your evaluation. Some examples are as follows:

- Analysis of records - attendance, admission, demographic details.
- Surveys – email, mail.
- Individual interviews – face to face, telephone.
- Group interviews – focus groups.
- Documentation – journal, log, reports.
- Triangulation – combination of the above.

For example, depending on your project you might:
• Record the number of people who attend the event or activity.
• Record the number of people who turn up for health checks.
• Prepare a short survey or questionnaire to get people’s feedback on the activity (perhaps measuring people’s awareness of the factors contributing to chronic disease and whether they felt they had enough information to make healthy lifestyle choices).
• Organise a community meeting to discuss the project or activity after it has taken place.

Overall, there are two main types of data that can be collected as part of the evaluation process — quantitative and qualitative.

**Quantitative data**

Quantitative evaluation is based on numbers and things that can be measured. It usually requires a base measure to start from. For example the number of people who attend an event or the number of people who change their behaviour. Another example is if your goal was to halve the number of people who smoked in the workplace by the end of the project, you would need to know how many people smoked in the workplace at the beginning of the project.

Ways in which quantitative data can be gathered might include:

• Surveys.
• Numerical data (e.g. attendance rates, participation, sales).
• Service utilisation data.
• Observational data (e.g. traffic numbers, passenger numbers, use of cycle paths).

**Qualitative data**

Qualitative evaluation is more about how well an activity was delivered and received. It relies on people expressing their thoughts and opinion, how people engaged with the project, how they felt about doing the activity and what they think could have been done better.

There are many different ways in which qualitative information can be gathered. Some examples include:

• Open-ended surveys.
• Focus groups.
• In-depth interviews.
• Observation (of participants or processes).

*When to use each type of data*
The type of data collection will depend on a number of factors including the purpose of your evaluation, the questions the evaluation is seeking to answer, financial resources, time and skills.

If you want to explore participants’ experiences, it would be more appropriate to use qualitative methods. This will allow you to ask ‘how’ and ‘why’.

On the other hand, if you want to measure the numbers of participants in a program or measure the degree of change in a health measure (such as Body Mass Index) or behaviour (such as participation in physical activity), then it may be most appropriate to use quantitative methods.

**Developing data collection tools**

Once you decide on the data collection methods you then must consider what measurement tools you will use. Measurement tools might include questionnaires, observation forms, diaries, etc.

Below are some tips to consider when identifying and designing your data collection tools:

- Select or develop your tools in collaboration with the people who will use them.
- Use an existing tool (if available) that is appropriate for your population of interest and your research questions.
- Keep questionnaires short and simple.
- Collect information that you ‘need’ to know and avoid the ‘nice’ to know information.
- Use the language of the people who will be providing the information. Avoid jargon.
- For tools requiring written responses
  - use large print
  - avoid putting too much information on a page
  - leave lots of white space
  - be as specific and direct as possible with your questions
  - provide ample room for written responses
- Use a format which is easy to read and complete.
- Pilot test your tools with the population of interest.

**Step 4: Develop an Evaluation Plan**

This step involves the creation of a detailed plan for your evaluation. An evaluation plan is a summary of what needs to be evaluated, what data needs to be collected, and how the information will be gathered.
Below is a sample evaluation plan for a ‘Smoking During Pregnancy’ awareness project that could be easily adapted for other programs/projects.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Strategies</th>
<th>Process Indicators</th>
<th>Data Collection Methods</th>
<th>Impact/Outcome Indicators</th>
<th>Data Collection Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase knowledge among the target group about the risks of smoking during pregnancy and quit smoking support.</td>
<td>Disseminate quit smoking resources and information to expectant mothers through local antenatal clinics. Conduct short workshops on healthy lifestyle during pregnancy in conjunction with local antenatal clinics.</td>
<td>Number and type of resources disseminated. Number of antenatal clinics reached with resource dissemination – presented as a % of the target/total number of clinics. Number of workshops conducted (should include a target to provide a true measure of reach). Number of participants in each workshop.</td>
<td>Count - Number of resources disseminated through antenatal clinics minus the number of resources left over at the end. Number of clinics engaged count. Attendance list count. Workshop count.</td>
<td>Level of increased awareness of the risks of smoking during pregnancy.</td>
<td>Survey of expectant mothers who attended antenatal clinics.</td>
</tr>
<tr>
<td>To increase local business and retailers involvement in</td>
<td>Encourage relevant businesses and retailers (e.g. baby shops)</td>
<td>Number of businesses and retailers engaged – presented as a % of the target total number of businesses and retailers.</td>
<td>Businesses and retailers engaged count.</td>
<td>Increase community involvement in raising awareness</td>
<td>Survey of employees engaged in project: Satisfaction of</td>
</tr>
<tr>
<td>Activity</td>
<td>Indicator</td>
<td>Notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raising awareness of the risks of smoking during pregnancy.</td>
<td>Stores to provide quit smoking advice to clients (expecting mums).</td>
<td>% of the target/total number of business/retailers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Undertake brief training sessions for staff of local businesses and retailers.</td>
<td>Training sessions conducted count.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disseminate resources to businesses and retailers to provide to clients in conjunction with quit smoking advice.</td>
<td>Count - Number of resources disseminated to business/retailer minus the number of resources left over at the end of the project.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Satisfaction of training conducted.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level of increased understanding of the risks of smoking during pregnancy.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Number of training sessions conducted (should include a target to provide a true measure of reach).
- Number of staff who participated in the training.
- Attendance list count.
Developing an evaluation budget

It is generally recommended that agencies spend approximately 5–15 per cent of the total program budget on evaluation. It is important to consider the scope of the evaluation when deciding on a budget for the evaluation.

If the program is new, innovative, or being implemented in a new setting it may be necessary to evaluate more intensively, using a stronger study design. This may be particularly important if you want to use the evaluation results for future advocacy or to obtain additional funding to ensure sustainability.

If a program has been implementation a number of times and the impact evaluation has been shown to be effective it may not be necessary to conduct an extensive evaluation. It would be sufficient to undertake process evaluation to ensure the program has been implemented as planned and undertake an impact/outcome evaluation periodically.

**Step 5: Collect the Data**

This stage is where your evaluation plan is put into action. The way you collect data and the types of data you collect will depend on the evaluation design and data collection methods you selected in the previous steps.

Coordination of data collection involves specifying:

- What tasks need to be completed?
- Who should undertake the tasks?
- When the tasks should be undertaken?
- What resources are required?

Some useful tips to maximise data collection potential are provided below:

- Ensure that the people collecting the information are trained in the appropriate data collection method.
- Prepare your data collection forms in a format that is easy for people to complete and also easy to analyse later.
- Support and encourage volunteers and staff doing the data collection throughout. Data collection can become frustrating and boring at times.
- When collecting qualitative data be sure the people providing the information or filling out the forms write neatly and in complete sentences as much as possible.
- Audio tape interviews and focus groups.
- Computerise data collection where possible to make it easier for participants and to analyse later.
Step 6: Analyse and Interpret Results

Data analysis is the process of identifying and summarising the key findings, themes and information contained in the raw data collected.

Qualitative data requires a different type of analysis from quantitative data. Data analysis and interpretation is a critical task to ensuring that the data collected can be used to inform the impact/outcomes and to refine the program. Allocating sufficient time and resources to data analysis and interpretation is, therefore, important.

Qualitative data analysis

The analysis of qualitative data involves identifying themes or broad range categories in the data collected. Such an analysis involves studying the data to identify what you consider the major themes to be and then classifying and grouping the data according to these themes, so that you are able to build up evidence under each of them.

When reporting on qualitative data some key questions to consider as part of your analysis may include:

- Has the program had the desired impacts? Why? Why not?
- What key lessons have been learned?
- What are the critical success factors?
- What are the barriers?
- What should be done differently in the future?

Quantitative data analysis

Quantitative data is generally analysed and presented as frequencies, measurements or percentages, and involves relatively simple statistical calculations of averages (means, medians) or differences over time or between groups. This type of data is often presented in tables, graphs or charts.

Where program impacts are being measured, it may be necessary to use relatively sophisticated statistical tests to prove that any difference observed is in fact ‘significant’. Therefore you may need to enlist the help of a statistician or a colleague with some training in statistics.

Microsoft Excel is a useful program that can be used for analysing quantitative data. It allows you to count, calculate averages, find minimum and maximum values and compare groups using graphs and tables. Below is a simple example of how you might collect data if you were measuring changes in weight of participants in an exercise program.
Quantitative data is generally presented using graphs, tables and descriptive statistics to report findings. Some simple examples of how you might analyse and present quantitative data are provided below:

**Graph 1: Presentation of data in a pie chart – Overall Participant Satisfaction of Program**

Graph 1 demonstrates that the majority (96%) of participants were satisfied with the program.
Graph 2: Presentation of Data in a Line Graph – Average Weekly Weight

Graph 2 indicates that all participants in the program had a gradual decline in their average weekly weight over a 5 week period.

Step 7: Disseminate Lessons Learnt

This final step involves collating evaluation findings, preparing an evaluation report and communicating findings to key stakeholders. This step is crucial in establishing a strong evidence base for your program.

As part of this step you will need to document and communicate what worked well, what didn’t work well and possible reasons for success and failure.

Preparing and writing an evaluation report

A formal evaluation report should be written so that it is easy to understand. It does not need to be lengthy or technical. Below is an outline of what an evaluation report might look like:

- Executive Summary
- Background and Purpose
  - Program background.
  - Evaluation rationale.
  - Stakeholder identification and engagement.
  - Program description.
  - Key evaluation questions/focus.
• Evaluation Methods
  o Design.
  o Sampling procedures.
  o Measures or indicators.
  o Data collection procedures.
  o Data processing procedures.
  o Analysis.
  o Limitations of the data.

• Results
• Discussion and Recommendations

Tips for writing evaluation reports

• Tailor the report to your audiences
• Present clear and succinct results.
• Summarise the stakeholder roles and involvement.
• Explain the focus of the evaluation and its limitations.
• Summarise the evaluation plan and procedures.
• List the strengths and weaknesses of the evaluation.
• List the advantages and disadvantages of the recommendations.
• Verify that the report is unbiased and accurate.
• Remove technical jargon.
• Use examples, illustrations, graphics, and stories.
• Prepare and distribute reports on time.
• Distribute reports to as many stakeholders as possible.

Communicating your findings

Ensure that you have allocated sufficient time and budget for dissemination activities. Without comprehensive dissemination, your evaluation results and learnings will have little influence. A mix of dissemination strategies should be used when communicating your evaluation findings. Some communications channels might include:

• Training or education events.
• Briefings or presentations.
• Direct email communication.
• Printed documents including a technical report, summary reports for different audiences and peer-reviewed journal articles.
• Communication through new information technologies (video-conferences).
• Website information.
Appendix 1: Levels of Evidence

The National Health and Medical Research Council’s **EVIDENCE PYRAMID** is often used to illustrate the development of evidence. At the base of the pyramid is animal research and laboratory studies - this is where ideas are first developed. As you progress up the pyramid the amount of information available decreases in volume, but increases in relevance to the clinical setting.

**Meta Analysis** - systematic review that uses quantitative methods to synthesize and summarize the results.

**Systematic Review** - summary of the medical literature that uses explicit methods to perform a comprehensive literature search and critical appraisal of individual studies and that uses appropriate statistical techniques to combine these valid studies.

**Randomised Controlled Trial** - Participants are randomly allocated into an experimental group or a control group and followed over time for the variables/outcomes of interest.

**Cohort Study** - Involves identification of two groups (cohorts) of patients, one which received the exposure of interest, and one which did not, and following these cohorts forward for the outcome of interest.

**Case Control Study** - study which involves identifying patients who have the outcome of interest (cases) and patients without the same outcome (controls), and looking back to see if they had the exposure of interest.

**Case Series** - report on a series of patients with an outcome of interest. No control group is involved.

**Source:** University of Newcastle. *A guide to systematic review searching for University of Newcastle researchers: Evidence Pyramid*. Nov 2013.
References, Additional Reading and Links


The Health Communication Unit at the Centre for Health Promotion 2007. *Evaluating Health Promotion Programs*, Department of Public Health Sciences, University of Toronto.
