# 5.0 DID YOUR PROGRAM WORK?

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Evaluation is the process of judging the **value** of something. It is a crucial component for assessing whether or not an intervention has achieved its desired goal and objectives.

### In this section:

Why evaluate?
Types of evaluation
Evaluation methods
Improving data reliability and validity
Analysing data
Using the results of an evaluation

# 5.1 Why evaluate?

Evaluation enables health practitioners to **document**, **promote** and **disseminate effective practice**. Others can learn from what you have done and can identify program strengths and areas for future program improvement.

Furthermore, we need to evaluate our programs and services to ensure we do no harm to our intended target groups and to **justify expenditure** of public funds.

Evaluation can answer many questions, for example:

- 1. Has the intervention been implemented as planned?
- 2. Have there been any changes to the cause of the problem?
- 3. Are we reaching the right people?
- 4. Has the health issue improved as a result of the program?
- 5. Did the program achieve its goal and objectives?
- 6. What worked well? What could be improved?

It is important to think about evaluation in the early planning stages Although some evaluation will not be conducted until after a program concludes, evaluation strategies should

be considered early in the planning process to ensure that opportunities to collect data are not missed. For example, undertaking a pre-test to determine baseline measures for your target group cannot be done after the intervention.

# 5.2 Types of evaluation

A comprehensive program evaluation is likely to include three different types of evaluation. These are:

- 1. PROCESS EVALUATION
- 2. IMPACT EVALUATION
- 3. OUTCOME EVALUATION

Each type of evaluation is related to the stages of program planning (see Table 5.1) and is described in more detail below.

Table 5.1: Evaluation linked to program planning

Strategies	measured by	Process evaluation
Objectives	measured by	Impact evaluation
Goal	measured by	Outcome evaluation

### 5.2.1 Process Evaluation

Process evaluation is used to measure **program development**, **delivery** and **progress**. It assesses factors such as the program's quality, availability, appropriateness, target group reach and how well the strategies were received by the intended audience.

Process evaluation can be implemented throughout the entire duration of the program, from the early planning stages to completion. Questions could include:

- Did we reach the intended participants?
- Was the program liked/accepted?
- Was the program cost effective?
- · What worked well?
- · What would we do differently next time?
- Were participants satisfied?

Process evaluation records how well the program was implemented as planned

Although Process evaluation describes what happens once the program has started, and may involve recording and counting

inputs and outputs such as number of sessions held, attendance and response rates, the number of resources

developed and distributed, program costs, and the time taken to develop resources. Using process evaluation to monitor program development is important for identifying the **strengths** of program delivery and **areas for improvement** to achieve optimal health outcomes.

Process evaluation also provides information that assists in understanding whether a program is **sustainable** and could be repeated.

### 5.2.2 Impact Evaluation

Do not evaluate the impacts of a program too early! Process evaluation should be done before impact evaluation

Impact evaluation measures the immediate short-term effects of the program, related to the program objectives. Impact evaluation can measure

short-term changes in behaviour, knowledge, social participation, environment, policy development and risk factors. An impact evaluation may include answering the following questions:

- What proportion of the target group has heard of the program strategies?
- Has there been a change in behaviour? (e.g. more people having STI tests)
- Do participants know more about the topic? (e.g. broader knowledge on STI's)
- What are the participants' attitudes towards this intervention? (e.g. positive attitudes towards more condom dispensers)
- Did the program increase knowledge and/or skills?
- How did the program change behaviour?
- What changed as a result of the program?
- What other changes were influenced by the program?

Impact evaluation is undertaken on completion of certain stages throughout implementation (after sessions, monthly intervals, on completion of the program).

### 5.2.3 Outcome Evaluation

Outcome evaluation could include follow-up surveys or phone calls

Outcome evaluation measures long-term program effects and assesses whether, or to

what extent, the program goal has been achieved. Longterm changes may include decreases in incidence or prevalence rates of a certain health problem, variations in mortality, quality of life improvements, effects of policy implementation and sustainable behaviour change.

Since outcome evaluation focuses on long-term change, this type of evaluation will generally be undertaken at some time after the intervention has ended. This time frame can vary between a few weeks after the program has ended, to several years.

Outcome evaluation could seek to answer questions such as:

- Has there been a reduction in Chlamydia rates?
- Do people self-report regular use of condoms?
- Has the quality of life of people living with HIV improved?

## 5.3 Evaluation methods

There are many ways to collect information for each type of evaluation. The evaluation method that you choose depends on the size of your program, your budget, time constraints, the characteristics of the target group (including determining methods that are acceptable and/or culturally appropriate), how big your target group is, what information you are aiming to collect and who the information is for.

Depending on the purpose of your evaluation you can use **qualitative** or **quantitative** data collection methods. These are described below.

### **Qualitative Evaluation**

Qualitative evaluation methods will usually ask participants to use words and meanings in order to provide an in-depth assessment of their experience of the intervention issue and to describe their thoughts and feelings on the program. When using qualitative data collection it is best to use a combination of approaches (i.e. more than one source of data) to improve data reliability.

### **Quantitative Evaluation**

Quantitative evaluation methods use numbers, frequencies, percentages and statistics to measure change. Quantitative methods are useful for large groups. Results can be generalised to the population level. Structured surveys undertaken online, by telephone or using paper-based surveys are the most commonly used quantitative evaluation methods.

Using a variety of evaluation methods and data sources can increase the reliability of your data for example, by engaging different subgroups in the target group, or to enable comparisons for assessing consistency.

### Qualitative evaluation methods

- Open surveys/questionnaires
- Interviews
- Focus group discussions
- Observation
- Informal feedback
- Suggestion boxes
- Session notes/debrief
- Diaries/journals
- Text message polls (SMS)

- Drama/theatre/role play
- Games/competitions
- Art/music
- Photography/video
- Facebook
- Field notes

### **Quantitative data sources**

- Multiple choice questions
- Quizzes
- Pre/Post Tests
- Surveillance reports
- Number of STI/BBV tests
- Number of STI/BBV notifications
- Program attendance records
- Resources produced/distributed
- Number of website visitors
- Website pages visited
- Program costs
- Medical records
- Number of requests for information
- · Number of sessions conducted
- Project activity report

Table 5.2 provides a summary of the advantages and disadvantages of both qualitative and quantitative data collection methods and some examples for each.

**Table 5.2: Evaluation Methods** 

Method	Advantages	Disadvantages
Qualitative	<ul> <li>Provides indepth, rich data</li> <li>Good for assessing attitudinal information</li> <li>Can use with individuals to better understand a community</li> <li>Gives good information on why something changed</li> </ul>	<ul> <li>Can be very time-consuming</li> <li>Costly</li> <li>Requires high skill level to analyse results</li> </ul>
Quantitative	<ul> <li>Generally easy to administer</li> <li>Cost and time effective</li> <li>Good for obtaining data from a large target group</li> <li>Can do group comparisons</li> <li>Can measure changes in a group/population</li> </ul>	<ul> <li>Not good for exploring complex ideas</li> <li>May not demonstrate real reasons for attitude and behaviour change</li> </ul>

### **MY-PEER TOOLKIT**

The My-Peer Toolkit <u>www.mypeer.org.au</u> contains more information about different evaluation methods

- The My-Peer Toolkit was developed by the WA Centre for Health Promotion Research at Curtin University to provide a free online resource for youth workers involved in planning, implementing and evaluating peer-based youth programs including sexual health peer education programs and drop-in peer support programs for LGBTIQ youth and teenage parents.
- The My-Peer Toolkit contains information about a range of evaluation methods including interviews, focus groups, observation, surveys, and creative evaluation strategies including photography, dance, drama, music, online simulation, art and sculpture. The information on evaluation is relevant for all programs, not just peer-based programs.
- The My-Peer Toolkit also includes a selection of evaluation case studies and tools.

Figure 5.5: My-Peer Toolkit www.mypeer.org.au



# 5.4 Analysing data

Data analysis can require specialist evaluation skills and knowledge. This section provides an overview of data analysis to help you determine if you can do the evaluation yourself or if you need to enlist specialist support.

**Quantitative data analysis** involves the analysis and presentation of numerical data, e.g. responses to structured surveys, attendance records, surveillance data, and quiz responses.

**Qualitative data analysis** involves the interpretation and presentation of visual or textual data e.g. interview or focus group transcripts, observation data, openended surveys, photographs, artwork, drama, and dance.

### Quantitative Data Analysis

For quantitative data analysis, issues of **reliability** and **validity** are important:

- You need to show that the methods used were valid and effective in collecting the data needed (e.g. writing non-ambiguous survey questions, using a validated scale).
- You also want to be able to show that the data collection methods are consistent and stable for example the method would collect the same data regardless of when the data was collected or by whom. A test-retest procedure is used to establish this type of reliability where data is collected at two different times and/or by different people using the same data collection method and the outputs are compared for consistency.
- Eliminating sources of bias introduced by the data collection method, the respondents or the researcher is important. For example, do paper-based surveys yield more responses that online surveys or do online surveys appeal to different sub-groups in the population who may have particular characteristics? If so, can the data be said to be representative of the wider population or is the data biased?

Don't underestimate the time needed for data entry!

Data entry can be time consuming before you are able to analyse quantitative data – consider the time

taken to enter the responses to a long survey from several hundred respondents! **Computer software** such as SPSS (Statistical Package for the Social Sciences) is the easiest and quickest way to analyse large volumes of quantitative data once data entry is completed. Some basic knowledge of statistical techniques is needed.

### STATISTICAL TECHNIQUES

- Frequencies how many, number of males, number of females, etc
- **Bivariate analysis** relationships between two variables e.g. condom use and knowledge of condoms' role in preventing STIs
- Multivariate analysis relationships between several variables e.g. factors influencing condom use – acceptability, availability, experience, cost, norms, etc

### **MEASURING DATA**

- **Nominal data** e.g. marital status, religious affiliation, gender
- Ordinal data the answers form a scale, e.g. skill levels
- Interval data e.g. age groups, income brackets, number of children
- Mean the 'average' when a list of numbers is added together and divided by the number of items
- Median the middle number in a list of numbers
- Mode the number that occurs most frequently. There can be no mode or more than one mode

This **SHBBV Program Planning Toolkit** does not cover statistical data analysis in detail. For further information, please refer to one of the following books:

- Greasley, P (2008). Quantitative data analysis with SPSS. Maidenhead: Open University Press<sup>15</sup>
- Quantitative Data Analysis with SPSS Release 12 and 13: A Guide for Social Scientists (2005) by Alan Bryman and Duncan Cramer. East Sussex: Routledge<sup>16</sup>

### Qualitative Data Analysis

The first step in qualitative data analysis is presenting the data in a way that can be analysed. For recorded interviews or focus groups this involves creating a written transcript of the interview or focus group.

Thematic analysis is a commonly used process for analysing qualitative data. The process involves identifying and highlighting major themes in written transcripts (see Figure 5.2). This process is called coding. The themes are found within the data but may be influenced by the researcher's previous reading or experience of the health issue being investigated.

Figure 5.2: Example of coded transcript

Fe ......With our GPs a client might come in to us they start off with a headache but they are in there for % of an hour, the doctor says what's causing it. Butt with a general GP they go in and you get Panadol and walk out. None of the underlying things get dealt with because the general GPs have only got 5 or 10 minutes appointment time they only want to deal with what you present with and they don't want to know what's causing it. That's the feeling we are getting. I'm not saying that's across the board. I know with some of our doctors sometimes we are pulling our hair out because the patients take so long. It could take up to an hour because once they start opening up they just keep talking. Once you start that you can't say, "Sorry but your time is up. I cant talk to you any more".

Fe..... You also find with Aboriginal people its not just one issue it could be ten different things its quite complex. For example, you get a grandmother in, she's tired and got a headache you don't just give her a Panadol you find out why she has got a headache. It is because she has got half a dozen kids and she's looking after all of them because her daughter is probably in Bandyiup There's no income coming in so there's all these sorts of things so its really bound to play a big part in their health. So that's why we say about holistic health.

The process of analysing qualitative data is a very personal process. For example, two researchers reviewing an interview transcript could identify different codes and meanings in the content based on their experience, perspectives and knowledge of the subject. A table defining each code is a useful tool to create when analysing qualitative data.

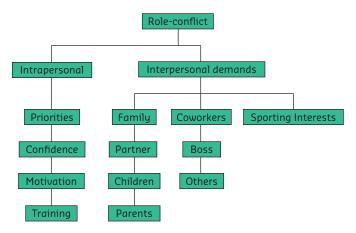
For example, in a program investigating attitudes to condom use, the overall theme might be 'condom use' with associated codes such as 'availability', 'cost', 'experience', 'acceptability' and 'knowledge'. Participants' comments about their condom use could then be grouped in relation to these codes. The table defines each code and can be used as a reference tool during the process of coding a number of transcripts about the same topic.

### Example:

Theme:	Condom use
Codes	Types of comments relevant for each code
Availability	Where to buy condoms, ease of access
Cost	How expensive, do free condoms promote increased use
Experience	Effects of condoms on sexual pleasure
Acceptability	Friends and partners don't use condoms, hard to discuss
Knowledge	Awareness of how condoms can prevent STIs

Different techniques such as simple tables, SWOT (Strengths, Weaknesses, Opportunities and Threats) charts, tree diagrams and models can be created to present the coded data. See Figure 5.3 for an example of a tree diagram.

Figure 5.3: Tree diagram



The **SHBBV Program Planning Toolkit** does not cover all aspects of qualitative data analysis. For further information, please refer to the following book: *Qualitative data analysis: a methods sourcebook* (2013). 3rd Ed. Miles, Huberman, and Saldana, Sage Publications<sup>17</sup>.

# 5.5 Using the results of an evaluation

Evaluation is only worthwhile if the results are used. When we collect data for evaluation purposes we need to ask two important questions.

### So what?

This question asks: How important are the findings

of our evaluation? Do the findings raise questions and prompt us to reconsider the programs and services we are implementing? Or do the findings simply validate what we already know? If so, perhaps they provide justification that the program/service should continue as before or evidence that the program is effective and could be expanded or adapted for other areas/populations?

### Now what?!

This question asks: What will we do with the

information we have gained from the evaluation? Do we continue to implement the program/service as before with no changes? Do we introduce any changes? Do we stop the program/service completely? Do we need to do further evaluation and collect more information before we can make an informed decision?

Consider the planning and evaluation cycle again:



Evaluation prompts us to check what we are doing and adjust or refine our programs and services if needed to achieve greater health gains.

We need to change our mindset about evaluation from measuring outputs to **measuring outcomes** (see Figure 5.3). Evaluation should not only be done for compliance reasons but should be seen as a tool to improve our practice.

Figure 5.3: Changing the mindset of evaluation

### **From OUTPUTS**

- How many participants?
- · What did we do?
- How many activities?
- Who came?

### To OUTCOMES

- So what?
- Who benefited?
- What difference is it making?
- What results were achieved?

If we can adopt an outcomes-focused mindset, we are more likely to plan programs and activities which achieve intended outcomes. Thinking about evaluation early in the planning process can help us set a clear direction of where we want to go and what we expect to achieve.

# 5.6 Ethics approval

If you wish to publish the results of your program you will need to obtain ethics approval from a qualified ethics committee before you begin collecting data. The ethics review process ensures the protection of the welfare and rights of participants in research and provides the general public with assurance that the research has been undertaken in an ethically sound manner.

SiREN has developed a factsheet that provides an introduction to planning and applying for ethics approval. It is available on the SiREN website <a href="https://siren.org.au/learn-support/build-your-skills/obtaining-ethics-approval/">https://siren.org.au/learn-support/build-your-skills/obtaining-ethics-approval/</a>

# 5.7 Sharing what you have learned.

Sharing your evaluation findings ensures others working in similar areas have access to information on what works, why and for whom. Increasing access to this knowledge supports effective practice which can lead to improvements in health outcomes. Before you share details of your project and evaluation you may wish to consider<sup>18</sup>.

What would you like to share? Reflect on what makes your program unique and what interesting things you have learned from evaluation.

Why would you like to share? Consider the purpose or benefit of sharing the information you have.

Who would you like to share with? Deciding on your audience will help you to determine what you will share and how you will share it. You may wish to share details of your program with service providers, researchers, policymakers, or your community.

How will you share? There are many ways you can share what you have found including at conferences, social media, websites, print media, reports or journal articles.

An example of a research project that has shared its findings using mulitple strateiges including conference presentations, media releases, infographics, reports, and publications can be found here <a href="https://siren.org.au/project-overview-barriers-to-hiv-testing/">https://siren.org.au/project-overview-barriers-to-hiv-testing/</a>

# 5.8 I'm stuck! Where can I get more information?

Please contact SiREN at <a href="mailto:siren@curtin.edu.au">siren@curtin.edu.au</a> or visit the SiREN website <a href="mailto:www.siren.org.au">www.siren.org.au</a> for more information about undertaking evaluation, applying for ethics, or identifying opportunites to share your evaluation findings. The following links and references may also be useful.

**Better Evaluation.** This website provides summaries and resources of a large number of evaluation methods, processess and approaches. <a href="https://www.betterevaluation.org">https://www.betterevaluation.org</a>

**Community Tool Box: Evaluating the Initiative.** This toolkit aids in developing an evaluation of a community program. https://ctb.ku.edu/en/evaluating-initiative/

### Planning for effective health promotion evaluation.

This resource aims to support those working in health promotion to effectively evaluate their program. <a href="http://docs.health.vic.gov.au/docs/doc/32F5DB093231F5D3CA257B27001E19D0/\$FILE/planning\_may05\_2.pdf">http://docs.health.vic.gov.au/docs/doc/32F5DB093231F5D3CA257B27001E19D0/\$FILE/planning\_may05\_2.pdf</a>