Program Evaluation in Environmental Health

Glossary

A

Activities: The actions carried out by a program to achieve the objectives.

Assessment: Often used as a synonym for evaluation. It is often conducted before a project begins. The term is sometimes recommended for processes that are focused on quantitative or testing approaches.

C

Closed-ended questions: These are questions which can be answered finitely, usually by either “yes” or “no.” By definition, these questions are restrictive and can be answered in a few words.

D

Data-collection Instruments: Data-collection instruments are the tools used to collect information. Examples of data-collection instruments include:

- Surveys
- Focus groups
- Questionnaires
- Administrative records

Data analysis: The process by which meaning, themes, and useful information are extracted from raw quantitative or qualitative data.

Descriptive data: Information and findings expressed in words, unlike statistical data, which are expressed in numbers.

Descriptive statistics: Information and findings that describe measurements but do not try to explain them. Averages and distributions are descriptive statistics.

Determinant: Any factor that brings about change in a health condition or in other defined characteristics.

Direct observations: Direct observation is a less obtrusive method to gather information about things that can be observed. For example, by visiting a

participant's workplace, you can directly collect information on the physical surroundings. By monitoring program activities or meetings, you can observe who shows up for meetings or the program, how many individuals actively participate in a meeting or activity, how people interact, whether participants can apply the skills that are being taught, etc.

E

Epidemiology: The study of the distribution and determinants of health conditions or events in populations, and the application of this study to control health problems.

Evaluation: Program evaluation is the systematic collection of information to answer important questions about activities, characteristics, and outcomes of a program. Evaluation stages include design, data collection, data analysis and interpretation, and reporting.

Evidence: Information, both qualitative and quantitative, that an evaluator collects to reflect the process or outcome of a program.

External evaluator: An evaluator who is not involved with the program and is not a member of the organization or team whose project he or she is evaluating.

F

Focus group: A group selected for its relevance to an evaluation that is engaged by a trained facilitator in a series of discussions designed for sharing insights, ideas, and observations on a topic of concern to the evaluation.

Framework: An outline of steps that guide but do not dictate action.

G

Goal: A goal is a long-range statement describing what your program is working toward; a goal describes the "big picture," or the conditions that will result if your program is successful.

I

Indicators: Indicators are measurable elements that tell you, or indicate, that the program efforts are successful. Indicators help to define what information must be collected to answer evaluation questions.

Inferential statistics: Information and findings that explain the relationship between indicators and outcomes. Sometimes these are cause and effect explanations; sometimes they only show associations.

Inputs: Inputs are resources, such as costs, materials, and personnel required to carry out the program.

Impacts: Long-term outcomes may be called impacts. Impacts tend to be influenced by external factors as well as program activities, so they are more difficult to directly connect to the program activities.

Instruments: see "Data-collection Instruments"

L

Logic model: A diagram that visually organizes the elements of a program and shows relationships between those elements.

N

Nominal group method: In the nominal group method a small group of participants responds to a question and ranks their answers in order of importance.

O

Objectives: Objectives are interim measurable goals. Think of them as markers or steps along the way to a goal. Though it may be difficult for you to know whether you have achieved your goals, you should be able to measure whether you have accomplished your objectives. Whereas goals are broad and achieved over one or more years, objectives are clear, measurable, and can be achieved in much shorter periods of time (typically within one year, or program cycle, or less). As you accomplish each objective, you will be closer to reaching your overall goal.

Open-ended questions: These are questions that can not be answered with "yes" or "no." They allow for spontaneous, unstructured, descriptive responses.

Outcomes: Outcomes are the positive differences the program makes in the lives of people and communities. Outcomes are changes in beliefs, attitudes, knowledge, and action the program produces. Outcomes should flow directly from program goals. Outcomes may be short term or long term.

Outcome indicators: These are the specific items of information that track a program's success on its outcomes. They describe observable, measurable characteristics or changes that represent achievement of an outcome. For example, a program whose desired outcome is that participants pursue a healthy lifestyle could define "healthy lifestyle" as not smoking; maintaining a recommended weight, blood pressure, and cholesterol level; getting at least two hours of exercise each week; and wearing seat belts consistently. The number and percent of program participants who demonstrate these behaviors is an indicator of how well the program is doing with respect to the outcome.

Outcomes, intermediate: Outcomes that result from activities in a relatively short time. These may be considered outputs.

Outputs: Things the program is intended to produce, such as the number of services or the number of people reached, and other results you can observe or measure.

P

Population: Population is the total number of people who belong to the specific group from which you need information. For example:

- All the adults who live in one particular neighborhood
- All the children who have stayed in a particular shelter
- All the people who participate in an organization's programs

Q

Quantitative data: Quantitative data captures information that is numeric. Quantitative data includes things such as personal income, amount of time, or a rating of an opinion on a scale from 1–5. Even things that you do not think of as quantitative, such as feelings, can be collected using numbers if you create scales to measure them. Quantitative data is used with closed-ended questions, where users are given a limited set of possible answers to a question.

Qualitative data: Qualitative data records a thought, observation, opinion, or words. Qualitative data typically comes from asking open-ended questions to which the answers are not limited by a set of choices or a scale. Examples of qualitative data include answers to questions such as "How can the program be improved?" or "What did you like best about your experience?"—but only if the user is not restricted by a pre-selected set of answers. Qualitative data is best used to gain answers to questions that

produce too many possible answers to list them all or for answers that you would like in the participant's own words. Qualitative data is more time consuming to analyze than quantitative data.

Questionnaires: A questionnaire is useful in gathering focused, limited information. It is a uniform, written tool and is completed by a group of respondents. Information collected through questionnaires can include participants' self-assessment of attitudes, behaviors, beliefs, and activities. Responses are limited to what is asked in the questionnaire, although questions included on a questionnaire can range from being closed-ended (for more limited and easier to analyze responses) to open-ended (with more room for a variety and explanation of responses).

R

Risk factor. An aspect of personal behavior or lifestyle, an environmental exposure, or a hereditary characteristic that is associated with an increase in the occurrence of a particular disease, chronic condition, or injury.

S

Stakeholders: A stakeholder is someone who has a stake in an organization or program. Stakeholders either affect the organization/program or are affected by it. Stakeholders include:

- People who staff a program (e.g., management, staff)
- People who are affected by a program (e.g., clients, their families, and the community)
- People who contribute to a program in other ways (e.g., funders, volunteers, partner organizations, board members, etc.)
- People with a vested interest in the program (e.g., politicians, neighbors, etc.)

Study, analytic: A study in which groups are compared to identify and quantify associations, test hypotheses, and identify causes. Two common types are cohort studies and case-control studies.

Study, case-control: An analytic study that compares a group of people with a certain disease, chronic condition, or type of injury (case-patients) with a group of people without the health problem (controls) to detect differences in characteristics such as exposure to an agent.

Study, cohort: (Syn: follow-up, longitudinal, and prospective study) An observational analytic study in which enrollment is based on status of exposure to

a certain factor or membership in a certain group. Populations are followed and disease, death, or other health-related outcomes are determined and compared.

Study, experimental: A study in which investigators identify the type of exposure that each individual (clinical trial) or community (community trial) has had and then follows the individuals' or communities' health status to determine the effects of the exposure.

Surveillance, public health: The systematic, ongoing collection, analysis, interpretation, and dissemination of health data. The purpose of public health surveillance is to gain knowledge of the patterns of disease, injury, and other health problems in a community so that we can work toward controlling and preventing them.

Survey: Surveys are particularly useful for gathering statistical information. They are used to get a general idea of a situation, to generalize about a population, or to get a total count of the aspects concerning a group of people. The information gathered is limited and easier to analyze and offers little or no explanation as to the reasons behind the results. Surveys are useful for evaluations that deal with things other than the success of the program (for example, if an evaluation is in part to identify barriers to participating in the program, questions on a survey may ask about access to transportation, childcare, etc.). A census is an example of a survey.

V

Validity: The soundness of the inferences made from the results of a data-gathering process. Validity is the degree of accuracy of a measurement. For survey instruments, validity refers to what the questions actually measure in practice, as compared with what they are intended to measure.