

Stage 2:

Developing Goals and Objectives

Topics

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Stage One Conduct Community Assessment

Stage Two Develop Goals and Objectives

What to Establish

Set Goals

What are the priority needs and problems in accessing health information?
What effect do you hope that outreach will have?
What does the community want to see happen as a result of outreach?

Identify Outcomes

What will need to change or happen (the hoped-for outcomes) to achieve outreach goals?
What indicators will provide evidence of these changes?

Construct Objectives

Which objectives will address what outreach will do? (e.g.: conduct x classes, recruit y participants)
What objectives will address hoped-for outcomes?
What outcomes will be measured? (e.g.: knowledge, skill, attitudes and behavior)



Stage 2 describes the process of constructing goals and measurable objectives—important steps in developing an outreach agenda. Goals allow you to prioritize the needs of your targeted audience and develop relevant objectives. Once goals and objectives are identified, it is easier to plan the necessary activities and strategies, as described in Stage 3. If well developed, objectives will specify outcomes, or expected results, and the ways they can be measured (the indicators). Objectives provide criteria for measuring outreach, and are useful for both the process and summative evaluation phases described in Stage 4.

Outreach evaluations have typically measured outcomes such as numbers of exhibits or training sessions conducted and numbers of audience reached (e.g. training class participants). These number counts do not reflect the impact of outreach on participants' learning and behavior outcomes, such as gained knowledge, changed attitudes, changed beliefs, developed skills, or increased use. Nor do number counts measure other factors that can influence access, such as adequate technology or attitudes of decisionmakers or opinion leaders.

The factors that influence objectives to change or influence information seeking behaviors are more fully described in Stage 3, but they are important elements to consider when developing outreach objectives and will be introduced in this chapter (see Figure 2).

Setting Goals

Goals are long-range statements describing a desired condition or future that outreach is working toward fulfilling. Goals describe, in general terms, the conditions that will exist when outreach has been successful.

To formulate goals, ask yourself and key contacts from your targeted audience:

- In the long run, what effect do I hope to have on information access problems for this community?

- What is the overall improvement I want to achieve?
- What are the goals of my targeted audience – what do they want to achieve or see happen as a result of the outreach program?

The concept of setting goals *with input from the outreach audience* is an important principle borrowed from health education. Rather than unilaterally deciding what you think should happen, develop an agenda based on the community's needs and concerns. You will be far more likely to achieve change if plans are based on the community's perceived needs and concerns rather than a personal or agency agenda (1).

For example, goals for an outreach program to the public might be:

- Residents of XYZ county will have access to current and relevant health information resources with ease and convenience.
- Staff of local hospital and public libraries will have a sustainable working partnership.

In the above example, goals reflect the mutual priorities of the target audience and outreach program. For residents, "ease and convenience" of access is paramount to use. For the outreach staff, the ultimate goal of improving access require cooperation among partners with similar interests.

Identifying Objectives Based on Outcomes and Indicators

Goals describe an ultimate ideal. However, to reach that ideal, smaller steps are implied. These steps include various types of objectives that are considered essential to realizing the goals and the *outcomes* that will hopefully result (2).

For example, typical goals for an outreach program are to improve access, use, and exchange of health information. The objectives to reach these goals would hopefully include outcomes that influence changes in information

seeking behavior, including:

- Cognitive outcomes such as awareness of Internet-based health resources
- Affective outcomes such as attitudes toward Internet-based health resources
- Skills outcomes such as knowledge and ability to find health information
- Behavior outcomes such as utilization of Internet-based health resources
- Environmental outcomes such as sustained commitment to maintain information services
- Social and community outcomes that support initial and sustained behavior changes
- Quality of care outcomes such as improved patient care decisionmaking

As discussed under “Constructing Objectives,” there can be *process objectives* that state what the outreach staff will do (e.g., conduct X number of skills training workshops). Consider also developing outcome-based objectives that measure the impact of outreach on participants’ learning, behavior, and environment. There are *learning, behavioral, and environmental objectives* that are measured not by what the staff has done (e.g., facilitate Internet connectivity), but by how that new technology has impacted outreach participants or their environments. In other words, outcomes-based objectives are linked to results.

Indicators

In considering possible objectives, it is important that they be both realistic and measurable. Making them measurable means identifying the *indicators* that provide some type of logical evidence that the intended outcome has occurred. For example, a desired outcome of outreach might be a change in attitude toward the Internet. But what can indicate an attitude change? Asking the audience if their attitudes have improved after outreach is not precise enough. Something needs to be identified as an “indicator” of an attitude, such as “fear of information overload.”

Be realistic about the indicators you choose. For example, you may want to measure an outcome related to improved quality of health care. You hope that outreach can influence this outcome, given the assumption that more informed decisions ultimately lead to better health care. The indicator of interest here would not be some long term measure of improved health, such as changes in morbidity or mortality rates. These measures would be very difficult to link to your outreach activities. However, you could measure indicators for quality of care by gathering data about use of online resources for patient care decision making. See Figure 2 for more examples.

Figure 2: Selected Sample Outcomes & Indicators

Outcome: Environmental support to enable access

- Worksite funding for professional librarian/library
- Worksite policies allow Internet access at work
- Adequate hardware and software for Internet connectivity
- Interlibrary loan services

Outcome: Awareness of choices in finding health information

- Beliefs or thoughts that useful health information on the Internet exists
- Ability to name specific sources

Outcome: Online information seeking skills

- Knowledge of search skill concepts
- Knowledge of criteria to evaluate websites
- Self-confidence in skill to find health information

Outcome: Attitudes about Internet-based resources

- Feelings about online resources

Outcome: Use of Internet resources

- Frequency of online use
- Repeated use of online resources
- Information found online is discussed with doctor or between health care professionals

Outcome: Support of Social Network

- Ongoing promotion of online health resources by opinion leaders
- Repeat requests for outreach activities

Outcome: Quality of Care

- Information found online used for patient care decision making

Constructing Objectives

As stated earlier, objectives can be defined as the steps required to reach a goal and outcomes specify the results you hope to achieve. Having prioritized the overall outcomes you hope to achieve, the next step is to develop objectives that include indicators to measure progress toward your intended outcomes.

Include several types of objectives that together contribute to the outcomes you envision. In the health education literature, these types of objectives are hierarchical, leading to the ultimate objectives of a program (*program objectives*). The following discussion presents the four types of objectives as described by McKenzie et al. (3).

A. Process Objectives

The process objectives are what you do to accomplish all other levels of objectives. Think of them as the inputs and process components needed to carry out the program. For a very comprehensive process evaluation, you may choose to create specific objectives that will track all possible components, which could include:

- Program resources (materials, funds, space)
- Type and appropriateness of activities
- Target population exposure and attendance

B. Educational Objectives

Educational outreach objectives can be divided into four general categories: *awareness*, *knowledge*, *attitudes*, and *skill development*. The premise of this hierarchy is that if the targeted audience is to adopt and maintain information-seeking behaviors to alleviate health information needs, they first must be aware of the need or of the value of current information. Second, they must expand their knowledge of available and appropriate resources. Third, they must adopt and maintain beliefs in the effectiveness of these resources and their own ability to use them. And fourth, they need to possess the actual skills to obtain

information efficiently.

C. Behavioral and Environmental Objectives

The third level of objectives includes the behavioral changes that resolve health information needs, thus moving toward the ultimate program objectives for improved health care. Environmental objectives can be loosely defined as those that remove physical and social barriers to enacting the behavioral changes.

D. Program Objectives

Program objectives are the ultimate objectives of an outreach program, expressed as the outcomes of individual and community change in using or providing health information.

Although it may seem burdensome to develop four types of objectives, it is important for getting a complete picture of what is happening and why. For example, you may be able to detect an increase in use of health information resources, but it might be less than your stated behavioral objectives. If you use this as your only criteria for success, you have missed the possibility of measuring other outcomes, such as:

- Increased awareness about the value and effectiveness of using Internet resources to answer questions; or
- A strengthened social network of modeling and support from opinion leaders or community resources that will encourage eventual adoption and maintenance of new behaviors.

Much of the health education literature recommends developing objectives that are specific, time-limited, and measurable. The clarity of your objectives will provide direction to planning pertinent activities. According to McKenzie (1994), an objective should include the following elements:

1. The outcome to be achieved, or what will change.
2. The conditions under which the outcome will be observed, or when the change will occur.

3. The criterion for deciding whether the outcome has been achieved, or how much change.
4. The target population, or who will change.

The first element – outcome – is the consequential action or behavior that will change as a result of the program. Outcomes are usually identified as verbs of the sentence, such as *cause, connect, convert, demonstrate, develop, eliminate, reorganize, and supply*. McKenzie emphasizes that outcome verbs must refer to something measurable and observable; thus *appreciate, know, internalize, or understand* by themselves are not good choices for outcomes.

The second element – conditions – describes how or when the outcome will be observed. Typical conditions might be “upon completion of the class,” “as a result of participation,” “by the year 2005,” “three months after the program,” or “during the class session.”

The third element of an objective is the criterion for deciding when the outcome has been achieved or how much change has occurred. This element is the standard by which you measure whether the outcome is performed in an appropriate or successful manner. Examples might include “30% of class participants,” “100 flyers,” “ten opinion leaders,” “five follow-up classes,” etc.

The last element of an objective is mention of the target audience, or who will change. Examples are “all professional clinic staff” or “constituents of the Miloxi tribal reservation.”

Sample objectives, constructed according to McKenzie’s four elements, are provided in Appendix D. A work form to fill-in goals and objectives for your program is provided in the *Tool Kit* at the end of this chapter.

If you are accustomed to objectives that use action verbs, the structure of the objectives presented in Appendix D may seem awkward.

For example, outreach planners may be accustomed to an objective such as:

- To provide training in the use of medical bibliographic databases with emphasis on Pub Med.

Consider revising the above objective to focus less on what outreach staff does (conduct classes) and more on what the audience does that provides evidence of progress toward improved information access, thus:

- During the next twelve months, at least 50% of health providers in each of four rural clinics will participate in one outreach promotional or educational activity

Then develop additional objectives that focus on the learning and behavioral outcomes you hope to achieve, such as:

- By the end of the workshop, at least two out of three class participants will correctly answer a true/false question about how to access Medline Plus.
- By the end of the year, at least 30% of class participants will consult PubMed for answers to clinical questions.

These revised objectives emphasize more accountability for outcomes that predict or demonstrate changes in information access.

References

1. Nyswander D. The open society: its implications for health educators. Health Education Monographs 1966;1:3-13.
2. Dignan MB, Carr PA. Program planning for health education and promotion. Philadelphia: Lea & Febiger, 1992.
3. McKenzie JF, Smeltzer JL. Planning, implementing, and evaluating health promotion programs: a primer. Boston: Allyn and Bacon, 1997.

Outreach Goal : _____

Process Objective(s): _____

Outcome (what): _____
Target population (who): _____
Conditions (when): _____
Criterion (how much): _____

Educational Objective(s): _____

Outcome (what): _____
Target population (who): _____
Conditions (when): _____
Criterion (how much): _____

Behavioral Objective(s): _____

Outcome (what): _____
Target population (who): _____
Conditions (when): _____
Criterion (how much): _____

Environmental Objective(s): _____

Outcome (what): _____
Target population (who): _____
Conditions (when): _____
Criterion (how much): _____

Program Objective(s): _____

Outcome (what): _____
Target population (who): _____
Conditions (when): _____
Criterion (how much): _____

In Stage 1, you were able to obtain useful data for the Gowan Library outreach program from a community assessment. Your next step is to develop goals and objectives that are relevant and of mutual interest with your targeted community. Your staff reviews the interviews and data collected in the community assessment and develops a list of hoped for outcomes. Some examples include:

- The interest of the rural health organization in having up-to-date Internet technology at clinics that could lure students and new professionals
- The interest of primary care providers for continuing education, current diagnosis and treatment information, and credible patient information in Spanish at a low literacy level
- The interest of the health care administrator in showing use of current health care practice guidelines that impact patient care decisions and improve patient outcomes

Since the outreach program is limited by time (one year) and funding, outreach staff identified several other hoped for outcomes. One hope is that Geneva clinics will develop collaborations with other agencies or community based organizations to fund and maintain technology infrastructure initiated by this outreach program. Also, the library staff know from previous studies that outreach has a greater impact on continued use (after outreach ends) when there are onsite library resources or personnel. The Geneva clinic sites do not have an information resources “advocate” (ideally, a librarian), so your outreach staff identify another hoped for outcome—to train personnel at each outreach site who could provide continued information access support or services.

In reviewing the needs and hopes for outcomes, your staff notices that some outcomes require environmental objectives to improve technology infrastructure and other outcomes require educational and behavioral objectives to motivate and reinforce use of electronic resources. Staff want to develop measurable objectives that describe what should happen to meet the objectives. They decide to measure certain indicators such as awareness, attitude, knowledge, satisfaction, use, and impacts on health care decisions or behaviors. They also identify the criteria (how much or what) and the conditions (when) that will guide them in determining their accomplishments. The draft list of goals and objectives thus developed are presented in Appendix D.

You then decide to share the list of goals and objectives with your key contacts made during the community assessment to confirm that the list is both relevant and realistic.