Principles and Tools for Evaluating Community-Based Prevention and Health Promotion Programs

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This article is an overview and practical guide for the evaluation of community-based disease prevention and health promotion programs. The article first offers a rationale for evaluating community-based programs, then enumerates five selected principles that are contemporary to community evaluation. The principles are as follows: (1) evaluation of community programs should include an assessment of program theory; (2) evaluation instruments that are used to measure community programs must be contoured to each individual community; (3) evaluation approaches used should be guided by the questions asked and often require both a quantitative and qualitative orientation; (4) evaluation should be informed by social ecology and social system concepts; and (5) community evaluation should involve local stakeholders in meaningful ways. At the end of each principle, an annotated reference list is provided that contains tools for applying the principle to community evaluation.

Key words: *community assessment, community evaluation, evaluation, health program evaluation, health promotion*

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This article is written as an overview and practical guide for the evaluation of community-based disease prevention and health promotion programs. More detailed accounts of evaluation issues and technical approaches for evaluating community programs can be found elsewhere.[1–4] The present article first offers a rationale for evaluating community-based programs and an introduction to evaluation approaches, then enumerates five selected principles that are contemporary to community evaluation. At the end of each principle, an annotated reference list is provided that contains tools for applying the principle to community evaluation.

A Rationale for Evaluating Community-Based Health Promotion Programs and Introduction to Evaluation Approaches

An underlying premise of community health promotion is that well planned local initiatives can produce desired social and health results. Steckler et al.[5] maintain that community health promotion is founded on democratic principles, and citizen participation is integral to community health promotion if community members are to take ownership for local health concerns. Thompson and Kinne maintain that "proponents of community approaches . . . recognize that local values, norms, and behavior patterns have a significant effect on shaping an individual's attitudes and behaviors."[6(p.45)]

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Without sufficient evaluation, the effectiveness of a community program cannot be assured. Other reasons that often are given for evaluation include requirements by funding agencies for programs to be accountable, information on what programs work and how, and ethical considerations that programs are of benefit to clients and are cost effective.[1–3,7] Skillful evaluation can facilitate the ongoing improvement of program efforts; gaining of community support, grant money and donations; overcoming resistance to the program, detecting unforeseen challenges and side effects of the program; identifying intermediate successes; and increasing program responsiveness and accountability to community stakeholders.[8]

Program evaluation is divided into two general types: formative and summative.[9,10] Formative evaluation focuses on program development and summative on program results. Formative evaluation is frequently associated with process evaluation. The former examines the *acquisition and development* of necessary resources and structures to implement program activities effectively, including the hire or assignment of staff with the appropriate skills to the program, purchase of needed equipment and materials, allocation of program space, and development of activity protocols. The latter examines the *actual implementation* of the program, including the degree and quality of program delivery; for instance, does the program reach the appropriate audience, do sufficient numbers of individuals receive the program, is the program delivered in a consistent manner, are accurate records maintained?[3,11] Summative evaluation is often divided into near term impacts and final outcomes.[12] Impacts usually are changes in the knowledge, attitudes, and behaviors of the program's target audience. If a program produces such impacts, then the likelihood increases that desired outcomes will result, including lower risk of disability or death.

In the last decade, evaluation approaches, in general, have developed in sophistication,[3] but evaluations of complex community efforts have experienced relatively fewer innovations.[13] In recent years, community health initiatives have become more comprehensive and complex, and evaluators are challenged to capture their rich nature.[14–16] Community initiatives often have broad and multiple goals that require complex interactions, multiple levels of intervention that occur in diverse settings, and multiple change strategies that require broad and repeated exposure. Frequently, community initiatives are purposely flexible and responsive to changing local needs and conditions; therefore, evaluation formats must be able to adapt in the middle of the assessment process. The responsibility for program implementation is likely to be shared by many community organizations and individuals; therefore, evaluation should be sensitive enough to reflect these complex working arrangements. Community health promotion may center on elusive concepts like community empowerment, ownership, leadership, and capacity building that are difficult to measure. Community programs often take many years to produce results; therefore, evaluators must maintain ongoing and harmonious relationships with community constituents.

In sum, adequate evaluation of complex community initiatives requires multiple data collection and analysis methods extended over long periods of time. In so doing, evaluators face significant challenges in developing adequate sampling, measurement, design, and implementation strategies with enough conceptual and methodological integrity to justify the effort.[17,18] Furthermore, evaluators must be sensitive to and wise about local political realities and competing interests of different program stakeholders. Also, evaluators must be interpersonally skilled to interact effectively over the long haul with program representatives.[19]

Contemporary Principles in Community Evaluation

The five principles that follow address both formative and summative aspects of evaluating community health initiatives. Taken as a whole, the principles can help the evaluator address the complexity of community programs. Table 1 provides a summary of the principles and describes the tools available in the literature to assist with the application of each principle. The table is meant to augment the "Practical Tools" sections that appear at the end of each principle.

Principle 1: Evaluation of community programs should include an assessment of program theory

A common theme in the contemporary evaluation literature emphasizes the requirement that commu-

Table 1

A summary of evaluation principles and tools

Principle	Tools	Description
1: Evaluation of community programs should include an assessment of program theory	Logic models	A diagram that illustrates the sequencing of program activities that should occur for planning, organizing, implementing, and producing desired results (see Figure 1). References 7, 19, and 21 should be obtained for step-by-step instructions for constructing a logic model.
2: Evaluation instruments that are used to measure community programs must be contoured to each individual community	Questionnaires and surveys	These instruments are often used at the beginning and then at later points in the program's life to determine whether the desired changes have occurred over time. The instruments also can be used just at one point in time to determine the status of the community when the instrument was administered. Whether applied at one point or several, the instrument is administered to individuals. The individual results are usually aggregated for statistical analyses. Reference 30 should be obtained for step-by-step instructions for developing questionnaires/surveys that can be contoured to a particular program's needs.
	Social indicators	Unlike questionnaires and surveys, social indicators do not depend on individual respondents, but often are based on data collected by government and other organizations, for instance the number of drunk driving arrests in a community. Social indicators generally are used over time to compare changes over time. For instance, do the rates of arrest increase, decrease, or remain constant over the course of the program's implementation? References 13, 26, 29, and 31 should be obtained for numerous illustrations of the types of social indicators that often are useful in evaluating community health initiatives.
3: Evaluation approaches used should be guided by the questions asked and often require both a quantitative and qualitative orientation	Experimental and quasiexperimental evaluation designs	These designs are often used to enable statistical comparisons between communities receiving a program and communities without the program to assess program effectiveness in producing desired results. Reference 3 is an introductory text that provides a detailed yet straightforward understanding of these designs, which can become quite complex.
	Qualitative designs	Unlike experimental designs, qualitative designs are not generally formulated for statistical comparisons, but provide for in-depth probing of a program's receptivity in a community. Interviews with program stakeholders, reviews of program materials, and observations of program activities are the main methods used in these designs. Reference 33 is an introductory text that provides the essential components for developing program case studies, a qualitative design that often employs interviews, observations, and document reviews.
4: Evaluation should be informed by social ecology and social system concepts	Ecology and system designs	These designs combine principles from both experimental and qualitative designs in order to provide a comprehensive assessment of complex community programs. The designs are sensitive to a program's current stage of development and shift measurement strategies at each developmental stage, for instance from the program planning stage to program formation and implementation. Also, the designs include measurement strategies that are meant to be comprehensive, accounting for program effects on individuals, social networks, community organizations, social trends, and policy. Reference 14 should be obtained for a more detailed elaboration of ecology-informed designs. The reference also includes several measurement strategies and instruments for different developmental stages and social levels. Other references are described at the end of Principle 4 that should be obtained for more in-depth and technical approaches.
5: Community evaluation should involve local stakeholders in meaningful ways	Participatory planning	Participatory planning tools help to stimulate and reinforce community member involvement in the formulation and implementation of the evaluation in order to assure community problem-solving for program improvement. Reference 58 should be obtained for a four-step approach for program and evaluation planning that is non-technical and developed for lay community members to implement, including goal setting, and process, outcome and impact assessments.

nity health promotion programs should have theories of causation that guide their intervention strategies.[7,19–21] These theories are sometimes referred to as theories of action,[22] or logic models.[7] Kumpfer defines logic models as a ". . . a fancy term for what is merely a succinct, logical series of statements that link the problems your program is attempting to address, how it will address them, and what the expected result is."[7(pp.7,8)] Patton[22] describes a theory of action as a construction of means-ends hierarchy that constitutes a comprehensive description of the program. Weiss[16] describes program models as a series of micro-steps that contain important assumptions such as: training will lead to more skilled staff; information will reach target audiences; when informed, target audiences will attend programs. Micro-steps may be constructed as a series of "if . . . then" statements. For instance, Figure 1 is an example of a logic model taken from a program that activates community coalitions to reduce and prevent the abuse of alcohol, tobacco, and other drugs. If/then statements applied to this program include: *if* a local lead agency organized an ad hoc committee of leaders, *then* they will form multisectorial committees; *if* the committees are formed, *then* they will conduct needs assessments within their respective sectors; *if* needs assessments are conducted, *then* the chairpersons of each committee will consolidate the assessments; *if* the assessments are consolidated, *then* a comprehensive community plan will result; *if* a plan is produced, *then* it will guide plan implementation; *if* the plan is implemented, *then* the program will result in improved community health indicators.

Logic models should be developed well in advance of program formation and implementation. By so doing, the evaluator can work with the program stakeholders to explore the assumptions upon which the cause and effect relationships are based to ensure that time, effort and expense are not wasted on programs with weak conceptual foundations and links. The theory of action can assist community stakeholders in developing consensus regarding the assumptions underlying the program, in assuring that the intervention is targeted at the problem of concern, and in making explicit how program activities are linked to produce the desired outcomes.[16,22] The models can help in defining the resources that are required for each stage of a program's development,

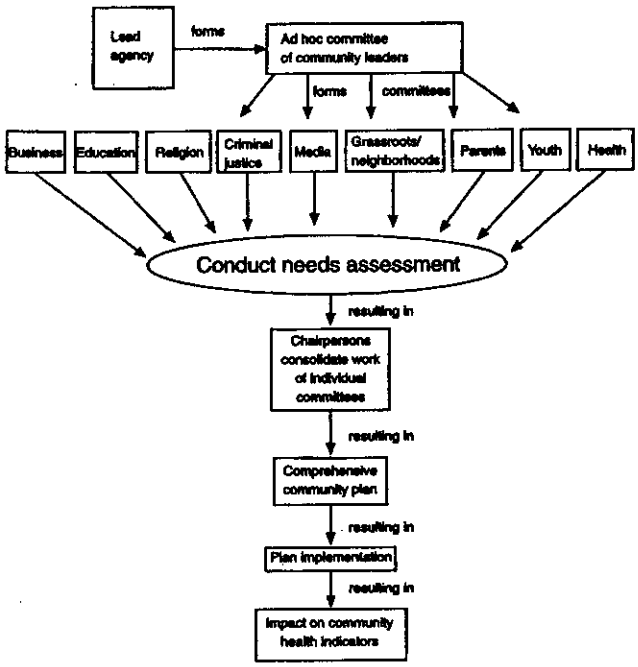

Figure 1. A logic model for a community coalition to address alcohol, tobacco, and other drug abuse.

thus enabling program stakeholders to consider whether sufficient resources can be obtained in advance of program implementation. Thus, logic models serve as program planning as well as evaluation tools. Furthermore, models are templates for comparing how consistent the desired program (as reflected in the model) is with the program that is implemented.[7,16] Evaluations that illustrate such consistencies may have more influence on both policy and popular opinion.[16] For many of these reasons, Patton[22] maintains that one of the first responsibilities that the evaluator has is to help program stakeholders identify and fill in the gaps in the programs theory of action. The Practical Tools section suggests several useful references for developing logic models.

Practical Tools. Kumpfer and colleagues[7] provide an approach to developing logic models, discuss evaluation design questions, and provide an exten-

sive listing of evaluation instruments and measures for the practitioner. Scheirer[21] devotes an entire volume of the journal to the use of program templates that are similar to logic models. The templates are composed of lists of components of effective practice, intended program elements and what the program actually produced, and are a basis for judging and improving a program's formation and implementation. Goodman and Wandersman[19] incorporate the use of logic models into FORECAST, a system of formative evaluation. They present a step-by-step approach to developing models and using them to identify whether a complex community program is developing according to the model.

Principle 2: Evaluation instruments that are used to measure community programs must be contoured to each individual community

By developing a theory of action, program stakeholders construct their own unique blueprint for their community program. It may be similar to program models in other locales, but, first and foremost, the model should reflect the realities that are unique to the community in which it is implemented. Just as theories of action are unique, other types of evaluation instruments, like surveys and health status indicators must be carefully adapted to fit the realities of each community.

The tension between the desirability of using a tried and tested measure as opposed to one contoured specifically to each program is evident in the community evaluation literature. For instance, Kumpfer[7] maintains that standardized evaluation instruments should be sought out, but she also notes that locating such measures can be frustrating as the instruments must conform to the language skills, age appropriateness, cultural relevance, and attention span of local audiences. Padilla and Medina[23] assert that cultural sensitivity should span the entire evaluation process including the adaptation, translation, and administration of measures, along with the analysis, scoring, and interpretation of results. Without such cultural adaptations, biases may occur that can lead to misinterpretation of a program's results.[24] In order to reduce culturally induced bias, Suzuki et al[25] offer the following suggestions: develop alternative measures and procedures for diverse populations, understand the norms of ethnic groups to which evaluations are applied, increase collaboration with bilingual and bicultural professionals in developing evaluations, increase racial and ethnic community involvement in the assessment process, and consult the literature and research available regarding multicultural assessment procedures.

Sometimes community programs try to use standard measures that are compiled by governmental agencies to compare their program to national or statewide standards. For instance, a program may compare its status on drunk driving arrests, birth outcomes, and tobacco consumption with other communities, or with state and national averages. But highly aggregated data may not be pertinent to local community level evaluation because the data may not reflect the realities of different locales.[26] For instance, national data may show declines in drug use, whereas local data might indicate drug use is increasing.[26] Hayes and Willms[27] suggest that funders or evaluators can be misguided in requiring selected indicators for monitoring community progress, because such requirements can stifle community initiative and ownership if local groups perceive that the project is being wrested away from them due to outside and inappropriate requirements.

Another type of measurement problem due to aggregating data occurs when individuals are asked questions about the community in which they live, or the organization in which they work. Cheadle et al.[13] note that most measures of community are really taken at the individual level and then aggregated. For instance, to identify whether organizations in the community become more aware of a health promotion effort or more active in that effort, individuals (usually administrators) in the organization may be surveyed to provide a surrogate measure for organizational change. Although this can provide useful information for some purposes, it may be misleading when examining health promotion program impacts and outcomes.[28] To address this issue, some advocate for the use of indicators that can be derived from observations of the community or organizational environment. Such indicators might include the number, type, or visibility of no smoking signs in a work place; more media attention as reflected in the number of column inches devoted to a health issue in the local newspaper; supermarket sales records for specific products, such as cigarettes; or the amount of space devoted to a product, for instance the percent of low fat products as compared to fast food (and fat

containing) products.[13,29] As with surveys, questionnaires, and health status measures, environmental indicators should be contoured to be relevant to the particular community and program under study.

One important conclusion that may be drawn from Principle 2 is that questionnaires, surveys and environmental indicators developed in other locales, and standard indicators should be used with caution. This is not to say that measurement instruments and indicators should be disregarded, but they should be adapted and interpreted in light of local realities. Thus, the tools presented below should not be viewed as "gold standards." They may best be considered points of departure that require modification to fit local conditions.

Practical Tools. DeVellis[30] provides a user-friendly set of steps for developing your own surveys or questionnaires including: determining what you want to measure, generating questions, determining formats for measures, having experts review the items, validating the items, pilot testing the instrument, and revising it based on feedback from experts and the pilot test. Gruenenwald et al.[26] suggest several social indicators for measuring the larger level impact that programs have on communities. Also, they provide a systems approach similar to the construction of logic models that can help in identifying appropriate social indicators. Coulton[31] identifies several social indicators that are relevant for community programs that focus on child well being. Cheadle et al.[13] and Wagner et al.[29] offer lists of environmental indicators that can supplement individual level measures in evaluating complex community-based program. Suzuki et al.[32] edit a volume of papers that discuss issues and techniques for rendering measurement as culturally sensitive and relevant.

Principle 3: Evaluation approaches used should be guided by the questions asked and often require both a quantitative and qualitative orientation

Principle 2 illustrates that a good measure is hard to find. Moreover, given the complexities of community health initiatives, one good measure is hardly enough. The techniques that the evaluator uses should be like the wardrobes of the rich and famous: abundant, elegant, and diverse enough to fit all occasions. The elegant evaluator should be able to fashion evaluation strategies that are tailored to the specific evaluation questions and concerns of a community project. In developing the widest array of possible evaluation strategies, the elegant evaluator should be versed in both quantitative and qualitative approaches. Yin[33] points out that when a program evaluation focuses on questions that ask who, what, where, and how much, often these lend to quantitative inquiry. When the questions are posed as why or how, then qualitative methods often are most appropriate. Deciding upon what evaluation questions are important may be the best guide for suggesting which method is choice.

Quantitative approaches are frequently linked to experimental and quasiexperimental designs. The former require that potential program recipients be randomly assigned to the program or to a control group that does not receive the program. Quasi-experimental designs deliberately (not always randomly) match program recipients with others who do not receive the program. Quantitative approaches typically use statistical techniques to judge whether program recipients benefit from the program in contrast to controls or comparisons. Qualitative approaches seldom use randomization and often do not have comparison groups. These approaches focus on the program itself, using detailed observations of activities and events, interviews with program stakeholders, and review of program documents to judge program results.[34]

Some argue that quantitative and qualitative approaches are not easily used in combination.[35] Similarly, some debate whether any approach to evaluation other than experimental designs can be definitive.[36–38] Others argue that qualitative approaches are superior because validity is enhanced when stakeholders are sought out to share a range of perspectives regarding program benefits and challenges.[39,40] Steckler and colleagues offer a pragmatic view regarding the combination of qualitative and quantitative methods. They write that

> . . . health education and health promotion programs are complex phenomena which require the application of multiple methodologies in order to properly understand or evaluate them. . . . Today, the issue no longer is whether to use quantitative or qualitative methods, but rather how they can be combined to produce more effective evaluation strategies.[34(p.4)]

This moderate view seems most appropriate for community evaluation. In fact, qualitative tech-

Qualitative techniques are often embedded in experimental designs.

niques are often embedded in experimental designs. For instance, if a statistical analysis of a program's outcomes indicates that the program produced no significant result when compared with a control group, then qualitative techniques, like interviews with program stakeholders or program document reviews, may help to explain why the program was not effective. Conversely, quantitative techniques are often embedded in qualitative evaluation designs. For instance, interviews may be analyzed by counting the number of times different respondents express a program-related concern, thereby providing an indication of the magnitude of each concern that is expressed. Thus, it is important to recognize that while quantitative and qualitative evaluation *designs* have the different orientations that are noted above, *within* either design, the *methods* used to evaluate a program may be both qualitative and quantitative.[41]

Practical Tools. Windsor et al.[3] offer one of the more straightforward explanations of different experimental and quasiexperimental designs and apply them to the evaluation of health promotion programs. The text also provides several qualitative approaches. Many works are available on qualitative methods, but Yin[33] offers a good overview, providing a step-by-step approach for doing qualitative case studies. He offers practical guidelines for asking qualitative evaluation questions, determining which methods to employ, structuring an evaluation protocol, and gathering and analyzing qualitative data.

Principle 4: Evaluation should be informed by social ecology and social system concepts

Recently, evaluators have emphasized that the assessments of complex community programs be based on ecological and systems principles.[26,42,43] Social ecology and systems theories accentuate the individual, social, and environmental dynamics that underlie human behavior.[26,44] According to these theories, complex health issues like substance abuse, teen pregnancy, violence, or chronic disease should be viewed as interwoven into the social fabric. Programs that address such issues effectively often intervene at different levels simultaneously to influence individual knowledge, attitudes, and behavior; social support systems and networks; community capacity to mobilize effective initiatives; coalitions of cooperating organizations; and alliances that affect politics and policy through media and lobbying.[1,45] Consequently, the assessments of programs that concern socially imbedded problems should take into account the multiple levels at which they occur including: intrapersonal, interpersonal, organizational, community, and public policy.[43]

A growing body of evidence suggests that effective community programs not only intervene across several strata of the social ecology, but also develop in stages including: beginning mobilization, establishing organizational structure, building capacity for action, implementing, refining, and maintaining the program.[46] Each stage may be conceptualized as an intermediate outcome for the program. If a stage is not fully nurtured, a program can fail to thrive.[47,48] The evaluator can assist in nurturing community programs from one stage to the next by tailoring evaluation methods for feedback during each stage. If a program does not achieve its long term outcomes, knowing which intermediate outcomes were not met can help identify the weak links in a complex community initiative.[13]

The importance of the ecological and systems perspectives is that evaluation should be conceptualized across two dimensions: first, the multiple social levels at which interventions are directed (intrapersonal, interpersonal, organizational, community, and public policy); and second, the stage of program development (initial mobilization, establishing organizational structure, building capacity for action, implementing, refining and institutionalizing). Such criteria pose unique challenges for evaluation since more traditional approaches may not be sufficient for assessing complex interventions. For instance, randomized controlled designs may be impractical, expensive, and unwieldy. Evaluating program effectiveness may require increased reliance on case methods and other qualitative approaches, and the judicious combination of these methods with experimental and quasiexperimental designs.[34] Thus, Principle 4, which advocates for complex, ecology-based evaluations, extends from Principle 3, which advocates for the astute combination of both qualitative and quantitative approaches.

Practical Tools. Goodman et al.[14] demonstrate how an ecological assessment is accomplished in assessing community efforts to combat substance abuse. The article also discusses several useful evaluation tools that may be adapted to other programs. Parcel and colleagues[49–51] and Steckler et al.[52] provide examples of staged approaches to the evaluation and measurement of health promotion programs in schools. They can serve as models for understanding how the evaluation method can shift when moving from one program stage to the next. Also, they provide measurement tools that may be adapted to each stage of the evaluation. In a more general vein, Nelson[53] provides a useful manual that contains checklists for evaluating all aspects of school health programs including assembling an evaluation team strategically, posing important questions, contouring evaluation to both implementation and outcomes, developing objectives for the evaluation, providing instruments for evaluation, and providing references for other organizations that might be helpful in constructing evaluations. Muraskin[54] provides a general "how to" manual for designing and implementing evaluations that include practical advice for approaching the entire evaluation process. Fawcett and colleagues[8] provide a manual for evaluating community programs in cardiovascular disease. The manual explains ways to design process, intermediate, and long-term outcome measures. The manual is particularly useful for developing community-based monitoring systems for process evaluation and provides other measurement instruments for community based outcomes. King et al.[55] offer a thorough listing of elements that may be considered when evaluating program implementation that include elements of the program's context; its origins and history; its rationale, goals, and objectives; aspects of program personnel, program participants, budget and administrative arrangements; materials and facilities, program activities, measurement and data collection procedures.

Principle 5: Community evaluation should involve local stakeholders in meaningful ways

Principle 5 brings the article full cycle back to its introduction, which suggests that citizen participation is a foundation of community programming. When involving community members in the development and implementation of the evaluation, the evaluator acts as a coach, collaborator, and builder of capacity. These roles facilitate program development as well as evaluation. If program stakeholders perceive the evaluation as an integral part of the program, it can enhance community understanding, stakeholder commitment, and utilization of results; be perceived as a cost-cutting measure; and a bridge between different cultural groups that may participate. In general, the distance between the evaluator and community is reduced when local stakeholders are involved in the evaluation in meaningful ways.[17]

When the evaluator becomes actively engaged with community groups, an array of skills become important that are informed more by community development than by evaluation technology *per se*. The community engagement process requires skills in effective interpersonal communication, team building, group process, and negotiation, teaching skills, political acumen, and the ability to gain cooperation and trust. Some evaluation approaches, such as participatory evaluation incorporate these skills into the evaluation process.[1] In participatory evaluation, community constituents help define the evaluation questions, often participate in data gathering, and use the data analysis as feedback for suggesting program improvements. A recent approach to qualitative evaluation, called empowerment evaluation, supports community groups in developing skills for self-evaluation and consciousness-raising.[56] Empowerment evaluation is designed to ". . . help people help themselves and improve their programs using a form of self-evaluation and reflection. Program participants conduct their own evaluations and typically act as facilitators; an outside evaluator often serves as a coach or an additional facilitator depending on internal program capabilities."[56(p.5)]

Empowerment evaluation has generated controversy. Some criticize it for being inappropriate as an approach to evaluation.[57] According to this point of

A recent approach to qualitative evaluation, called empowerment evaluation, supports community groups in developing skills for self-evaluation and consciousness-raising.

view, empowerment is viewed as a worthy goal, but the clients of an evaluation are not considered expert enough to conduct a skillful, objective, and technically worthy evaluation. Moreover, allowing clients to select criteria for evaluation, collect data, and write, edit and disseminate reports leaves room for significant bias to infiltrate the evaluation process.[57]

The criticisms of empowerment evaluation notwithstanding, its orientation is quite compatible with community development practices that are aimed at citizen participation and ownership. While it is unlikely that lay citizens can develop the expertise of a professional evaluator without considerable training, increasing community members' capacity to be wise consumers of evaluation and to interact with and conduct some aspects of the evaluation can pay dividends for current and future community health initiatives. Therefore, supporting evaluations that build community member skills for self-assessment seems to be a worthy goal. The tools that follow offer methods for interacting with community groups in order to build their capabilities in program evaluation.

Practical Tools. Linney and Wandersman[58] produced a manual that facilitates citizen involvement in planning community programs, developing community plans, and evaluating program activities. They provide an extensive list of measurement tools for both process and outcome evaluation. Fetterman et al.[56] provide a rationale for citizen empowerment approaches to evaluation. Their edited volume contains a section titled, "Workshops, Technical Assistance, and Practice," that includes tools for actively engaging the community in the evaluation process. Of particular note are chapters by Dugan,[59] who identifies evaluator tasks for building community capacity across the program stages, and Butterfoss et al.,[60] who offer self-assessment tools for conducting community needs assessment, developing a quality plan for the program, and assuring that the elements are in place for program implementation.

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The five principles that are presented above constitute important aspects of contemporary evaluation of community programs. Selected references are provided along with each principle for those who may want more practical guidance. Given the complexity of community health promotion programs, it is unlikely that their evaluations can be conducted effectively without rigor and sophistication. This paper suggests that such demands should not deter the practitioner from attempting to import the principles into evaluation efforts. To the contrary, the practitioner is encouraged to learn by doing; to become more skilled at applying each principle through trial, midcourse correction, and retrial. Since instruction in evaluation usually is part of the curriculum of many university programs, practitioners may be able to identify experts in their communities who are willing to consult in the development of program logic models, measurement instruments, multiple methods, ecology and systems approaches, and community involvement. The program practitioner may be wise in taking such a collaborative approach. After all, few complex community health initiatives can be implemented by one person, and to do justice to the program, its evaluation often should be a shared effort. The task of evaluating may require considerable effort, but without such effort how can we assure that program operations are effectively developed and implemented, and that they produce the desired results? Given the enormous amount of effort that practitioners usually devote to the development and delivery of community health initiatives, it simply is prudent that evaluation be used to inform program refinements and other improvements with the goal of optimizing effectiveness.

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