Bridging Science and Practice: The Integrated Model of Community-Based Evaluation (IMCBE)

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Abstract:
A trend in community-based evaluation studies is to include everyone affected by the work, the community, administrators and participants, in their design and implementation. This concept has been accepted by communities and community evaluators, but a concern persists that the scientific integrity, reliability, and validity of these studies are compromised. To address these concerns we present both the multi-conceptual and hands-on practical aspects of the Integrated Model of Community Based Evaluation (IMCBE) and illustrate the utility of the IMCBE with the case example of the Sickle Cell Disease Association of the Piedmont’s (Greensboro, North Carolina) Home Health Study (HHS).

The IMCBE is conceptually sound and joins social scientific rigor with an understanding of the elements essential to addressing community members’ and agencies’ need for meaningful outcomes that determine the efficiency and effectiveness of their efforts. The IMCBE promotes a “best fit” approach of adapting the evaluation to the unique problem or intervention to be examined.

Keywords: IMCBE, community evaluators, sickle cell, models

Article:
Tell me.... I forget
Show me.... I remember
Involve me.... I understand
-Chinese Proverb

INTRODUCTION
The traditional definition of evaluation is the systematic application of social research procedures to assess the concept, design, implementation, and utility of social intervention programs (Rossi & Freeman, 1993). As social programs proliferated in the mid-1960s, Congress mandated systematic evaluations. This led to the development of private firms and university-based institutes that specialized in evaluation research (Miller, 1991). Corresponding with the expansion of evaluation activity, the conceptual side grew with the work of Campbell and Stanley (1966) and others.

Evaluation research was ultimately viewed as the assessment of the net effects of a program (Cohen, 1983; Weiss, 1983). Researchers needed rigorous evaluation designs to specify appropriate conditions. This would permit valid estimates of the effects. The randomized, controlled experiment became the ruling paradigm for evaluation research (Miller, 1991). Actual realities of field-based research and evaluation soon uncovered numerous barriers to effective use of the randomized experimental design and a realization that many programs could not be evaluated this way (Boruch, 1997; Campbell & Stanley, 1966; McKinlay, 1996; Orlandi, 1992a).

Growth in community-based programming and the demand for valid and meaningful evaluations fueled the need to ensure that evaluations conducted by persons untrained in formal evaluation methods were timely
and useful to program administrators (Brunner & Guzman, 1989; Fawcett, Andrews, Francisco, Schultz, Richter, Lewis, Harris, Williams, Berkeley, Lopez & Fisher, 1996). During the last decade, in particular, the growing emphasis of public and private funders on outcome-based community service programs and initiatives has spurred interest in collaborative and participatory forms of evaluation (Bailey, 1992; Cousins & Earl, 1992, 1995; Fetterman, 1996; Horsch, 1997).

A recent survey of Canadian and American evaluators suggested support for a use-focused, stakeholder-service orientation for evaluators that maximizes the practical utility of the results for stakeholders (Cousins, Donohue, & Bloom, 1996). Evaluators become involved with community-based programs: (1) by being asked, to be the outside evaluator by an authoritative person at the federal, state, or local level; (2) by asking to become involved (e.g., in response to a grant announcement); or (3) as part of the community team, adding the target problem to their evaluation agenda (Herman, Morris, & Fitz-Gibbon, 1987; Rossi & Freeman, 1993; Whyte, 1991). How evaluators become involved usually dictates the evaluative approach they will use (formative or summative), design (experimental, quasi-experimental) and model (traditional or community-based).

**RATIONALE FOR COMMUNITY-BASED EVALUATION**

Community projects and settings pose difficult and unique challenges in designing and implementing sound evaluations. Community-based programs usually evolve in response to a mutually recognized need by community stakeholders, emphasizing the social, emotional, and political aspects of service delivery (Cottrell, 1976; Rothman & Tropman, 1987). Differences in emphasis and direction may create a lack of conceptual and practical fit between service providers and evaluators.

One hospital-based outreach program staff member described this disparity as the difficult process of “evaluator shopping,” to find a competent evaluator who adheres to a philosophy and orientation of service delivery methods compatible with that practiced by an organization or program (their “program theory”) (Chen, 1994; Weiss, 1997, p. 41). The trend toward participatory evaluation, in which stakeholders and evaluators contribute to every phase of the evaluation process, is directly applicable to community-based programs (Bailey, 1992; Brown, 1994).

Community-based evaluation differs from other evaluations based on several attributes, including: who holds the power in the program and its evaluation, the extent to which community resources and capacities are accessed, and the development of the program based on perceived needs of community members. Very few community-based program evaluations are pure examples that share all these attributes. Indeed the variety of questions and initiatives requires that various approaches to evaluation be examined for their fit with the community. All can be valid for specific purposes and all can be assessed for appropriateness in context. Based on this definition, the evaluator who serves community stakeholders has a responsibility to facilitate, support, and engage in the problem-solving aspects of these activities, rather than accept a definition of activities, objectives, or criteria that were developed by outside funders and other stakeholders. In this regard the evaluator becomes a collaborator in the enabling process of capacity building and empowerment ideally leading to skill development and self-determination (Stringer, 1996; Fetterman, 1996; Wallerstein, 1992 paraphrases in italics). Evaluators practicing in community settings also need an eclectic “toolbox” of knowledge and skills that allow them to engage community stakeholders in a flexible, yet rigorous evaluation process.

Community-based evaluation differs from other types of evaluation in the “fit” of communities, of their leadership, and their perception of needs, termed the “cultural reality” of communities. This distinction has its intellectual foundation in ecological psychology.

Evaluators may recognize that a more participatory and collaborative evaluation is needed in the community-based setting, but there is concern that the scientific rigor of evaluations produced with such models might be
compromised (Cousins et al., 1996; Weiss, 1983). Community programs need an evaluation model that incorporates scientific principles and maintains the integrity and rigor that evaluation researchers have demanded for the last three decades. The conceptual framework presented in this paper integrates key concepts related to: (a) the context in which community-based service delivery and intervention activities occur; and (b) models and approaches of other evaluators and social researchers. Our focus is primarily on small-to-moderate-sized service-oriented programs and agencies, however, we believe our model is relevant to programs and agencies of all sizes and types.

**INTRODUCTION OF THE INTEGRATED MODEL OF COMMUNITY-BASED EVALUATION (IMCBE)**

We propose a structure and rationale for a model of evaluation based on the integration of sound evaluation fundamentals, the growing literature on participatory and collaborative evaluation, and our collective experience. This paper delineates the prerequisites, characteristics, foundational principles, and implementation phases of the Integrated Model of Community-Based Evaluation (IMCBE) (see Figure 1).

The IMCBE is a functional, multi-method model that gives form to community evaluation. This model: (a) meets the accountability and applied science requirements of clients, funders, stakeholders and other evaluators; (b) recognizes the realities in which community-based programs take place; and (c) provides a context and a process through which people can collectively identify assets, clarify problems, and formulate new visions and solutions (Stringer, 1996).

Directly engaging community members to formulate solutions to problems encountered in their personal, community, and organizational lives is the defining focus of the IMCBE model and the heart of its explicit collaborative, capacity-building agenda that, ideally, leads to self-determination (Fawcett et al., 1996; Fetterman, 1996). The evaluator’s role may shift from technical guidance and training to a shared role. Mutually agreed upon decisions are made at each phase of the evaluation process to functionally move from the “ideal” evaluation design to what is “real.” The evaluator and community members consider the context, human and financial resources, staff and evaluator skills, and the problem or intervention to be addressed.

For example, the Sickle Cell Disease Association of the Piedmont (SCDA_P) is a private, non-profit, community-based organization located in Greensboro, North Carolina. It is one of four such agencies in North Carolina (in North Carolina, the incidence of SCD is 1 in 500 [Whitworth, 1992]). It was founded in 1971 in response to a family with unmet needs due to SCD. The SCDA_P began working collaboratively with the first author in 1992. The evaluator consults and technically assists with the evaluation design, data collection methods and measures, and analysis to address desired outcomes. After several years of working collaboratively with the first author, key staff can now convert problems and funders’ questions into goals, measurable objectives, and identifiable outcomes. SCDA_P will be discussed as the working case throughout this paper and its Home Health Study (HHS) project will serve as the specific case example for each phase of the IMCBE.

**PREREQUISITES OF THE IMCBE**

The socio-contextual characteristics of evaluator temperament and skills, as well as stakeholder buy-in and funding, are components of the IMCBE that are influenced by the foundational principles and outcomes of the IMCBE process (see Figure 1).

**EVALUATOR REQUISITE SKILLS AND TEMPERAMENT FOR THE TRADE**

Implementation of the IMCBE requires specific evaluator skills and a flexible temperament. The IMCBE evaluator’s goal is to complement the skills of the program stakeholders (Fetterman, 1996; Lackey, Moberg, & Balisterieri, 1997). IMCBE evaluators facilitate and continue to train others in evaluation skills, while program staff and other stakeholders set evaluation goals and identify performance indicators. These role shifts demand evaluator skills including the ability to: (1) present (demystify) new knowledge in meaningful
and practical ways; (2) position evaluation as an integral part of program activities; (3) enhance community understanding of the process and value of sound evaluation practices; (4) secure stakeholder commitment to the evaluation and use of results; (5) address cultural gaps; and (6) assure findings are relevant for the community (Green, Mulvey, Fisher, & Woratschek, 1996; Orlandi, 1992a; Patton, 1982; Patton, 1997).

**STAKEHOLDER BUY-IN AND FUNDING**
The investment and support of stakeholders is critical to successfully implementing the IMCBE. Stakeholders are community residents, service providers, political leaders, public and private funding agencies, or similarly invested participants affected by the development, implementation, or outcomes of the evaluation (Cohen, 1983; Sommers, Brown, Chaskin, George, Richman, Slavitt, & Venkatesh, 1996; Telfair, 1997; Telfair [under review]; Weiss, 1983). Before decisions are made to adopt an evaluation approach, stakeholders must agree that it is the most useful method to meet their goal. Program implementers and service providers are often excluded from such decisions, yet they are expected to fully participate in developing questions and collecting data. Commitment to this process requires that stakeholders understand the model and believe that an evaluation using the IMCBE is worth the required effort. They must trust that implementation of the IMCBE will: (a) assure that the focal problem or targeted intervention is assessed in
an understandable and attainable manner; (b) provide useful information; and (c) meet their need for accountability.

Funders of community-based programs are concerned about changes, benefits, or outcomes for the target population. Some may not appreciate the value of a formal evaluation and do not allocate sufficient funds for its implementation. From the viewpoint of one agency staff person, “They want the results, but are not willing to provide for the evaluation.” Programs must convince (negotiate with) their funding agency of the importance of an evaluation, define the chosen approach (e.g., participatory), and decide if a model such as the IMCBE would achieve their goals. Without full stakeholder buy-in attempts to implement models such as the IMCBE that rely upon collaboration cannot succeed and should not be initiated.

**CHARACTERISTICS OF THE IMCBE**
The model’s basic characteristics are: (a) flexibility; (b) adaptability; (c) longitudinality; and (d) comprehensiveness (Telfair, under review).

The one constant about communities and community-based service programs is that they change. Similar to the concept of the “working hypotheses” (Geer, 1969), within the IMCBE the evaluator, program staff and, in some cases, clients jointly develop a design that anticipates community and program change and focuses on defining the principles that underlie their practice models. A flexible, yet rigorous, design promotes confidence in the results of the evaluation and allows participants to own the adopted evaluation process.

The IMCBE is adaptable as it allows participants to define the problem to be addressed as they are defining the principles that guide their approach to service delivery. The “fit” and implementation parameters of the chosen approach and design must be understandable and agreeable to the participants and consistent with their model of practice. The level of involvement of various stakeholders will depend on their experience and comfort with the approach and the evaluator. A clearly delineated, yet adaptable approach to defining, addressing, and assessing the targeted problems allows the participants and the evaluator to uniquely and creatively meet the initial and ongoing demands of funders.

The IMCBE is longitudinal because it encourages looking beyond the end of the funding or service period allowing key information to be carried over from year to year for long-term evaluation design and sustainment of the project. Longitudinality means the evaluator guides the participants to focus on the benefits (particularly in terms of future funding) and means of assessing and using outcome data. For example, SCDA_P now routinely evaluates applications outcomes for funding and has used this evaluation information to strengthen its arguments for increased funds for programs, in applications for new funds, and to more precisely address clinical questions.

Lastly, the IMCBE is comprehensive. It is amenable to a range of concerns and service delivery processes common in communities and community-based settings (Green et al., 1996; Sommers et al., 1996). It is explicitly recognized that the issues communities may need to assess will occur in a unique cultural, social, and political context (Nash, 1986; Rothman & Tropman, 1987). Comprehensiveness further acknowledges that communities and community-based service programs need to use a broader scope of methods and measures than do programs operating at state, regional, national or other levels by virtue of their dynamic service approaches (Green et al., 1996). Comprehensiveness in the IMCBE brings together a sound evaluation model with process, contextual, and technical factors that influence interventions and service delivery at the community level.

**FOUNDATIONAL PRINCIPLES OF THE IMCBE**
The IMCBE’s three foundational principles are:
1. Health service programs must be evaluated at the level(s) at which programs or interventions are delivered. This principle incorporates concepts of human ecology, the environmentally influenced behavior of organizations, individuals, and families, and social systems theory (Bronfenbrenner, 1989; Dunst, Trivette, & Deal, 1988; Fisher & Ury, 1981; Garbarino, 1982; Hinkle & Wolf, 1957; Rothman & Tropman, 1987; Whyte, Greenwood, & Lazes, 1991). It is based on the premise that to address needs or problems adequately, those engaged in the evaluation process at all levels must understand clearly the social, cultural, and political factors affecting the service or intervention being assessed (Bailey, 1987; 1992; Brown, 1994; Fear, Carter, & Thullen, 1985; Grace, 1992; Hatch, Moss, Saran, Presley-Cantrel, & Mallory, 1993; Harwood, 1981a; 1981b; Klienman, 1980, 1988; Klienman, Wang, Li, Cheng, Dai, Li, & Klienman, 1995; Kaufman, 1985; Orlandi, 1992a; Roberts & Evans, 1997; Stringer, 1996; Wallerstein, 1992).

The perceived power of environmental and cultural factors to influence the nature of the program reflects the influence of ecological or social systems theory. These factors also reflect our understanding of individuals and their relationships with communities and organizations at all levels (Bronfenbrenner, 1989; Friedson, 1988; Garbarino, 1982; Harwood, 1981a; 1981b; Pinderhughes, 1989; Thorne, 1993). Proponents of the systems approach assume that appropriate changes in the social environment will produce changes in individuals, and conversely the support of individuals is essential for implementing social and environmental changes (Bronfenbrenner, 1989; Galanti, 1991; Garbarino, 1982; McLeroy, Bibeau, Steckler, & Glanz, 1988; Minkler, 1990).

2. The guiding ideology or principles (whether explicit or implicit) of the service environment must be the central orientation of the evaluation. This principle is based on the premise that for an evaluation to be useful, empowering, functional and long-standing it must reflect the realities of the environment in which the intervention is taking place. The evaluation must be contextually relevant. This principle also incorporates human ecology and the environmentally influenced behavior of organizations, individuals, and families (Bronfenbrenner, 1989; Dunst, Trivette, & Deal, 1988; Fisher & Ury, 1981; Garbarino, 1982; Hinkle & Wolf, 1957; Rothman & Tropman, 1987; Whyte, Greenwood, & Lazes, 1991). Further, this principle blends issues related to community competence, integration, development and collaboration (Brunner & Guzman, 1989; Cottrel, 1976; Israel, Checkoway, Schulz, & Zimmerman, 1994; Minkler, 1990; Wallerstein, 1992; Wallerstein & Bernstein, 1988; Winer & Ray, 1994; Whyte, 1991).

3. Those involved in the delivery and receipt of services should have every opportunity to be involved in the process of evaluation. Community-based evaluation is inherently a collaborative and participatory process. As Stringer (1996) states, this approach “engages people who have traditionally been called ‘subjects’ as equal and full (active) participants in the research (evaluation) process.” (p. 9). This third foundational principle of the IMCBE incorporates three key concepts necessary for its successful application: (a) individual and community capacity building, asset assessment, and empowerment (Eng, Salmon, & Mullan, 1992; Gutierrez, GlenMaye, & DeLois, 1992; Kiefer, 1984; Kretzman & McKnight, 1993; Israel et al., 1994; Pinderhughes, 1989; Rappaport, 1984; 1987; Solomon, 1976); (b) participatory, action-based and empowerment oriented research and evaluation (Bailey, 1992; Brunner & Guzman, 1989; Cousins & Earl, 1992, 1995; Fear et al., 1985; Fetterman, 1996; Kaufman, 1985; Stringer, 1996); and (c) culturally competent evaluation (Fawcett et al., 1996; Grace, 1992; Israel et al., 1994; Orlandi, 1992a; Orlandi, 1992b; Roberts & Evans, 1997; Zimmerman, Israel, Schulz, & Checkoway, 1992).

These processes include the recognition of the need to “build capacity to build capacity,” that is, “programs develop(ing) the capacity to evaluate and improve themselves” (Coffman, 1997, p. 5, paraphrased; Mayer, 1996). Service providers, agency staff, and community representatives may not be accustomed to sharing responsibility in evaluating their work. Further, they may not even be familiar with, knowledgeable about or even comfortable with this approach. It is the responsibility of the evaluator to: (a) assess the agency’s capacity to engage in collaborative or participatory evaluation; and (b) participate in the planning, education, and guidance to build the staff or community’s capacity to competently take part in the process (Mayer,
These acts of engagement shift the power and liability paradigm and de-mystify the evaluation process. This increases the probability that the evaluation will be meaningful and useful with fewer implementation difficulties. These results are referred to as “empowerment outcomes” (Fetterman, 1996).

An integral element of the IMCBE of which encourages this maximum participation from all stakeholders is the achievement of bi-competence as a way of thinking, a skill, and a model of practice acquired over time. It involves an ongoing exchange of education and learning between community-based individuals and evaluators about the culture, values, expectations, social and technical realities in which each functions. The goal of bi-competence is to reach a middle ground of mutual language, understanding, and respect with which community-based individuals and evaluators address a need or problem. It also includes evaluating the success of an action and who takes the credit for the outcomes.

**PROCEDURAL PHASES OF THE IMCBE**

Having discussed the prerequisites and theoretical basis of the IMCBE, we turn to the steps required to implement the model. These steps (referred to here as phases) parallel those in the development and implementation of traditional health and human services program and participatory/collaborative evaluations (see Table 1) (Edwards & Newman, 1982; Fetterman, 1996; Herman, Morris & Fitz-Gibbon, 1987; Isaac & Micheal, 1978; Kotler, 1995; Patton, 1978; 1982; 1997; Pitz & McKillip, 1984; Rossi & Freeman, 1993; Shortell & Richardson, 1978). The terminology and emphasis in the IMCBE, however, reflect a paradigm shift to a process more conducive to work in community-based settings.

The rigor and objectivity of traditional evaluation models are essential to a sound evaluation plan (Telfair, 1997). These traditional characteristics might not fit easily into collaborative or participatory approaches and their implementation may require sacrificing some rigor (Bailey, 1992; Brown, 1994; Cousins & Earl, 1992). The SCDA_P case example illustrates how the IMCBE’s characteristics and principles are incorporated into the implementation phases.

<table>
<thead>
<tr>
<th>PHASE</th>
<th>IMCBE</th>
<th>TRADITIONAL</th>
<th>PARTICIPATORY/COLLABORATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-Existing Condition</td>
<td>Pre-Planning and Initial Consultation</td>
<td>Taking Stock (Empowerment Evaluation-[EE] Fetterman) Setting the Stage (Stringer) Asset Mapping (Kretzman &amp; McKnight)</td>
</tr>
<tr>
<td>2</td>
<td>Planning and Decision Making</td>
<td>Planning and Development</td>
<td>Setting Goals and Developing Strategies (EE) Thoughtful Methods Decision (Making) (Patton)</td>
</tr>
<tr>
<td>3</td>
<td>Implementation and Action</td>
<td>Implementation</td>
<td>Resolving the Problem (Stringer)</td>
</tr>
<tr>
<td>4</td>
<td>Data Review, Analysis and Interpretation</td>
<td>Data Analysis</td>
<td>Interpreting and Explaining (Stringer) (Patton)</td>
</tr>
<tr>
<td>5</td>
<td>Report Development and Utilization</td>
<td>Report Development Marketing and Decision-Making</td>
<td>Dissemination and Utilization (Patton)</td>
</tr>
</tbody>
</table>

Similar to traditional program evaluation models (Herman, Morris, & Fitz-Gibbon, 1987), the phases of the IMCBE potentially overlap and there is a feedback loop between multiple phases, outcomes, and other components of the model (Figure 1). Further, depending on the type(s) of evaluation used, methodological design, and data collected, not all components may be used.
1. Assessment of Pre-existing Conditions. This phase is functionally linked to stakeholder and evaluator prerequisite issues. The evaluator and the community-based program participants gain an understanding of each other by reviewing a variety of documents and basic issues. In this phase the community-based participants and the evaluator decide whether an evaluation is feasible or appropriate (Herman, Morris, & Fritz-Gibbon, 1987; Rossi & Freeman, 1993). Critical tasks of this phase are listed in Box 1.

This assessment of pre-existing conditions in services or programs gives the program staff and the evaluator a shared knowledge base from which to develop an effective assessment design. When SCDA_P, for example, began working with the first author as part of the Pre-Existing Principles and Conditions Component of the IMCBE, he gathered information about the history, resources, philosophy of practice, and mission. These are briefly described here. SCDA_P serves a six-county area that encompasses rural and urban areas with a population totaling 932,800 including 211,000 African-Americans. Using the 1 in 500 estimated incidence of SCD live non-white births per year, this program serves an estimated 422 clients with SCD with an interdisciplinary staff of counselors, social workers, and nurses. The SCDA_P’s liaisons with community-based health care providers and health and human services institutions are part of the comprehensive service delivery program. Community-based comprehensive care is provided for everyone seeking services: 95% are African-American, 49% are from rural areas and about 69% are low income. Since the SCDA_P functions as an independent, community-based agency, it is often responsible for creating appropriate programs for its clients. As a result, the administration and staff of the SCDA_P view their cooperation in the research and other activities of the major medical centers and several health and human services agencies as a way of assuring that all the needs of their clients are met. After 23 years of existence, this program enjoys an established reputation in the community it serves. Despite their record, SCDA_P must counter the stereotypes of persons with SCD as drug-seeking patients who frequent emergency rooms.

Because the agency serves a largely African-American clientele, the staff report that it is often difficult to separate these and other access and use concerns from the underlying stigma and racism in its service area.

**BOX 1**

**PHASE 1: Assessment of Pre-Existing Conditions—CRITICAL TASKS**

- Review with participants and other stakeholders the program history, descriptions, reports, interviews, extant data, core activities, staff configuration, goals and objectives, and collaborators;
- Determine the history, nature, and type of experiences collaborators have had with evaluation/evaluators in general and specifically participatory evaluation models/evaluators;
- Determine the history, nature, and type of problem to be addressed;
- Clarify expectations of working together and the evaluation process;
- Examine service delivery principles; and
- Summarize and document the lessons learned.

Although SCDA_P participated in the research of the major medical institutions in the state, SCDA_P was not perceived as part of the medical institution’s decision making processes. In 1991 SCDA_P was faced with the dilemma of the changing accountability demands of several of its major funders (e.g., United Way and the State SCD program). In the past, simple monitoring data was acceptable and sufficient. Now funders were asking the agency for outcome-based information to prove that their interventions were working. Faced with the classic situation of: (a) having staff that were competent with community issues but not with evaluating data; (b) limited funding; and (c) the sense that traditional researchers and evaluators did not have an adequate understanding of community-based comprehensive services to African-Americans with chronic conditions, the agency sought out and began working with our evaluation team in 1992. From the outset it
was agreed by all involved that the IMCBE approach would “most likely” work with the agency. However, given the unique characteristics of the staff, clients, and service programs and fact that the agency was accustomed to traditional “top down” models of assessment, much work at all levels of application of the IMBCE was ahead.

2. Planning and Decision-Making Phase. In this phase, the evaluator and the community-based program participants jointly undertake a series of tasks. The ultimate goal of this phase is to finalize decisions that move the participants to act using knowledge and resources available and the circumstances under which the evaluation activities are to occur. The critical tasks of this phase are listed in Box 2.

This phase was illustrated by the planning and decision-making component of the SCDA_P Home Health Study (HHS). SCDA_P developed the HHS in 1991 in response to three major concerns: (a) inadequate resources for home and community-based services; (b) adult clients lacked skills that would allow enhanced self-care activities; and (c) stigmatizing stereotypes must be overcome (e.g., that adults with SCD have an overdependence on the health care system and unnecessarily seek pain-killing drugs). The intervention plan was to use the agency’s resources (counseling and nursing) to provide in-home or agency-based education and support services to empower adult clients by enhancing their self-care skills, thereby reducing personal, financial, and personnel resources needed to manage their care. The intervention plan focused on frequent service users. Although the HHS had a pilot run in 1991, there were no data on its effectiveness, something subsequent and potential funders wanted. As part of the team, the evaluator engaged the staff in developing and implementing an evaluation plan that would be rigorous enough to provide evidence that the program was efficacious. The team carried out a series of activities in two labor-intensive stages.

**Box 2**

**PHASE 2: Planning and Decision-Making—CRITICAL TASKS**

- Establish the feasibility of the evaluation by reviewing information from Phase 1;
- Assess and come to an agreement on the commitment to the proposed evaluation approach;
- Clarify funder and stakeholder expectations of the program and the evaluation;
- Discuss purpose, meaning, and implications of engaging in the evaluation process;
- Review goals, objectives, and strategies related to the evaluation for degree of consistency with the approach or practice model of the agency or program;
- Identify responsible person(s) from the program to coordinate activities with the evaluator;
- Decide and define questions to be answered;
- Determine the evaluation approach, design, and data to be collected;
- Develop operational definitions of tasks linked to realistic, measurable indicators;
- Determine data collection methods, types of measures, and protocols for monitoring progress, adherence to timelines, data management, and confidentiality;
- Develop alternative implementation plans;
- Set up plan for ongoing meetings; and
- Document lessons learned.

In the first stage, SCDA_P staff and the evaluator met on several occasions to:

- discuss the feasibility of assessing HHS to determine how clients, staff and collaborating entities responded to the intervention and their willingness to continue;
- clarify and assess the local funder’s expectations for the initial evaluation period (24 months) and participants’ understanding and agreement with these expectations;
- clarify the purpose, meaning and implications of engaging in the evaluation process; and
- clarify, restructure (to narrow and make measurable), and document the goals and objectives.

The focus of the second stage was establishing the technical and logistical parameters of the HHS evaluation. SCDA_P staff and the evaluator met to:

- review the proposed evaluation model;
- move from the “ideal” to the “real,” discuss and negotiate revisions of the model to best fit the given resources, anticipate client burden and needed rigor in order to determine change;
- finalize data gathering tools (including study specific questions) and related documentation that would be used;
- determine role responsibilities and the rationale for each; and
- outline mutual expectations for the HHS.

These activities laid the groundwork for an intervention that had the support of all relevant stakeholders, including the clients. Within the IMCBE, the chosen evaluation design for the HHS was a multi-level (client and program), multi-method (quantitative and qualitative) longitudinal cohort model.

3. Implementation and Action Phase. In this phase community-based program participants and the evaluator establish the evaluator plan and accomplish related tasks. Key to the success of this phase is the continuing communication and documentation of the work (e.g., weekly meetings, process logs, data documentation sheets). Furthermore, because communities and community-based programs change, flexibility and mechanisms that account for the potential confounding effects of these changes require ongoing monitoring and adjustments that are consistent with the data collection plan. These adjustments could include training of new staff, adding or removing indicators, and recording information on program drop-outs. Critical tasks of this phase are listed in Box 3.

As applied to the SCDA_PHHS, the program director and staff led this phase. SCDA_P established an implementation oversight team consisting of the program director, nurse coordinator, and the evaluator. A major concern of the oversight team and staff was that the instruments be culturally appropriate, understandable by staff and clients, relevant to the lives of persons with SCD and able to provide information that would meet the reporting requirements of their funder. Coupled with staff interests, the evaluator emphasized that the instruments must also be reliable and valid. During the early part of this phase the evaluator assisted staff with training, as well as finalizing the program procedures and intervention-specific measurement instruments. The final measures were an integration of study-specific questions, scales, and existing standardized scales reviewed and agreed upon by oversight team members and the staff. Counseling and nursing staff were responsible for conducting the teaching and support interventions and assisting with the data collection. Throughout the 18 months of the project, the staff and the oversight team consulted together on procedural and other issues affecting the intervention and assessment process. The program director, nurse coordinator and staff conduct monthly staff meetings to address concerns and work out problems. The evaluator’s role during the latter part of this phase was supplemental, that is, assisting with problem solving and overseeing quality control of data forms and data entry.
4. Data Review, Analysis and Interpretation Phase. In the next phase community-based program participants and the evaluator engage in another set of activities related to data review, analysis and interpretation (Rossi & Freeman, 1993; Stolenberg & Land, 1983). Depending on the evaluation approach chosen, the level at which the program or services are being evaluated, and the type and quality of the collected data, this phase may be repeated often throughout the evaluation process. Box 4 lists critical tasks of this phase.

In the SCDA_P program the data to be analyzed depended on the requirements of the funder. The program director, a designated staff person(s) and the evaluator, usually make up the data review and analysis team. These are often the same members as the oversight team from the previous phase, but if there is staff turnover or a change in the project protocol, flexibility of the IMCBE allows for membership change. If the membership changed, efforts are made to orient the new member to the project and the IMCBE approach. The primary responsibility of the data review and analysis team is to determine which variables should be included in the analysis and to attach meaning to and interpret the findings. Once the analysis components have been agreed upon, the actual tasks of data preparation and preliminary analysis are always the responsibility of the evaluator. However, subsequent review of the data and suggestions for further analysis is usually the responsibility of the analysis team. For the HHS, the funding expectations required that the many standardized and study-specific measures that were tested for reliability and validity, and that the intervention measure (support and teaching visits) was adequately obtained. Further, there needed to be documentation of any change in the population that could reasonably be attributed to the intervention. All of these tasks were the primary responsibility of the evaluator. Problems of missing or inadequate data and low reliability scores on some subscales did arise, and these were discussed by the team. After data cleaning and preliminary analysis, the data review and analysis team decided what to use. These decisions were based on the procedures used in the data collection process, the requirements and results of sound data assessment, what was the best (and most accurate) representation of the participants and SCDA_P and what would be useful and understandable to the funders. These discussions were led by the program director with the evaluator providing technical assistance.

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**BOX 4**

**PHASE 4: Data Review, Analysis, and Interpretation-CRITICAL TASKS**

- Determine which participants, stakeholders, and/or funders will work with the evaluator during this phase;
- Review data validity, reliability, and quality;
- Determine participants', stakeholders', and funders' questions and the variables to be analyzed, based on the conceptual basis/purpose of the intervention;
- Decide upon and carry out all levels of analysis, e.g., descriptive, bivariate, content (for qualitative data);
- Finalize the data format and components to be included in documents such as the preliminary and final report; and
- Document lessons learned.
5. **Report Development and Utilization Phase.** Several authors (Edwards & Newman, 1982; Herman et al., 1987; Kotler, 1995; Patton, 1978; 1997; Pitz & McKillip, 1984) suggest that: (a) evaluation data should be understandable, rigorous, and relevant, and should provide useful feedback to agencies about the needs of their clients, and specific interventions that work. Other authors found that results from the evaluation are more likely to be used if they focus on the information needs and values of potential users of the results (e.g., the stakeholders). Consumers, service providers, funders, and other relevant stakeholders have a prominent role in determining how evaluation information will be accessed, reported, and used to address needs, solve problems and plan for the future. Critical tasks of this phase are listed in Box 5. Finally, as illustrated in Figure 1, outcomes of the IMCBE are directly linked to the phases of the model at the levels the program or services are administered or delivered.

The SCDA_P program director, staff, and the evaluator reviewed the findings from the final analysis report, determined that the results were clear, and what was needed in the report depending on who will be the readers of the final report. One or more drafts of preliminary reports are written and reviewed by all on the team. Who is responsible for the final draft depends on how technically complex the report must be. Since the HHS required a more statistically oriented report, the evaluator was responsible for the final draft and SCDA_P was responsible for relevant input. However, using the same information, the program and executive director wrote a grant application that emphasized the lessons learned and configuration of the data to the requirements of the targeted funders with almost no statistical information. This project was subsequently funded as the child supplement to the adult HHS. Now in its third year (first renewal), the HHS has weathered a number of changes including lack of funding, confounding issues of clients participating in psychological support protocols while in the HHS, staff changes, and data handling problems. However, the IMCBE model has allowed all participants to pinpoint key areas for assessment with the greatest probability of showing change and achieving maximum utility of the findings. Those involved understand the contextual factors influencing the intervention, and are committed to the process, the data, and outcomes. Lastly, the assessment of the study’s value and worth is not considered the end point of the evaluation-as traditional evaluation or research often considers it-but it is a part of an ongoing process of program improvement that guides the current intervention process and has provided data and methods for successful small applications (Fetterman, 1996).

**BOX 5**

**PHASE 5: Report Development and Utilization—CRITICAL TASKS**

- Determine which participants, stakeholders, and/or funders will work with the evaluator during this phase;
- Review questions addressed with attention to the implementation, context, purpose and intent of the intervention;
- Assure understandable results for participants and other stakeholders;
- Decide who, how, when, where, and for what purpose the data will be used;
- Review and discuss the preliminary report;
- Determine responsibility for the final report;
- Develop structure and outline of the report, e.g., is there a need for an executive summary or a shorter version for program participants (clients);
- Finalize timeliness for the completion and distribution of the report(s);
- Develop and plan for follow-up of questions related to the report(s);
- Develop and plan for the technical assistance in the use of the evaluation findings as well as for presentation of the results; and
- Document lessons learned.
BARRIERS AND OBSTACLES TO THE USE OF THE IMCBE

This paper has presented an approach to evaluation tasks in a community-based setting that can lead to a satisfying and successful experience for the evaluator and the program. We must reiterate the importance of considering the characteristics of the evaluator’s and stakeholder’s requirements, and logistical issues before deciding that the IMCBE is the appropriate approach for your evaluation task. Without sufficient attention to such issues there may be obstacles that will thwart the success of the most well-planned set of activities. Some of the most important barriers and obstacles to consider are discussed below.

Evaluator Attributes That May Prevent the Use of the IMCBE

- Background, training, and methodological orientation not conducive to the participatory, collaborative nature of the IMCBE;
- Temperament that is inflexible, controlling, and incompatible with shared decision-making;
- Interpersonal skills that may not comprise the ability to interact with diverse groups of people with a variety of backgrounds and skill levels; and
- Evaluation practices that allow for limited translation into practical and useful information for the stakeholders.

Stakeholder Attributes That May Prevent the Use of the IMCBE

- Insufficient background and orientation to understand the methods and process to be used in the evaluation;
- Level of experience with the participatory process incompatible with expectations of the evaluator and other stakeholders;
- Inadequate understanding and experience that allows comfortable commitment to the IMBCE;
- Congruence with the mandates of the funding source(s) that may not allow for adoption of the evaluation model; and
- Bureaucratic/administrative structure of the agency or institution that is not a good fit with the participatory nature of the proposed evaluation.

Logistic Issues That May Prevent the Use of the IMCBE

- Consideration not given to the length of the funding cycle and the level of funding;
- Consideration not given to the political and social assets and resources that may or may not be available to supplement the implementation of the IMCBE; and
- No (or inadequate) plan in place for appropriate allocation and use of resources available to the project.

Once the prominent issues related to the evaluator’s attributes, stakeholder attributes, and logistical matters have been acknowledged and resolved, the implementation can move forward. A final word of caution: remember that the one constant about communities and community-based programs is that they change. Thus, successful implementation of models like the IMCBE will only occur when the ever-changing political and social context and technical needs are anticipated and taken into account as the evaluation proceeds through its various phases.

CONCLUSION

To address the need for a collaborative approach to evaluating community-based programs we offer the Integrated Model of Community-Based Evaluation (IMCBE). The explication of the model advanced in this paper provides a rationale and template for implementing the principles formulated by those advancing collaborative and participatory forms of evaluation. By incorporating what is perceived to be the best of
these innovative evaluation methods with the empirical and practical experiences of the authors, the IMCBE provides a useful and workable framework for applying the theoretical and scientific principles in the uncertain environment of community-based evaluation.

The approach advocated by the IMCBE model is an integral part of the planning and implementation of community-based programs, intervention, and services. It must not be, as is often the case with community projects, an afterthought. Community programs and staff must develop and implement means by which they can account for why, how, and with what results they provide services. Engaging program staff in the evaluation process, as is common in participatory and collaborative models of evaluation, means not only a contextual shift in the power relationship between evaluator and program staff, and in making decisions about the role and extent of staff involvement. Evaluators must recognize the unique context in which community evaluation takes place and be flexible in both the role they play and the evaluation model/approach and design they choose. The work of the community agency and evaluator depends on the nature and type of problem being addressed, the expected or desired outcomes, and the social and political context(s) in which the issue was created and will be expected to function. As a result of this collaborative work the community and the evaluator can achieve bi-competence by identifying and understanding: (1) what is important to the community; (2) the fundamentals of the art and science of evaluation; (3) how evaluation can be used to assess strengths and weaknesses; and (4) how this assessment can bring about change.

The IMCBE includes an integration of participatory, collaborative, and traditional approaches to evaluation with an emphasis on the “functional fit” that is dictated by the issue, problem, or intervention of interest. This emphasis on integration and fit allows the community evaluator to shift from the ideal (e.g., empowerment model or true experimental design) to what may be real (e.g., stakeholder involved model or quasi-experimental design) given the context in which the evaluation is to take place. Further, the structural components and conceptual approaches of the IMCBE are essential for understanding and providing form and function to the evaluation of community-based and community-oriented programs. This form and function bridges rigorous accountability and service delivery.

Community-based program evaluation resembles with the best practice of general human service delivery evaluation. For example, consultation with stakeholders and the application of stakeholder principles, long a hallmark of community-based programming, are fast approaching recognition and acceptance in community-based evaluations. Incorporating various views in the design and conduct of program evaluation, a way to ameliorate problems of nonuse and misuse of results, offers clear advantages in community-based evaluation. Community evaluations recognize and facilitate environments of continuous learning and sharing of information, while tailoring their rationale and methods to the reality of community-based programs. Lastly, it is important to understand that merely working with community groups or organizations does not automatically mean true community-based work is being done. What ultimately determines if such community-based work occurs is the degree of congruence between the beliefs, attitudes and principles of practice of the programs and services being evaluated and those implicitly or explicitly embedded in the evaluation model (Fear et al., 1985; Kaufman, 1985; Minkler, 1990; Wallerstein, 1992).

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