CHAPTER 2

COMPONENTS OF PROGRAM EVALUATION CAPABILITY IN COMMUNITY MENTAL HEALTH CENTERS

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Despite the general recognition of the merits and potential benefits of systematic program evaluation, few comprehensive community mental health centers (CMHC's) have defined and integrated a role for evaluation which is useful and relevant to program management, planning, and development. To be useful, evaluation efforts require substantive investments of staff and financial resources. Evaluation also requires a unique organizational role—one that allows evaluation specialists full participation in the management decision-making process and yet provides sufficient independence to allow a bold approach to the task (Glaser and Taylor 1973; Weiss 1973; Wildavsky 1972). A viable integration of evaluation into program management also requires considerable managerial motivation to participate in an ongoing evaluative process as well as managerial expertise based on training and experience (Horst, Nay, Scanlon and Wholey 1973; Huber and Ullman 1973).

The two major tasks of management, which relate directly to the evaluative process, are: (a) ensuring the fulfillment of legal obligations and commitments of the program to its constituents, and (b) the management of aspirations related to program development and improvement within the boundaries of these obligations. The need for evaluation stems from both the demands for accountability and the desire for excellence in the fulfillment of program goals and commitments.

Most current CMHC-based evaluation efforts lack the proper backing and financial support congruent with the growing need and demand for these services. As noted by Windle and Volkman (1973), the viability of the community mental health centers movement depends largely upon the ability of centers to demonstrate their value to local communities. Furthermore, in their efforts to organize community services, communities without centers as yet will need to be convinced and guided by the experience of existing centers. As a result, the role of program evaluation and public information and education, both at the State and national level and in individual centers, becomes increasingly important. However, program evaluation was not among the "five essential services" and has received relatively little attention in the development of center programs. From 1960 to 1972, 2.2 to 2.7 percent of all center staff time was devoted to research and evaluation. This level is probably a high estimate, and even so is barely at the minimum level called for in recent Federal legislation (Public Law 94-63).

These limitations in financial resources and staff corroborate the results of a recent study at the University of California, San Francisco, which indicated that the few resources currently allocated to evaluation are insufficient to meet the increasing demands for evaluative data (Attkisson, McIntyre, Hargreaves, Harris, and Ochberg 1974). The need to increase evaluation capability at this time is related to external pressures from funding sources and internal factors inherent to the maturation of CMHC programs. External expectations for evaluation stem directly from Federal, State, and local government funders who increasingly require: (a) evidence of program accountability, (b) assurances that effective and equitably distributed services are being provided at reasonable cost, and (c) data for planning health and human services. Recent curtailment of Federal participation in the development and staffing of CMHC's has resulted in a major funding crisis and competition among centers. Programs, finding themselves vulnerable and virtually dependent upon single source funding, now must produce more accurate program data in order to compete effectively for other sources of financial support. In addition, as programs have matured, grown more complex and financially problematic, there has been a corresponding increase in the need for evaluative information as an integral element in management decision making.

Many of the difficulties facing those who manage and evaluate human service programs stem from confusion in the definition of social problems and a

lack of consensus regarding their most dependable and feasible solutions. In the mental health field, program managers and evaluators share a broad spectrum of concerns: (a) the identification and measurement of community mental health needs; (b) the definition and refinement of measurable goals and objectives for mental health programs; (c) the establishment of essential organizational, staffing, and other resources needed for effective programs; (d) the linkage of evaluation with planning and program development; (e) the evaluation of the adequacy of services currently being provided; (f) establishment of cost-finding and rate-setting procedures; and (g) evaluation of community impact of existing programs. Few systematic efforts have been made which emphasize the overlapping concerns and the possibilities for mutual benefit between the tasks of management and the techniques of evaluation (Beigel 1976; Heymann and Downing 1961; Fox and Rappaport 1972).

While many noteworthy advances in evaluation methodology have been and are being made, there have been few attempts to develop basic standards and expectations for systematic program evaluation (Gruneberg 1966; Suchman 1967; Roberts, Greenfield, and Miller 1968; Schulberg, Sheldon, and Baker 1969; Weiss 1972; Struening and Guttentag 1975; Attkisson, Hargreaves, Horowitz, and Sorensen 1976). There are few if any agreed-upon standards for assessing the level or quality of evaluative activity in community mental health programs as well as no widely acknowledged guidelines for defining and organizing evaluation efforts within a CMHC (Tripodi, Fellin, and Epstein 1971; DHEW 1972). How are evaluative efforts best organized? What are the essential components in such evaluation efforts? How do CMHC's differ in their ability to evaluate the quality of services which they provide? What are the optimal approaches to augmenting that capability in any given instance?

Based on a 1-year study, involving site visits to more than 60 community mental health programs (Hargreaves, Attkisson, McIntyre, and Siegel 1975) and an extensive review of the program evaluation literature, the authors have developed an approach to an optimal role for, and organization of, internal self-evaluation within community mental health centers (Attkisson et al. 1974). This paper is designed to clarify some of the issues involved in the development of evaluation capacity within mental health programs and to identify specific impediments to such development. The discussion is organized to emphasize the role of evaluation in the context of a network of implicit contracts within which mental health service delivery systems function. Such a perspective avoids direct confrontation with the imponderables of social problem causation and the ambiguities of legislative intent while highlighting areas of agreement and relative certainty which are amenable to decision-making action. The contractual emphasis provides background for the succeeding presentation of a multidimensional model of the organization and essential components of program evaluation.

The Goals and Objectives of Program Evaluation

In the legal context, a community mental health center is a contracting agency with obligations to solve problems and make decisions, within certain geopolitical boundaries, on issues of mental health. The terms and intent of CMHC contracts rarely are explicitly defined and the parameters of concern typically are far from exact. Within this framework of vaguely specified agreements, agencies map out program strategies to cope with the uncertain domain of mental health and illness.

It would be easier for CMHC personnel to determine priorities for action if there were consensus on the priority problems and needs in mental health among the many constituents of mental health services, such as legislators, funding agents, clinicians, private citizens, and service recipients. But given the diversity of vested interests there is inevitable conflict of values and controversy concerning priorities. Due to a general lack of adequate management training, mental health professionals frequently are ineffective in the complex process of negotiating with the conflicting parties. Consequently, programs are created without adequate agreements and sanctions; and implicit statements of goals and objectives evolve subsequent to program implementation.

The environment of decision making for CMHC's is one of uncertainty. Rarely do agencies have systematic knowledge regarding program outcome or explicit data regarding the risks associated with alternative courses of action. Objectives and goals are unclear as a result of the vagueness of community expectations. The necessity persists, however, for decision makers to assure that a CMHC is meeting its responsibilities and commitments: to be accountable; and beyond that, to manage its aspirations for program improvement and innovation.

Accountability evolves from the notion of the delegation, by a funder, and the acceptance, by a local body, of responsibility for program planning and development. Accountability assumes the existence of an agreement stating that the authority has been designated and accepted by one party to

perform certain duties or functions in exchange for certain benefits and incentives from the other party. This agreement is the core from which a network of subcontracts and other statements of expectations are generated.

Accountability requires consensus on the criteria by which performance is judged. Thus, whether evaluation for accountability will be ultimately useful depends upon the degree to which the reciprocal expectations and agreements between the CMHC and its constituents are clearly determined. Difficulties arise when judgments about accountability rely primarily upon the words and intent of mental health legislation. The legislation, created in the atmosphere of compromise, is purposefully broad in scope and often ambiguously worded in order to accommodate the needs of differing CMHC environments throughout the Nation. "Program must be responsive to community needs" and "cultural accessibility must be assured" are examples of the legislative language. In the absence of clear, explicit and mutually understood statements, which translate the legislative intent into definite program strategies and reciprocal agreements, there are no manageable standards for judging center performance, and thus maintaining truly effective accountability.

Evaluation is also a tool for managing *aspirations* for program excellence once accountability requirements are met. Aspirations are valued end-points which are not easily measured but toward which CMHC's strive. Statements about the best use of limited resources are examples of aspirations. The "best use," or the concept of economic utility, implies an ideal or optimal aim. When this language is used evaluation effort is no longer in the area of accountability—exchanged promises and explicit obligations—but rather in the domain of management for program improvement. The purpose of evaluation in this area is to explore the possibilities for program change and development while maintaining the integrity of contractual obligations. Essential to the evaluation of program quality are active staff participation, a determined commitment by management to program excellence, and the ability and authority to undertake program change.

CMHC decision making occurs in four basic areas related to accountability and program improvement. They are (a) internal operations and management of a center; (b) service delivery function; (c) treatment and intervention functions; and (d) community impact efforts. In each area, operational standards are created and resources allocated in the attempts to meet program commitments and expectations.

Internal Operations

The core operations management agreements are evidenced by such documents as the funder grant, the budget, fiscal management and audit procedures, municipal reimbursement requirements, staff employment contracts, job descriptions, third-party billing claims, hospital accreditation certificates, and other contractual as well as quasi-contractual records. These documents comprise the basic terms and standards of the operational commitments of center administration.

Decision-making concern in this area may be primarily one of regulation and control, assuring that the minimum standards of contractual compliance and the minimum requirements for organizational survival, are met. In agencies where there are routine procedures that flag the errors and deficiencies that threaten smooth operations, decision makers may turn their attention to improving program efficiency or to clarifying long-term program goals.

Problem solving and analytic techniques borrowed from business management and labor research have been applied to decision-making problems in the area of internal operations (Benton 1973). Task analysis, performance analysis, critical incidence analysis, PERT diagramming and network analysis are techniques often used for identifying performance standards and correcting deficiencies (Mager 1972; Parsell 1966; Mockler 1972). Systems methodology, in general, provides guidelines for designing more efficient procedures and for improving the organization of management activities within the center. An evaluator who is familiar with some of these techniques can offer valuable assistance to administrators in operations management. It is not universally agreed, however, that this area of decision-making concern comes within the usual boundaries of evaluative responsibility.

Service Delivery Functions and Client Specification Agreements

Implicit in any center's operating agreements is the expectation that it will provide services to certain populations, basically mentally and emotionally disordered individuals and those at high risk of developing such disorders. No standardized method for identifying appropriate target populations is in use, and this area has been the source of considerable, often acrimonious controversy. To what age groups, social and ethnic populations, types of emotional difficulties should the center program differentially address itself? Where does the leadership reside for negotiating these questions—

with funding agent, legislative body, center administration, community advisory group?

Patient utilization statistics, aside from their value in peer review and in documenting what services are provided to target groups, do not themselves define the priority target populations or provide evidence of the quality of service. Center advisory board deliberations, community surveys of expressed mental health needs, and census data analysis are some of the approaches to the problems of client specification (Siegel, Attkisson, and Cohn 1976). Discussions between the center and its constituents to clarify expectations for, and limitations of, mental health programs is a primary but often avoided technique for identifying service needs.

Treatment and Intervention Functions

The CMHC's intervention functions extend the network of agreements and expectations even further. The center is expected to provide high quality services to its recipients. "High quality," without specification, is a term designating an aspirational level and in the absence of measurement criteria, its prevalence is never guaranteed. Treatment and intervention commitments, avoiding aspirational warranties, usually are expressed in terms of service agreements which exclude promises of specific results. Uncertain expectations for outcome make it impossible to standardize performance and therefore it is undesirable to exact terms of agreement which impose explicit obligations.

Standards of quality of care are controlled traditionally by professional organizations which standardize training and credentialling requirements. Outside of the domain of clear malpractice, the assessment of quality and appropriateness of intervention have been reserved for the practitioner's self-assessment. More recently, quality of care has been subjected to peer review through utilization review committees and professional standards review organizations.

Difficulty in applying standardized outcome measures to assess quality and appropriateness of intervention arises from the diversity of expectations. Like criteria for services, satisfactory outcome of treatment is defined variously by clients, private clinicians, training institutions, professional organizations, clinical peer groups, legislators, fiscal intermediaries, consumer advocates, and community advisory groups. The search for realistic expectations in the treatment area requires extensive collaborative research and inroads to the network of agreements between many parties.

Community Impact Efforts

The most far-reaching expectations in the community mental health movement are those directed toward reducing the incidence of mental illness, and in this day of equal protection legislation, accepting the responsibility for providing equal opportunity for mental health to all residents of a community (Holden 1972). The success of program efforts directed towards improving the mental health status of community residents is difficult to judge. There are neither precise measures of service impact nor accepted definitions of what the scope of service activities should cover.

Several sources of dismay and confusion complicate evaluation of community impact functions: (a) the lack of adequate professional or legislative definition of prevention, consultation and education activities, (b) the conflict among community representatives on the role of the mental health professional as an agent of social change, and (c) the traditional medical model training which is of questionable value in preparing mental health professionals for useful intervention in the community (Diamond 1972). Attempts to define expectations from the recipients and funders for primary and secondary prevention functions are extremely frustrating, and often the mental health professional has never been trained in the necessary tasks required to negotiate the kinds of conflicts which arise.

Dimensions of Community Mental Health Program Evaluation

The need for evaluation arises out of the four contractual areas where systematic data collection is crucial for effective decision making: internal operations, service delivery systems, treatment and intervention functions, and community impact functions. Evaluation capability for effective decision making appears to have three essential components. For purposes of discussion a three dimensional conceptual model depicting minimal necessary organizational components is presented in figure 1. The dependent variable dimension, in this model, is the component of "Evaluative Activity," levels I through IV. This dimension corresponds directly to the four areas of decision-making concerns which were described earlier. In the model they become evolving levels of program evaluation activity: (I) Systems Management, (II) Client Utilization Monitoring, (III) Outcome of Intervention and (IV) Community Impact of CMHC Programs. These activities are presented as levels because they are naturally ordered on a hierarchy which reflects

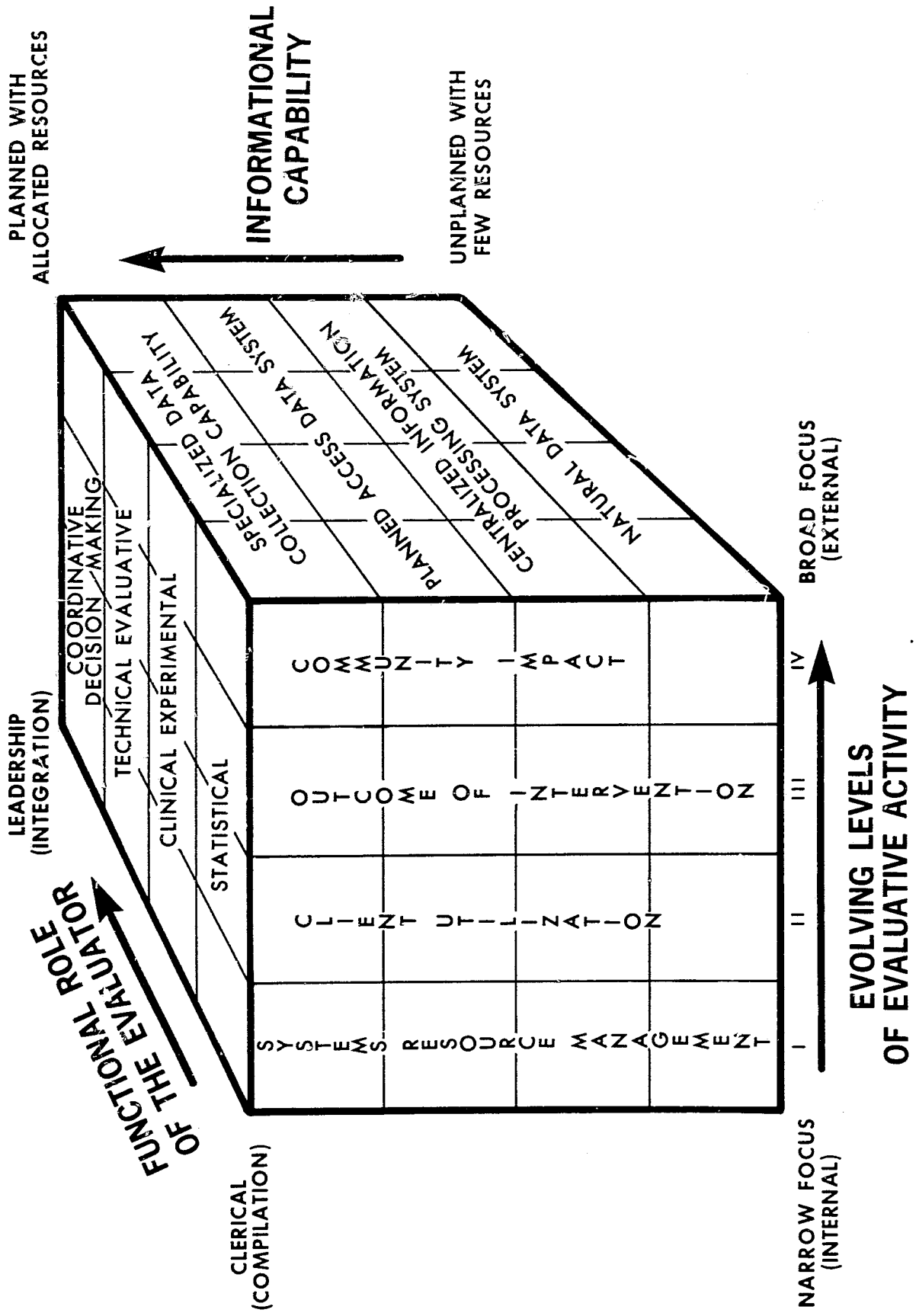

Fig. 1. A three dimensional model depicting key components of community mental health program evaluation capability.

current practice, levels of measurement difficulty, and relationship to the range of program goals. Two of the model's components, the "Informational Capability" of the CMHC and the "Functional Roles of the Evaluator" within the CMHC organizational structure, are dimensions which most affect the quality of evaluation activity within a CMHC.

Evaluation is best defined as a process of making reasonable judgments about program performance based on systematic data collection and analysis. An effective system for generating information, posing solutions to problems, and implementing strategies for change is assumed, according to this model, to result from an optimal mix of the evaluator's organizational role and the informational capacity of the center. Evaluation is therefore considered to be a process of inquiry where (a) relevant information is gathered, processed and analyzed, (b) reports are generated and presented in a form compatible to management decision making, (c) program effort and resources are described and assessed, and (d) alternatives are posed for implementing program goals. Inherent in this process of inquiry is the assumption that a given level of information capability interacts with a given level of CMHC investment in the evaluation process (functional role of the evaluator). The richer the level of interaction, the greater the evaluative capability. The following sections describe the three dimensions of the model.

Evolving Levels of Evaluative Activity

The evaluation-dimension component describes four distinct perspectives or levels on management information and decision making. Each level represents a boundary of inquiry or focus for management decisions. At the Systems Management level (I) of this component, focus is on internal operations of the mental health program. At the Community Impact level (IV), focus is on the program's impact on the social ecology of a particular community. The focus is most narrow at the systems end, with the broadest perspective at the impact level.

Systems Management, level I, focuses on operations management—that part of the system in least contact with service recipients—which provides the organizational and administrative backup for service delivery. The organization has most control over this part of its functioning. Center operations are the core activities, the most sealed off from both environmental influences and fluctuating requests and referrals for services, and therefore are the easiest to maintain at a high degree of technical efficiency. Decisions at this level concern such things as setting standards for services, creating policies and procedures for administration, identifying and diversifying financial support, and stipulating budget controls (Smith and Sorensen 1974; Halpert, Horvath, and Young 1970).

The tasks of evaluation at the level of Systems Management are to operationalize the abstract and often vague statements which describe the purpose, organization, and procedures of an agency and its program components. This would include such activities as examining goal and objective statements, reviewing any legal or formal agreements such as grants or contracts, studying budget agreements, noting any informal agreements between the agency and the community and reviewing staff responsibilities and organizational procedures. Initially the purpose of these evaluation activities is to explore the range of commitments the center has made which are nonnegotiable terms of its contracts and responsibilities, and then to obtain a conception of the aspirations of the staff and administration for the center programs about which information would be needed. It is usual at this stage, in attempting to obtain a clear statement of center purposes, to study operational procedures, management policies, and planning processes. Such studies may range from analyzing the record keeping procedures to assisting with a needs assessment study for purpose of program planning and goal setting.

At level II, *Client Utilization*, the focus expands to describe the system as it interacts with clients. Studies at this level examine client entry requirements, referral patterns, hours of service, and factors which influence service delivery and channel client demand. Patient utilization surveys ascertain the degree to which people for whom services are intended are being served. The study findings are usually submitted to funders to meet accountability requirements. Such surveys also seek to define the patterns of utilization for purposes of improving strategies which will make service more relevant to needs of clientele. Another approach to the development of alternative strategies for program improvement would be to study variables effecting continuity of care. An example of a patient-utilization-level evaluation would be a study of admissions at a psychiatric emergency service to determine and categorize various types of emergent needs (Trier and Levy 1969). Such a study would analyze the incidence of explicit emergent demands, as opposed to less severe and acute demands on the service, and propose alternative services for less acute emergent patients, thereby relieving the pressures on staff and reducing costs of maintaining a 24-hour emergency service. A variety of studies describe the methods and technology related to evaluation of client utilization (Bass and Windle 1972; Elpers and

Chapman 1973; Kiesler 1968; Le Breton 1969; Person 1971; Riedel et al. 1972).

Evaluation at level III, *Outcome of Intervention*, focuses on the results of services in the lives of the clients of the program. One might consider this the "proper" focus of "evaluation." Indeed some administrators and clinicians have suggested that the levels I and II activities related to statistical description of clients, to accounting for expenditures of funds and staff effort, and to cost finding more properly should be considered business management functions. In our experience, however, the center must have reasonable capability in all of the areas described under levels I and II before an effective approach to level III is possible. For example, planning a study to compare outcomes of different services for a particular client group requires information about how many of this group are now served, by which parts of the program, and at what cost.

Program outcome indicators can be separated into two types: system outcome and individual client outcome. System outcomes reflect the degree to which a program is functioning as it is intended. The successful referral of a patient from inpatient status to day treatment is an example of a system outcome for an individual. Individual client outcome, on the other hand, refers here to the effect of services on the client's psychological and social functioning.

A sensible motivation for an outcome study is to aid management and clinical staff in a decision about program change. Such studies deal with specific policy decisions about service delivery methods and are generally time-limited projects. An example would be a decision whether to adopt a proposed new approach to the aftercare of chronic schizophrenic patients. In this situation a center may compare followup outcomes under the new approach to outcomes of clients managed with the center's traditional approach. A second application of outcome analysis is routine monitoring to detect program strengths, weaknesses or trouble spots. For this purpose some simple outcome indicators are periodically examined to alert clinicians and administrators to problem situations. A third use of outcome information is to help demonstrate to funding agencies that the program as a whole is functioning with reasonable effectiveness (see part IV of this volume).

Level IV evaluation, *Community Impact Monitoring*, is the least technically developed but the most relevant to the ultimate goals of community mental health center program endeavors. At this level, the aims of the evaluation are to ascertain current demand, predict future need and analyze the impact on the community for which programs are designed. The development of reliable social indicators for describing and predicting community needs and demands for services is in its infancy. Similarly, the development of valid measures of program impact are dependent on the technological and statistical advancements which will allow appraisal of the significance of program activities in reducing the incidence of mental health problems (Bloom 1968; Dohrenwend and Dohrenwend 1965; Kramer, Pollack, Redick, and Locke 1972; Schulberg and Wechsler 1967).

Information Capability

A second major component of mental health program evaluation is the CMHC's overall dimension of "Informational Capability" (see figure 1). One primary objective of evaluation is to provide reliable and valid data to assure that accurate records of program performance are available. The dimension of information capability is best defined as the ability of a human service system to manage and analyze efficiently the immense amount of information which flows through the system. The informational capability of a CMHC is dependent on (a) identifying what elements of information are meaningful, (b) ensuring the availability of the essential data, (c) capturing reliable data at its source, (d) reducing to a minimum the degree of reliance on service staff for data collection (especially the reduction of overlapping or redundant reporting for which there is no reciprocal compensation to the clinician in the form of usable data), (e) translating abstract data summaries into decision-making material, and (f) performing specialized studies for immediate and long-term planning and policy decisions.

Information capability relates to the quality of the data used to influence administrative decision making. On the low end of the dimension, the unprocessed data are the least certain, available, or precise in their suitability to the decision-making needs. Moving up the dimension, the data are processed and analyzed so that the decision making takes on more precision and sophistication by accounting for more of the variation and noise in the system. Toward the top of the dimension the data have been transformed into relevant information and integrated into the decision-making process where they have the most significant impact on program operations and development. At the highest level of the dimension (assuming an ongoing, planned access data system) it is possible to integrate qualitative as well as quantitative measures into the decision-making process, to recommend

specialized time-limited studies, and to analyze program strategies related to overall center policies.

The *Natural Data System* is a term used to describe the first level of Informational Capability, where no effort has been made to coordinate or centralize the data generated by the respective functional units of the mental health care system. Examples of unit level data are the accounting and auditing records, patient records, hospital procedures manuals, contractual documents with funders, staffing grant applications, and personnel records. Each of these units may collect a wealth of useful information but in their fragmentary and idiosyncratic forms they are not relevant to center-wide decision-making and planning processes.

Idiosyncratic data collection practices and ambiguous statistical summaries characterize the evaluator's task environment at the Natural Data System level. Unreliable or biased information about system activities is a high risk at this level. Ideally, the evaluator should have reason to believe that the information collected represents that which it purports to represent. For instance, if the outpatient department reports it admitted 25 new patients during a given month, the evaluator needs to know that such a statistic accurately reflects an activity of that department and has consistent meaning for those collecting the information as well as for those reviewing it.

It is at this level of information capability that the evaluator sets the groundwork for future analyses and presentations useful to decision-making needs and attempts to reduce the risk of collecting data irrelevant to these purposes. The task at this level is to identify the information needs as evidenced by the natural data system in order to have confidence that the kinds of information used to compile statistics for eventual incorporation in reports are reliable for their anticipated uses and where there are gaps or inadequacies in this system, to duplicate or intercede in the collection process in order to create an original system which collects the information desired, in the way and form consistent with the anticipated uses.

A Centralized Information Processing System—a phrase describing the second level of Informational Capability—coordinates and channels data from the respective functional unit of the mental health care system through a centralized information bank. Efficiency of evaluation effort is greatly improved once the source and meaning of available information of the natural data system are understood and adapted to centralized filing requirements where information from a variety of sources is merged, making it possible to summarize program activities. Tables displaying service activities of a unit cross-tabulated with the range of service providers on that unit are an example of typical data at this level of informational capability.

The ability to compile program statistics makes it possible to describe some quantitative characteristics of program activities; but mere tabulations are unequal to the tasks of center administration. The information capability at this step lacks the planning, coordination, and sanction necessary for the decision-making process. Decision makers remain dependent both on the idiosyncratic data forms and collection processes peculiar to service units throughout the system for their sources of information, as well as on summary statistics to describe the complex array of program accomplishment. The factor which distinguishes this level from the previous one is that some effort has been made by the facility to centralize system information.

The first two levels of the "Informational Capability" dimension provide for filing, merging, and tabulating capability using the separate data systems indigenous to functional units of the center. However, these file systems can become extremely inaccessible, cumbersome, and expensive when used for evaluation purposes.

A third level termed the *Planned Access Data System* assumes an information agent process which is convenient and relevant to the purposes of evaluation and management decision making. The evaluator *creates* data collection and file systems that can be easily accessible, and easily merged and analyzed. The key variable here is that of *planned, achievable access to system data.* At this level (a) reliable data are collected routinely so that they are readily available to ongoing decision making, (b) the principal transactions (events such as therapy hours or consultation meetings) are systematically recorded and stored, (c) the overall data bank of stored information is available for prompt retrieval, and (d) the data system is flexible, accommodating system change or system reorganization.

The higher up the information capability dimension, the more dependable and reliable is the data gathering process. The closer the evaluator is to the data, and the more familiar he is with its sources, the more credible are analyses. The relevance of the data analysis framework to the decision making is dependent to a large degree on obtaining reliable data. The Planned Access level of "Informational Capability" allows the evaluator to devote much effort, time, and concentration to analyzing operational difficulties in attempts to identify causes and pose solutions. It is the place at which the evaluator, because of specific skills and training, is usually most effective in applying imagination and critical study. At this juncture the evaluator

attempts to match science and the world of models with the real world of decision making.

In the first two levels of the "Information Capability" dimension, evaluators attempt systematically to collect the "naturally" generated data, analyze these data, and try to piece together an overview of operations. The problems of using such uncoordinated data as a basis for secondary analysis are that the information is particular, fragmented, and difficult to interpret reliably. The third level of "Information Capability" allows the evaluator to integrate the information from various sources to accomplish meaningful analyses of the program (Smith and Sorensen 1974; Elpers and Chapman 1973; Cooper 1973; Sorensen and Phipps 1972). With such a system, the main determinants of the uses of CMHC resources can be described, data sources and processing procedures can be documented, and analytic techniques best suited to the decision needs can be applied.

It is clearly an advantage to be able to account for the sequence of decision points by having the analytic process centralized and available for planned access. A more subtle advantage, however, is that responsibility and accountability for establishing meaningful analyses with insight for decision making are backed up by the appropriate authority. Control over the operations and staff performance surrounding the evaluation process help maintain identifiable and clear boundaries between the responsibilities of evaluation and other program functions (Elpers and Chapman 1973).

Specialized Data Collection Capability, the fourth level, assumes the existence of a planned access data system and is the next logical investment by a CMHC in order to augment "Informational Capability" through specialized research or investigatory projects. Such projects are best construed as time-limited studies of special problems or issues which relate to strategies for program improvement and innovation. The studies might examine the consequences of alternative program strategies in their contribution to the cost-outcome performance of the CMHC.

At the level of Specialized Data Collection Capability, the task is to integrate both quantitative and qualitative information and independently analyze program strategies with an appreciation of the critical policy questions of center management. Policy analysis might involve posing questions on the effectiveness or efficiency of overall center program strategies in meeting community demands and assessed needs for service. Such studies seek to answer questions on the social worth of programs and have implications for policy modifications.

Organizational Role of the Evaluator

A third major focus of this paper represents our view of the sine qua non of effective evaluation effort within the CMHC setting: the "Functional Roles of the Evaluator" (see figure 1). Careful relating of program objectives to meaningful "Evaluative Activities" and a development of CMHC "Informational Capability" are not independently sufficient to ensure effective evaluation. "Evaluative Activities" and "Informational Capability" must be directly related to a creative problem-solving, planning, and managerial process. In order to ensure that a commitment to evaluation becomes a key element in program planning, it is necessary to recruit talented evaluators, re-allocate scarce funds, and underwrite the evaluator's role with sufficient authority and sanctions for effective action.

Creative evaluation efforts are dependent not only on training and experience, but also on a closeness to and understanding of management concerns. In this context, evaluative capability is enhanced greatly by (a) the authority to allocate fiscal resources to program evaluation activities and the development of informational capability, (b) access to the decision-making process (asking relevant questions, proposing studies, posing answers and planning strategies, and implementing changes), and (c) control over use of funds for training and recruitment of future staff.

Only in the atypical CMHC do evaluation staff—regardless of talent—walk easily in the midst of administrators or have easy access to, and participation in, the decision-making and planning process. From our field visits to CMHC's, four types or organizational roles for evaluators have been identified. These typical roles of evaluators with their associated background characteristics (training and experience) are described below. Each description includes an anecdotal commentary best characterizing the reasons for employment, the spirit of involvement in the decision-making process, the scope of responsibility and the constraints on the use of skills. The descriptions used to label the various evaluator roles emphasize the primary *functional* position within the organization and do not necessarily reflect a judgment on the importance of any specified activity, and are therefore not termed "levels."

1. *Statistical* staff, in general, are employed to mechanize, systematize, and enhance the efficiency of reporting to funders. Typically, they possess a rudimentary knowledge of data processing techniques and computer use, but have minimal acquaintance with either the mental health field or management principles. They are additionally

hampered by lack of access to the organizational network required for effective evaluative activities. Individuals in this functional role frequently report frustration in their attempts to coordinate data collection or to achieve ready, reliable access to the system's data. They are usually viewed as special staff to the center director, deployed to gather information which is obliquely related to immediate or ongoing decision making and planning needs. They are mandated to improve the CMHC's informational capability but are rarely given sufficient support or authority to carry out this function. Generally, they are the first staff hired for evaluation, as a preliminary measure to meet funder data collection requirements.

2. *Clinical Research* staff are usually trained in clinical psychology or psychiatry and have specialized research skills and interests. Typically, they are recruited within programs to assume the evaluation position because they represent the best trained, most readily available individuals in a field where credentialed evaluation specialists are rare. Usual activities involve conducting studies on outcome of treatment, assessing and describing special patient groups, instituting goal attainment scaling or carrying out other research-oriented studies. They are competent in research methods, but often are also encumbered with clinical responsibilities incompatible with evaluation and are unable to devote full time to planning, organizing, and implementing evaluation efforts.

Projects initiated at the clinical research level are limited by inadequate support staff and insufficient financial support to undertake meaningful evaluation studies. They share similar problems of powerlessness that were described for the statistical role. Like the latter, they usually lack training in mental health administration and program management. Frequently, they are unacquainted with the techniques of organizational analysis, budgeting and planning, operations research, or systems monitoring—skills useful to solving decision-making problems. An evaluator at this level has sufficient understanding of mental health practice to ensure adequate links to clinical operations, but the research emphasis is often too academic for the needs of administration.

3. *Technical/Evaluative* specialists are responsible for directing and organizing full-time evaluation efforts. They have authority to obtain and expend resources for evaluation projects and have job experience and training in the technical application of evaluation methods. They are recognized as responsible for data collection, analysis, and presentation and are the major source of information synthesis and interpretation for program planning and evaluation needs. The basic opportunities afforded an evaluator with this organizational role are (a) participation in the decision-making processes, (b) requisite time allocations and job specifications congruent with the evaluation task, and (c) monetary and personnel supports.

Evaluators at this functional level operate to provide technical analyses of center operations. The substance of these reports may range from monitoring of standardized procedures to indepth analyses of service delivery functions, and may incorporate recommendations for operational improvements. The resulting products are designed to assist center management in devising ways to upgrade center operations within the context of current program strategies and policies.

The tasks of the technical evaluator are wide in scope and generally are directed to providing timely information on center operations, discerning flaws in the system and recommending techniques for program improvement. However, political and behavioral variables, necessary for consideration at the level of policy decisions, are not part of the analytic framework of the technical analyst. Technical analyses and reports are an important input to the decision process but are insufficient for the analysis of policy issues and proposed strategies for program change or staff development.

4. The *Coordinative/Decision-Making* role—the evaluation specialist as decision maker—shares the prerogatives of the technical level and in addition is involved in implementing change through actively recruiting and training staff best suited to the policies and goals of the mental health center. The evaluator's role at this level is to present decision documents and perspectives which integrate the technical analysis of program effectiveness with other factors which influence program decisions: political factors, staff attitudes, and the perspective of top management.

At this level of management participation, an evaluator is in the role of manager, policy analyst, and implementor of program strategies. The coordinative/decision-making evaluator needs a wide range of experience in the uncertain environment of community mental health decision making and must have both the authority and capability to influence changes in the structural and behavioral environments of the center. Typical responsibilities of the evaluator at this level are the implementation of staff development and inservice training programs, recommending program and budget changes, and initiating and executing studies of individual programs in terms of relevance to overall strategies and policies of the center. An evaluator at this level of policy decision making would necessarily be closely

involved with community advisory boards, county boards of supervisors, service recipient groups, collaborative human service organizations, as well as high level center administration.

Discussion

No simple design exists for the development of community mental health center capability for program assessment. Evaluation, as a much sought after tool by center administrators for planning, program analysis and management decision making, is not yet a functional reality. To some extent the reluctance to commit resources to the development of evaluation capability stems from the uncertainty as to its possible benefits. It is not readily apparent, nor is it widely accepted, that an investment in evaluation will necessarily result in viable solutions to the complex political and social problems facing the administrator. However, with the growth of programs, the multiplicity of demands for accountability, the competition for resources, the reduction in categorical funding for mental health programming, and the growth of third-party funding, evaluation capability is becoming necessary for future CMHC program survival and effectiveness.

Successful evaluation in the CMHC does not spring full blown from the application of the technical tools of economic, mathematical, or statistical analysis; nor does it derive easily from the adaptation of clinical research methods. It requires the integration of political and social dimensions into its sphere of analysis, as well as consideration of the subjective realities of the organizational participants.

The model of internal evaluative capability described in this paper attempts a conceptual integration of the many facets of the evaluative domain. This model identifies components of an evaluation process that aim to enhance effective management decision making and improve clinical performance. The three dimensions of the matrix are (a) "Levels of Evaluative Activity," which range from basic systems resource management to the community impact goal; (b) "Information Capability," which evolves along a continuum from unplanned and uncoordinated natural data banks to planned access data systems supported by allocated resources; (c) "Functional Roles of the Evaluator," which progress from the clerical-statistical level to participation in management decisions.

The model has potential value for organizing evaluation effort within a center. Within its framework it is possible to define the tasks of evaluation and to derive the kinds of supports necessary to sustain these tasks. The model also has application in the design of curriculums for evaluator training programs. It suggests that evaluative technology should incorporate a wide range of analytic tools, each contributing to different aspects of the decision-making realm. Professional training in evaluation requires an interdisciplinary program to prepare the student for a variety of tasks and to deal effectively in the uncertain decision-making environment of human service programs.

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