

DOCUMENT RESUME

ED 190 638

TM 800 433

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 TITLE Needs Assessment: A Critical Perspective.
 INSTITUTION Office of Education (DHEW), Washington, D.C. Office of Planning, Budgeting, and Evaluation.
 PUB DATE Dec 77
 NOTE 81p.: For related document see ED 165 033.

EDRS PRICE MF01/PC04 Plus Postage.
 DESCRIPTORS Decision Making: *Evaluation Methods: *Federal Regulation: *Human Services: Labor Needs: *Needs Assessment: *Public Agencies: *Resource Allocation: State of the Art Reviews: Surveys

ABSTRACT

A critical examination of some basic claims and issues associated with needs assessment is presented. This paper identifies the various meanings and methods associated with needs assessment, including some of the evidence concerning differences in actual practice. Issues which arise as a result of various approaches to needs assessment are discussed, and practical guidance concerning whether or not to conduct a needs assessment is offered. Highlighted are: the meaning of the term: federal law and regulation; proposed methods, tools, and concepts for conducting needs assessment; and the reasons for and uses made of the needs assessment. Although current literature is generally optimistic about the value of needs assessment for resource allocation and decision-making in public agencies, this paper presents a clear contrast. It is concluded that the case for, limits of, and evidence about the positive impact of needs assessment are not encouraging. Caution and circumspection are suggested about the likely analytical contribution which assessments might make to decision-making in public agencies. (Author/GSK)

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NEEDS ASSESSMENT: A CRITICAL PERSPECTIVE



Office of Program Systems
Office of the Assistant Secretary for Planning and Evaluation
Department of Health, Education, and Welfare

December 1977

TM 800433



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Prepared by

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For

**Office of Program Systems
Office of the Assistant Secretary for Planning and Evaluation
Department of Health, Education, and Welfare**

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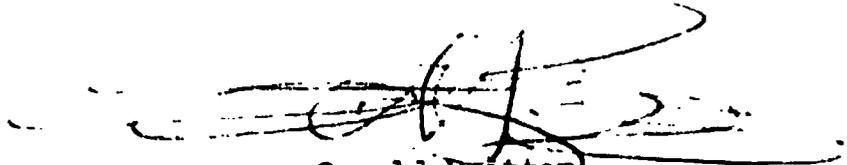
FOREWORD

This is the third in a series of papers on the subject of "needs assessment" which my office has sponsored under the direction of Walton Francis. The first two papers, Needs Assessment: An Exploratory Critique, and A Compendium of Laws and Regulations Requiring Needs Assessment, were published last spring. All of these papers are part of a continuing effort to improve human services planning.

This effort is especially important and timely in the light of President Carter's July, 1977 requirement for a zero-based review of all Federal planning requirements related to Federal financial assistance. The President said, "Planning is a vital part of making any decision. State and local governments, however, have been plagued by too much of a good thing." Unfortunately, one of the principal causes of this burden is the widespread belief, mandated upon States in dozens of HEW regulations, that "needs assessment" is the first and most important step in planning for resource allocation. The findings of this paper, and of the previous papers, cast considerable doubt on the validity of such claims and, indeed, on the usefulness for any purpose of "needs assessment" as commonly perceived and conducted.

We view our effort as the initiation of a dialogue with both practitioners and theoreticians, and welcome comments and suggestions on the problem, on our papers, and on steps which the Department or others might usefully take. Comments and requests for copies of our papers should be sent to the address below.

Our thanks to Wayne Kimmel for ably diagnosing the underlying premises and specific problems of "needs assessment" as faced by State and local practitioners. If the problems are understood and faced, then we believe that studies and analyses well targeted to actual decision problems can replace unnecessary and invalid surveys of "need", and provide a real contribution to better planning of social programs.



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ACKNOWLEDGMENTS

This paper was prepared for the Office of Program Systems, Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education, and Welfare under Purchase Order Number SA-10183-76. The bulk of the research and interviewing for the paper was carried out in the fall of 1976. Special thanks are due Walton Francis, Project Monitor, for encouraging the paper, for very stimulating discussions of the subject and for his patience and assistance through all stages of the paper's preparation. Key among the many individuals who provided useful materials, ideas, assistance and comments were Douglas Henton, Kristina Varenais, Bruce Zangwill and Jane Fullarton. Francis, Henton and Thomas vischi provided a set of constructive and penetrating criticisms of the draft. Too numerous to list here individually are a large number of other federal and state officials who shared their experiences with and views about needs assessment.

PREFACE

This paper presents a critical examination of some of the basic claims and issues associated with activities called "needs assessment." It has been prepared for those interested in the subject because the phrase has come into vogue in the past few years or because they are faced with a decision about whether or not to undertake a formal assessment. This is not a cookbook or manual on how-to-do needs assessment. Many of these already exist (See Sources). Instead, the paper identifies the many meanings and methods referred to by the phrase "needs assessment" and recites some of the spotty evidence about what difference it might make in actual practice. It also identifies issues which arise as attempts are made to use various approaches to needs assessment to influence the allocation of public resources. Finally, it attempts to provide some practical guidance about whether or not to conduct a needs assessment.

The paper has a simple premise: needs assessment will cost an agency money, time and energy and should have a reasonable payoff. In the case of large statewide surveys, for example, assessments are likely to cost hundreds of thousands of dollars, require several person-years of effort and take months if not years to complete. Even on a small scale, needs assessments consume scarce resources. Like any other expenditure of public funds, this one ought to meet a basic and prudent test of reasonable payoff: will needs assessment be worth the candle? Like many other approaches and methods which are offered to ease the difficulty and complexity of public choice, the methods of needs assessment tend to overshadow their purposes, uses and potential effectiveness.

A judgment about whether to do an assessment or one about which approaches to employ ought to be informed by a minimum understanding of what, how and why. If officials are not convinced of the likely relevance, significance and utility of a proposed assessment, why do it? Public funds may be better spent on more promising purposes, not the least of which is the provision of services to the many we already know are in "need."

The bulk of the current literature is optimistic about the value of needs assessment for resource allocation decision-making in public agencies. By contrast, this paper concludes that the case for, limits of and evidence about the positive impact of needs assessments are not encouraging. It suggests caution and circumspection about the likely analytical contribution which assessments might make to decision-making in public agencies. It reminds us that human needs are infinite and that need satisfaction is not free.

In preparing this paper we have drawn generously on the heterogeneous writing on needs assessment in the belief that the literature should speak for itself. We have also taken at face value the common claim that needs assessment is intended as an analytic aid to public choice. That claim is discussed extensively. Readers who want a summary listing of conclusions should turn to Part IX - Recapitulation.

I. INTRODUCTION: THE PROBLEM

Federal requirements for an assessment of "need" to be met by programs began to appear in legislation in the mid-sixties. By the early to mid-seventies the frequency of these requirements seemed to have increased. By now, presumably thousands of "needs assessments" have been created in response to federal requirements. With the growth in the number and potential cost of needs assessments, however, their methods and utility began to draw attention and critical scrutiny. Questions have been raised about what is going on under the rubric "needs assessment" and critical commentary and articles have begun to appear. Commenting on "problems and deficiencies in the needs assessment process", for example, Shapek (1975) observed:

A host of federally funded studies have assisted state and local officials in creating priority listings of needs. The supposition is that once these listings have been created, such ordering will permit decision makers to plan and manage resources and programs more effectively as well as to formulate more significant, long-range policy initiatives. Unfortunately, there is little evidence that this occurs. Needs listings are largely ignored and ridiculed (p. 754).

In a recent attempt to locate basic materials on needs assessment, Varenais (1977) sampled the available literature. She concluded that the writing on the subject constitutes "a semantic jungle," that definitions are vague, and that discussions of the subject are "confused." Commenting on a pre-occupation of the literature with methods rather than results, she concluded:

Many sources suggest intricate sets of activities to produce information, but omit satisfactory explanations of what these processes are directed toward or how the data would be used (p. ii).

Similarly, a recent examination (Zangwill, 1977) of a large collection of HEW statutes and regulations which call for needs assessment concluded:

....it is clear that the Department, in its official instructions to recipients of its funds, provides no clear conception of the what, why and how of needs assessment" (p. 5).

After noting that resource allocation decision making in public agencies is complex and based on the political and value-laden competition of interested parties for scarce resources, a federal official recently cautioned a national conference on needs assessment:

I don't think we ought to be lulled by the fact that data and needs assessment are going to give us our priorities and our choices (Peterson, 1976, p. 27).

What is the criticism and doubt about? What is needs assessment? Why should it be done? What good will it do? The remainder of this paper attempts preliminary answers to these questions.

II. FEDERAL REQUIREMENTS FOR NEEDS ASSESSMENT

A. Laws and regulations: Since the mid-sixties the amount of federal legislation which includes references to or requirements for "needs assessment" has grown. An assessment, or evidence that one was conducted, is often required as part of a planning process, a component of a plan, or a precondition for grant support. Relatively prominent programs which require a needs assessment include Vocational Education, Social Services (Title XX of the Social Security Act), Health Planning and Resources Development, Community Mental Health Centers, and Aging programs.

Provoked by the spread of what appeared to be a vague, ambiguous and potentially expensive set of requirements, the Office of the Assistant Secretary for Planning and Evaluation conducted a broad but partial examination of the laws and regulations of HEW programs which contain a need assessment reference or requirement (Zangwill, 1977). The report of that examination includes these conclusions:

- o NA is required in 28 of the largest HEW grant-in-aid programs. Several programs fund projects whose main purpose is to conduct NA.
- o In about half the cases, the law clearly requires NA; in the other cases the regulation, by HEW discretion only, mandates the requirement.
- o The results of the NA are almost always part of the material submitted to Federal officials as a precondition for obtaining a grant, usually in the State plan (for formula grant programs) or application (for project grant programs). Thus, NA is viewed by the writers of legislation and regulations as an integral part of the planning process, certainly of sufficient importance to be reviewed at the Federal level prior to awarding program funds.
- o The responsibility for conducting NA falls on the direct recipient of Federal funds: in formula programs the State usually conducts NA; in project programs the applicant, often either a local or State government agency, does the assessment.
- o Despite the presumptive importance of NA, the statutes and regulations never define "need" or "needs assessment" and in only two cases specify a frequency for assessing needs. Furthermore, most of the programs state no technique at all for conducting an NA while the remaining

five or ten are unclear on this matter or give only partial guidance in collecting the data. Moreover, no programs supply clear directions on how to use NA information once it is collected. (However, some of these programs do have informal guidelines which suggest some techniques.)

- o NA is most often intended as a means of resource allocation, that is, as a supposed means of directing services to those persons or areas having the greatest unmet "need" or of providing those particular services for which "need" is greatest. Another type of resources allocation requirement occurs in education programs requiring equitable participation by children attending private schools. In these situations, NA is often used to determine that these children receive services comparable (again, according to a standard of "needs") to those received by their public school counterparts.
- o No clear differences can be ascertained between programs requiring NA and those without such a requirement....
- o Thus, while NA requirements play a major role in the Federal grant-in-aid mechanism, the requirements are very poorly defined. A grantee could easily follow the formal requirements without using the results to design or improve its own program. If this situation is common HEW could eliminate regulation-required NA altogether in the many programs without clear requirements in their legislation. On the other hand, if the Department believes NA is useful, it could provide clear directions and/or technical assistance to enable grantees to make it a meaningful part of their program planning. Following either course would improve the present situation, in which it is clear that the Department, in its official instructions to recipients of its funds, provides no clear conception of the what, why and how of needs assessment (Zangwill, pp. 4-6).

A major and detailed table contained in the HEW study describes the scope of assessment requirements:

- o Of 36 program authorities, 16 clearly require a need assessment, 9 do not and the rest are unclear.
- o Though a requirement may be absent in a given law, 23 sets of regulations clearly require a need assessment.
- o 16 programs require a need assessment in a plan, 16 in an application for grant support.
- o 11 programs require that the state conduct the assessment, 16 a locality, and 9 either a state or locality or both.
- o No method or approach appears in 23 of the programs, while 6 suggest a "partial" approach.
- o Not a single program defines need assessment.

B. Why Does the Federal Government Require Needs Assessment? The answers to this question are probably as mixed and variable as the motives and interests of the individuals and groups who initiated, participated in or promoted the requirements in the first place. Though we cannot trace the 10-12 year federal history of needs assessment requirements, discussions with a variety of federal officials yield a mosaic of opinions and interpretations which can be characterized this way:

1. Assessing need is a natural first step in planning. If you do not know "what the need is", so the argument goes, how can you figure out what to do? According to this view the rationale for need assessment is apparently self-evident. The intended function appears to be basically analytical.

2. Needs assessment will presumably contribute significantly to a broad range of other useful activities including planning, priority setting, evaluation, resource allocation, decision making, and policy formation. Like the first rationale, this one poses needs assessment as a rational, analytical tool.

3. The focus on "need" is basically a response to increasing pressure over the past ten years for cost reduction, accountability and demands for justification (frequently of an economic and quantitative variety) of many existing and new public programs. According to this view, the increasing demands for economic justification provoked program advocates and officials to respond by sponsoring or conducting studies of their own. Needs assessments are used to "justify" the existence and proposed growth of programs by underscoring that "need" does in fact exist and that it is frequently far greater than the coverage of existing services. This rationale suggests that assessments are inspired for advocacy purposes. It also implies that they are sometimes an attempt to "fight fire with fire," studies with studies, "cost" data with "need" data.

4. Needs assessment is basically a reflection of the desire of social scientists (other than economists who do not use the term "need") to use their tools to participate in social program planning. Rightly or not the field of psychology is usually identified as the likely professional source of the concept "need." Abraham Maslow's humanistic psychology is based on a theoretical notion of a "hierarchy of human needs" and is frequently referenced when this rationale is offered. In addition, the needs assessment literature frequently urges the use of formal surveys as the preferred method. Survey researchers sometimes have a background in psychology or opinion research. In this view, support for needs assessment is support for some academic disciplines and their techniques.

5. Needs assessment is another reflection of the common but misguided call for "more data for decisions." According to this interpretation, technocrats with a bent for numbers are responsible for the promotion of needs assessment. "More data" is a commonplace knee jerk response to perplexing problems of public policy which are poorly understood. Data is assumed to clarify understanding.

6. Needs assessment is an additional tool of "participatory democracy." It is a way to "by-pass" bureaucrats by "going directly to the people" to ask them what they need and want. According to this interpretation its primary purpose is not analytical but political. It is purportedly a way to gather information "directly" from citizens and provide it "directly" to decision makers.

7. In a final alternative rendering of a rationale for the growth of needs assessment the trend is characterized as a new fad, even a new

ideology. Several participants in a recent conference alluded to the needs assessment "movement."

There are no means to weigh the alternative proposed rationales for the growth of federal need assessment requirements. The explanations have, however, all been tendered by thoughtful individuals some of whom were involved in the actual formulation of need assessment requirements. Most, if not all of these alternative rationales also appear in the proceedings of a recent conference on "Need Assessment in Health and Human Services" (Bell, et al, 1976). Like most other trends which draw wide attention and varied adherents and spokesmen, this one is probably actuated by a broad range of motives and intents.

III. VIEWS AND CLAIMS

A. Alternative views of Needs Assessment: The literature contains many varied views of needs assessment. It appears that needs assessment can be almost anything: a change-oriented process, a method for enumeration and description, an analytical procedure, a decision-making process, a process for the "resolution of many viewpoints," etc. If there exists an underlying conception of "need" it is rarely explicit and never specific. The literature speaks for itself:

1. Bowers and Associates (undated): "All community education programs use, or have used at one time, a needs assessment to determine the content of their program." It is a process for "identifying needs, setting objectives, setting priorities, and relating them to the community education program on a continuing basis."

2. Center for Social Research and Development (1974): "Needs assessment is a change oriented process, whereas resource allocation is a political process. Social planning and resource allocation should be responsive to problems and needs of the population....these needs should be ascertained through an objective process....Needs assessment deals with the attempt to define what is required to insure that a population is able to function at an acceptable level in various domains of living."

3. Florida Department of Health and Rehabilitative Services (1975): "Needs assessment can most simply be defined as a method which enumerates and describes the needs of people living in a community."

4. Human Services Institute (1975): Needs assessment is the process which consists of "a resolution of many viewpoints as to which are the state's high priority or urgent needs." "Needs assessment is closely related to goal and objective setting in that needs data provide a measure of demand for services against which the service goals and objectives should be set."

5. Hargreaves, et al (1974): "Basically, mental health assessment is an attempt to describe and to understand the mental health needs in a geographic or social area. This involves two distinct steps: (a) the application of a measuring tool or assortment of tools to a defined social area; and, following this attempt at measurement, (b) the application of judgment to assess the significance of the information gathered in order to determine priorities for program planning and service development (Blum, in press)."

6. Minnesota State Planning Agency (1977): Of two proposed definitions the Planning Agency discusses this one: "Needs assessment is the process of identifying the incidence, prevalence and nature of certain conditions within a community or target group. The ultimate purpose is to assess the adequacy of existing services and resources in addressing those conditions. The extent to which those conditions are not adequately addressed denotes a need for new or different services or resources."

B. Claims for Needs Assessment are Ambitious: Like views of the purposes of needs assessment, the claims for it are broad and ambitious. Here are four illustrations:

- o A manual prepared by the Booz, Allen consulting firm (1973) for use in the social service area lists 11 purported purposes or uses for needs assessment. The list includes such highly diversified and ambitious claims as: "A tool for community planning.... a basis for establishing priorities and setting realistic objectives....use in the organization and development of staff....an operational tool for use by service workers in information and referral....a staff education tool....a justification and substantiation of legislative program budget requests....an input to a client information system....etc."
- o Warheit, et al (undated), authors of a federally funded and widely referenced manual, claim that "need assessment programs are intended to provide data on the basis of which agencies will be able: (1) to identify the extent and kinds of needs there are in a community; (2) to evaluate systematically their existing programs; and (3) to plan new ones in the light of the community's needs and mental health service patterns."

The authors list five potential uses of needs assessment: "1. Provides data regarding the needs and services patterns of specific populations and sociodemographic groups in the community. (2) Provides data for comparative analysis of the goals, activities and client patterns of human service agencies with the needs and service patterns of those in the community. (3). Provides data for the development and modification of agency based programs designed to meet specific needs within various groups in the community. (4). Provides data for the generation of evaluation-outcome and impact studies. (5). Provides management information data for administrative purposes." (Undated, circa 1975)

- o Siegel (1974): "Assessment is a part of mental health planning. It provides one important informational input to a much broader planning process which leads to (a) a mental health plan; (b) the selection and operationalization of specific program activities; and (c) the evaluation of these program activities. A thorough assessment is essential to place mental health problems and service needs in some perspective. It helps assure that there will be additional inputs to staff formulations of service needs and/or to the most vocal or powerful community group's opinion in service development. Assessment is useful in established programs as a part of a periodic examination of the relevance of existing service programs to changing mental health needs and priorities in given communities" (pp. 7-8).
- o Schneff (1976): "Finally, I cannot resist as a planner interested in developing appropriate methodologies, reminding myself, and perhaps this audience, that needs assessment must be seen not only as a method but an end in itself." (Underlining added.)

If one were to believe the many and ambitious claims, needs assessment is good for planning, evaluation, priority setting, resource allocation.... and for many other purposes.

C. What Does Needs Assessment Mean? Since there are so many federal requirements and so many claims for needs assessment, one might conclude that this straightforward question has a simple answer. It does not. Federal laws and regulations are of little help. Because the meaning of needs assessment is so vague and variable, one recent student referred to it as a "semantic jungle" and recommended that the phrase "be struck" from the human services vocabulary (Varenais, 1977). In fact, no small part of the confusion and vagueness about "needs assessment" springs from the very words themselves.

Of the two words, 'assessment' is the least troublesome. Leaving aside the tax related meanings of the term, the dictionary indicates that "assess" means "to evaluate; appraise - See synonyms at estimate." Assessment, then, means the act of evaluating, appraising or estimating. However common it may be, the concept "needs" is more troublesome. A large share of the literature does not even bother to discuss or attempt to define the word. The meaning is assumed to be clear and obvious. After all, we all have needs.

Unfortunately, "need" is a word with variable meaning because it does not have a specific referent. It does not refer to something in particular but rather to something which does not exist. The dictionary makes this clear:

Need. 1. A condition or situation in which something necessary or desirable is required or wanted; corps in need of water. 2. A wish for something that is lacking or desired; a need for affection. 3. Necessity; obligation: There is a need for you to go. 4. Something required or wanted; a requisite; Our needs are modest. 5. A condition of poverty or misfortune: He is in dire need....Synonyms: need, necessity, exigency, requisite. (New College Edition, The American Heritage Dictionary of the English Language, 1976; p. 878).

One of the few definitions found in the literature is consistent with the open-ended character of the dictionary meaning of need:

A human need is any identifiable condition which limits a person as an individual or a family member in meeting his or her full potential....which is usually expressed in social, economic or health-related terms and are frequently qualitative statements. (human Services Institute, 1975)

In short, "need" is basically an empty term, one without conceptual boundaries.
if the term is to have operational meaning it must be defined in a specific context, usually by the use of absolute or relative (comparative) criteria or standards.

If we combine the basic meanings of the two words "need" and "assessment" we have this rough but open ended definition of needs assessment:

Act of estimating, evaluating or appraising a condition in which something necessary or desirable is required or wanted.

A needs assessment "guide" prepared by the Minnesota State Planning Agency (1977) makes the same basic point:

...needs assessment involves more than the collection and analysis of data - it is a process of interpreting social conditions in light of society's beliefs, values, and sense of public responsibility. The benchmarks that distinguish between need and lack of need are as dependent upon human nature as they are upon the quantitative indicators generated by sophisticated research techniques. Need is a relative concept. There are no objective standards for determining whether a need exists or does not exist. (p. 10)

In this relative meaning of "need" we have one of the major keys to the confusion about needs assessment. Needs do not show themselves. Someone must establish what constitutes a need. The needs assessment literature implies that in practice needs will not only show themselves but will also show their relative importance (priority). The relative character of "need" is reflected in the fluctuating and debated nature of that widely cited global measure of need, the so-called "poverty line". A recent HEW report noted that:

Measures of poverty used for national policy purposes require fundamental social, political and ethical judgments.....The official measure of poverty has a number of limitations, some of which stem from the fact that there are no commonly accepted standards of need, other than for food. (U.S. DHEW, April 1977, p. xxi², underlining added.)

When we speak of need(s) in a human resources context we often think of basic human needs, subsistence needs, survival needs. The word rapidly becomes suffused with emotion, feeling, urgency and passion. It also be-

comes loaded with cultural, normative, philosophical and political overtones. Because it is both emotion-laden and value-loaded, "need" is subject to many shades of meaning, intent and interpretation. The emotive and mercurial attributes of the word "need" follow the term into activities called "needs assessment."

IV. APPROACHES TO NEEDS ASSESSMENT

A. There is No Single or preferred Approach: Those who are looking for a single or preferred approach to needs assessment will be disappointed. A sampling of the literature indicates that proposed approaches and methods are many, heterogeneous and without practical or conceptual links or unifying logic.

In a preface to their attempts to invent needs assessment methods for the Community Services Administration of HEW, the firm of Booz, Allen noted that one reason for their work was that "the state of the art of needs and resources assessment was not generally well developed." In a recitation of the advantages and disadvantages of a range of needs assessment approaches, Hargreaves, et al (1974) acknowledges that there are no preferred methods: "Although we will present each technique separately, the most fruitful assessment efforts represent combinations of various strategies. The state of the art is such that there is no single, universally agreed upon approach to mental health needs assessment." (Any other program could be substituted for "mental health".) In the preface to their sober but obviously frustrating attempt to survey the "state of the art" of needs assessment, the Center for Social Research and Development in Denver (1974) is apologetic to the reader: "Unfortunately the confusion and ambiguity found in the field of needs assessment research is reflected in this report."

The table on the next page lists the several methods which have been suggested for needs assessment. Other methods or approaches could probably be added.

ALTERNATIVE APPROACHES TO NEEDS
ASSESSMENT IDENTIFIED IN THE LITERATURE

- I. Gathering Opinions and Judgments:
 - A. Key Informants (Knowledgeable individuals and experts)
 - B. Community Forums (Discussion meetings of any set of community members)
 - C. Public Hearings (with any set of lay or expert witnesses)
 - D. Community and Political Leaders
 - E. Group Processes (e.g., a semi-structured process such as the nominal group method)
- II. Collecting Service Statistics:
 - A. Utilization data and rates
 - B. Caseload and workload data
 - C. Grievance and complaint data
 - D. wait-list data
 - E. Service data in existing Management Information Systems
- III. Epidemiological Studies (Systematic studies of the origins of problems, especially health problems)
- IV. Studies of the Incidence and Prevalence of Problems (e.g., of disease or handicapping conditions or defects)
- V. Social Indicators - Use of quantitative measures of variables, e.g., unemployment, crime, schooling, income, prices, housing, etc.
NOTE: "Indicators" can be derived from descriptive sociodemographic data like census data.
- IV. Surveys:
 - A. Formal general population sample survey (these may be conducted through direct, telephone or mail questionnaire)
 - B. Formal subpopulation sample survey (e.g., of a locality, an age group or a service population)
 - C. Selective special interviews with service clients, providers, practitioners, agency officials, etc.
- VII. Secondary Analysis of Existing Studies or Sets of Organized Data
- VIII. Combinations of the Above

It is not the purpose of this paper to describe or critically evaluate the individual approaches listed in the table. That has been done elsewhere (e.g., see Francis (1973) and Schneider (1976) on the limitations of social indicators and the Conference Proceedings (Bell, 1976) mentioned earlier for a critique of a number of the others). There are, however, several observations worth making about the set of approaches and methods.

First, none of them is new. They are all borrowed for use in needs assessment. Most are traditional approaches which have been employed by public agencies for years: experts (key informants), community meetings (forums), public hearings, community and political leaders, workload, grievance, complaint and utilization data. One, social indicators, is "new" within the past 10 years, though indicators like unemployment rates, consumer prices and inflation rates have been used for decades. The so-called "nominal group process" method for getting convergent results out of group discussions is of recent vintage, but deriving group choice or preference through discussion and voting has been going on for thousands of years.

Second, with perhaps the exception of epidemiological research studies, all the approaches are ways to collect data or opinions. None has a well developed set of analytics, models or theoretical procedures associated with it beyond standard statistical procedures which exist for manipulating data. The approaches do not include guides for data interpretation and analysis in the context of resource allocation or priority-setting.

Third, all the methods except epidemiological research and the use of experts are sources of descriptions of needs and not explanations of why and how they arise or what could be done about them.

Fourth, there do not exist systematic procedures for relating data from one approach or method to the next. There is no method for synthesis.

Fifth, beyond the Roman Numeral classification into which we have arbitrarily cast them, there is nothing unifying or common about the approaches apart from the fact that they represent alternative ways to gather data, opinions and judgments.

Sixth, it is a commonplace observation in the literature that single approaches to needs assessment will not do, because they are all limited. Most advocates claim that multiple approaches must be employed, presumably in the belief that the weaknesses of one method will be cancelled out by the strengths of the next.

Seventh, in terms of their logical distance from those "in need" the set of approaches include at least three types:

1. Approaches for direct queries of individuals which include surveys and interviews of existing and potential clients.

2. Approaches for direct queries which include the use of experts, informants and knowledgeable individuals who are reporting on the perceived needs of others.

3. Indirect approaches from which inferences must be made about needs which include the use of sociodemographic data sources and derived social indicators.

All the methods require inferences from descriptive statements of need to the "causes" or sources of those needs. Dealing with needs appears to be like dealing with symptoms of problems rather than with their underlying "causes." Finally, none of these proposed approaches constitutes a way of "assessment" of needs. At best, the approaches lead to descriptive statements of needs but none of them provides a way to "assess" them. How does

the assessment (valuing and weighing) of needs occur? Are we thrown back to the political process which needs assessment is intended to improve? Or to experts? Or to advocates? It appears that the proposed methods are not needs assessment methods at all, but needs description methods at best. One observer has argued that the proponents of needs assessment got off on the wrong foot when they tried to give the activity the appearance of an "analytic technique" when it is not.

B. The Emphasis of Needs Assessment: Every major method and approach to "improving" organizational performance focuses on, emphasizes or accents some aspects of an organization's behavior, structure, functions or processes (see, for example, Kimmel et al 1974). Management By Objectives, for example, focuses on internal short-range management goal and objective setting. It is intended to induce joint objective setting between superiors and subordinates and thereby increase communication between them. PERT is intended to improve an organization's capacity for defining and relating tasks, for work scheduling and for determining optimal or critical paths through complex interrelated activities by estimating and comparing their cost and time requirements. Organizational Development (OD) is intended to improve organizational performance by improving employee selfconsciousness and interpersonal relations.

When it is not silent on its purposes the literature states that needs assessment is intended to improve an agency's capacity for planning, priority setting and resource allocation decision making. Another, but broader, approach directed to the same types of improvements is the Planning-Programming-Budgeting (PPB) approach introduced to the Federal government in the mid-sixties. Because they are billed as similar in intended purposes, a brief comparison of the two approaches will help define the dominant features and limits of

needs assessment. The table on the next pages selectively compares the two approaches and suggests these contrasts:

- o The major conceptual or philosophical sources of PPB are the fields of economics (primarily micro-economics), decision-theory and theories of public or collective choice. There are no clear conceptual sources for needs assessment. The summary of the national conference proceedings identified earlier (Bell, 1976) makes the point plainly:

Needs assessment has risen from opportunistic and empirical sources. It is not 'owned' by any one discipline. As a result, it has no unique theoretical frameworks. Also, perhaps as a result of its 'odd' birth, it is not well grounded in either a theoretical literature or in research findings. There is missing the scholarly first step of finding out what went before (p. 316).

- o The major concepts of PPB include a heavy emphasis on (a) cost and budgetary constraints and on the relationship between the expenditure of resources (input) to the production of services (output); (b) the development and evaluation of alternative program and policy actions in terms of their cost, efficiency and effectiveness; and (c) the importance of time reflected both in a multi-year time horizon for planning and in a concern for estimating the effects of future uncertainty on the cost and feasibility of alternative courses of action.

By contrast, the concepts of needs assessment probably came from psychology and social casework. There is little if any attention paid by the needs assessment literature to the cost and budgetary constraints on choice. Emphasis is on the consideration of a broad spectrum of unconstrained needs as they are articulated by individuals, experts and leaders or inferred from data. The focus is clearly on increasing the amount of detail (descriptive) about the conditions, defects and "unsatisfied needs" of individuals and groups. Whereas PPB carried with it techniques for gauging price, cost and benefits, needs assessment is preoccupied

NEEDS ASSESSMENT AND PPB COMPARED

NEEDS ASSESSMENT

PLANNING-PROGRAMMING-BUDGETING

I. MAJOR CONCEPTUAL SOURCE

Eclectic and unclear (may be psychology, survey research)

Micro-economics
Decision Theory
Public (collective) Choice Theory

II. MAJOR ANALYTICAL TOOLS

None

Program Budget
Program and Financial Plan
Analytic Studies:

Cost-benefit
Cost effectiveness
Systems, program and policy analysis
Cost studies

III. MAJOR DATA SOURCES

Canvassing opinions and judgements (experts and community groups)
Field Surveys
Social Indicators
Demographic Indicators
Epidemiological Studies
Incidence and Prevalence Studies
Secondary Data Analysis

Multiple, varied and problem-specific

IV. MAJOR CONCEPTS

Needs:

Individual
Community
Met
Unmet

Resource Constraints:
Resource Scarcity
Budget Costs
Economic Costs
Social Costs

Assessment (Not operationally defined):

Estimating
Valuing
Judging

Program and Policy Characteristics:
Goals and Objectives
Costs
Alternatives
Outputs

29

Identifying Gaps:

Described needs juxtaposed to existing resources (services)

Input-Output Relationships

Supply, Demand and Price

30

NEEDS ASSESSMENT

PLANNING-PROGRAMMING-BUDGETING

IV. MAJOR CONCEPTS
(Continued)

Efficiency and Effectiveness

Marginal Costs and Benefits
Multi-year Time Horizon
Uncertainty

V. DOMINANT FOCAL POINTS

Population Group Characteristics:
Community
Population at Risk
Target Population
Service Population

Goals and Objectives
Target Groups
Program and Policy Alternatives
Costs
Problems

VI. INTENDED USES

Planning
Priority-setting
Resource Allocation
Evaluation
Variable Others

Planning
Priority-setting
Resource Allocation
Program Design
Evaluation

21

VII. ORGANIZATIONAL LOCATION

Indeterminate
Rarely Discussed
Often Performed Outside

Staff office serving decision makers

with identifying "gaps" between estimates of need and the capacity of existing services to meet those needs. Assessing need is necessarily forced into processes and activities of valuing and judging the comparative claims of different sets of needs. By contrast, the analytical studies of PPB were to accept the goals and objectives of agencies (though critically examine them) and to assist in accomplishing them through programs with least cost or maximum output. While there is no question that PPB analysis cannot be free of value judgments, needs assessment thrusts the assessor and user into the very heart of value judgments without the benefit of the disciplining effects of costs, resource constraints, program objectives or the limits of available know-how and technology. The needs assessment literature misses or dismisses the key and commanding fact that "need" satisfaction is not free.

Major Tools: The major tools of PPB are basically of three types. First, a budget cast in a program classification framework. Second, the development and use of a multi-year program and financial plan developed under funding constraints or ceilings. Third, a set of analytical techniques and approaches for analyzing data which include cost-benefit, cost-effectiveness and systems studies. Finally, it is significant that emphasis on data collection methods and procedures are not a part of the PPB analytic toolkit.

By contrast, data collection procedures are the dominant types of method associated with needs assessment. Though some few have a minimum amount of methodological rigor (e.g., survey research), on the whole the techniques are not analytic. They are not designed to assist in directly structuring problems, tracing their causes or assessing their effects. They are primarily devoted to collecting opinions, expert judgment and data for subsequent use in whatever analysis or evaluative interpretation might be applied.

Dominant Focal Points: Needs assessment is characterized in a very major way by a look away from existing programs and away from an agency's goal and objectives outward toward the community, especially toward the conditions and "needs" of the service and risk populations. In this sense it is very "market oriented", very "target group" oriented. This dominant preoccupation of needs assessment keeps the literature and the practice of needs assessment distracted from the operations and requirements of real public choice processes and from the economic political and bureaucratic constraints under which all program planning, budgeting and policy-making occur. These blind spots of need assessment contribute to insulating the activity from "realities" of collective choice and from the large body of existing writing on systematic techniques of analysis. The problem is only partially knowing our "needs". It is also understanding problems which create needs and formulating effective ways to solve or reduce them.

Finally, the preferred organizational location of PPB analysis and planning has always been in a staff location serving decision makers directly. The needs assessment literature and practice is quiet or indeterminate on where the function of need assessment should be located. In fact, a large share of past needs assessments have been conducted by groups "outside" the formal framework of a public agency.

V. USE MADE OF THE RESULTS OF NEEDS ASSESSMENT

If needs assessment pays off as an aid to policy making (a prime claim of proponents) the payoff should be shown through the use made of assessment results. Yet despite the fact that thousands of "needs assessments" have been conducted, documentation of their use is scant. Here is the fragmentary and spotty evidence.

A. Review by the Center for Social Research and Development (1974):

Under contract to HEW, the Center attempted to review the "state of the art" of needs assessment. They conducted site visits to six projects identified by federal personnel as "exemplary," examined the need assessment components of project reports, and sent questionnaires to 102 sites "which were thought to have engaged in needs assessment." Beyond finding the field full of "confusion" the Center acknowledged these limitations of their review:

Thirty questionnaires were returned. After reviewing these questionnaires, CSRD/LRI feels that the results are biased, since sites which implemented needs assessment successfully seemed to be more likely to return questionnaires than sites which were unsuccessful in implementation.

That is, findings of the Center overstate the impact of needs assessment.

In addition, two of the six "exemplary" projects are unusual. One was an information project which was not yet operational by the time of the Center study. Its use could not be reviewed. The second was a study of low-income households in Detroit in 1964-65. Ten years old, the Center claims "it was selected for review because of the general impression that significant actions had resulted. These "significant actions" are summarized in two sentences:

...the data were used to get grants, to establish priorities and identify what services should get more or less money, to quantify need in the low-income Communities, and to identify individual impediments

to an adequate quality of life. The general consensus among those individuals contacted in Detroit was that the data not only provided the basis for justifying decisions already made but also led to other decisions.

Finally, of the 30 questionnaire responses, 13 were from projects of social indicators for the aged, six from model cities/community renewal programs, 9 from "service system studies" and two were unidentified. Within these limitations, here are prominent results of the review.

1. The major "goals" (purposes) of the need assessments were highly diversified and characterized in these twelve categories.

Goals of Needs Assessment Project	Number of Times Mentioned
Program planning data	9
Establish baseline data	9
Identify individual/community problems	8
Establish funding priorities	5
Data for improving service delivery system	4
Develop community awareness	3
Define operating agency goals	3
Identify available resources	2
Model testing	1
Integration of existing data sources	1
Impact evaluation	1
Staff training	1

Source: Center, p. 46

Many of these goals (or purposes) obviously stray from purported attempts to influence resource allocation decisions by improving understanding of service needs.

2. With respect to the specific program planning intent of needs assessment, the Center reports:

Data obtained through site visits and questionnaires returned indicate that a major dissatisfaction with needs assessment data stems from the lack of specificity of the data and their incongruence with program planning requirements...most respondents felt that needs assessment was most useful when it paralleled the information needs of program planning requirements (p.47).

3. About the use of needs assessment as a way to provide baseline data for evaluation purposes, the report found:

...few, if any, of the needs assessment projects were capable of providing adequate baseline data for evaluation purposes....These data can serve some useful purposes, but they cannot contribute very much to evaluation research (p.48).

4. On using needs assessment to identify problems:

They (respondents) did not expect that new problems would be discovered, although they felt that the magnitude of need might become more apparent. As one respondent stated: Many people were expecting an analysis that would dramatically illustrate the needs of the population. In fact, the results were predictable and unspectacular (p.48).

5. In a summary statement on these purposes, the report concludes:

From the viewpoint of the practitioners contacted in this exploratory study, most needs assessment does not provide information which is sufficiently specific for program planning purposes. It is usually not designed to provide meaningful evaluation data, and it does not uncover previously unknown community or individual problems. Nonetheless, as one respondent stated, it does serve an important function by lending credibility to and legitimizing the assumptions of planners.

'We, as planners, have a pretty good idea what the major needs are in (our area) but without documentation it is difficult to prove to the state and Federal government agencies that these needs exist' (p.49).

It is relevant to note at this point that if the primary impact of needs assessment is to lend credibility to or legitimize what is already known, it falls within the category of a tool of bureaucratic "proof" and/or advocacy, i.e., a political tool.

6. Reflecting on the finding that 16 of the 30 projects used a survey as a primary source of data, the report remarks that "The choice of these methodologies probably reflects the relatively common belief that needs assessment is synonymous with survey research" (p.50).

7. Nearly all the projects used several types of data but the combination of the various data sources into a meaningful planning framework has been minimal" (p. 50). The report adds:

However, these data constitute only the ingredients not the essence or final product of information necessary for planning and resource allocation decisions. It is in the interpretation of the data that needs assessment acquires its value, and this interpretation requires the combined efforts of the technicians, substantive program specialists, the potential users of the data, and various others with interpretive expertise (p. 54, underlining added).

8. Nine of the 30 need projects reported that their major objective had not been attained. Four reported poor study or sample design as a problem, two insufficient resources, one that the study was too late, one that it was still in process and one that the research objectives were too ambitious. The Center found that "the overall purposes of the needs assessment" were "perceived" to have been attained by two-thirds of the respondents, but nineteen did not believe that full use had been made of their findings. (Recall that the report cautions that the pattern of responses is biased in the direction of successful projects.)

An additional set of examples comes from the mental health field.

B. Five Manpower Needs Assessments: During 1973-77 the National Institute of Mental Health sponsored five contract projects to stimulate the development of manpower planning capacity at the state level. Each of the projects contained a needs assessment component. The impact of these assessments was evaluated by the author as part of a larger study of the overall projects

(Kimmel 1977). The projects suggest the wide range of activity which is included under the label "needs assessment" and the variability in their use and impact. The exact locales are not disclosed.

State 1: The bulk of this \$100,000 project was devoted almost exclusively to the conduct of a formalized assessment of the "perceived" estimated needs (not demand) for health manpower over the three years 1974-77. The project was conceived as a pilot for possible export to other states. It had a high level of initial interest from both state and federal officials. The assessment was carried out by a non-profit university affiliated research organization and consisted of:

- o Mail questionnaires to 247 human services facilities of which 149 were usable for the survey.
- o 3,300 questionnaires to individuals believed to be mental health workers. 1,650 were included in the study.
- o 1,229 questionnaires to physicians of which 949 were included in the assessment.
- o 1,500 questionnaires to religious organizations. 900 clergy responded and 779 were included in the study.

Respondents were asked a variety of questions designed to elicit information about future expansion of mental health services and their estimates of manpower staffing requirements. The questionnaires were well developed but the estimates were open-ended and unconstrained by any resource or funding assumptions. The assessment was directed to service providers rather than to service recipients. The final report of the assessment includes 125 pages of tabular material based on questionnaire returns and 10 pages of descriptive narrative summary.

The use and impact of this assessment was mixed and very indirect. Though it was prepared for use by the state mental health agency, it received no official deliberation or action there. The reasons are several:

- o The original purposes and uses of the project were never clear; the project seemed dominated by a concern with methods and logistics rather than purpose and use.
- o There was turnover in key state leadership, including the Governor and the Commissioner of Mental Health and Corrections. The priority position of mental health programs (and others as well) fell under new policies of cost cutting and conservatism.
- o Potential active users of the manpower need assessment results began to leave state employment, including both state project directors and the Director of Community Services.
- o The Commissioner of Mental Health (now retired) considered the project a "waste." He reported that the project revealed very little not already known or which could not be found out more cheaply. In his view, the funds spent on needs assessment should have been spent directly on manpower training instead.
- o Need data were the object of sharp criticism as "soft", "blue sky" (unconstrained by probable budgetary and funding levels), and mere "wish lists." Three years later the technical director claimed that he would not survey "need" again but rather would focus on projections of "supply."
- o The data were not analyzed in depth. One federal official recommended that the state hire someone to review and analyze the results. One of the two state project monitors spent time trying to "tease" some meaning out of the data. He concluded (a) "Need" is vague and used promiscuously. (b) To try to relate supply to need is naive because there does not exist a model of the relationship between "need" and appropriate services. (c) "A litany of needs is useless for policy purposes."

Despite its disputed value as a reliable portrait of future manpower demand, results of the assessment were used to support a successful grant application to the Federal government.

State 2: This \$64,000 project was devoted to needs assessment in one substate health services area. Design of the project was marked by debate over which methods of assessment were most appropriate and likely to be useful. A chief state health officer and a national expert in needs assessment pressed for the use of formal survey methods and social indicators. This was consistent with the direction of another project already underway in the state. By contrast, professional advisors to the project urged that the

assessment be more informal, open-ended and addressed to "problems" faced by clients and members of the service area. Interviewees reported that "a lot of politics" occurred over the choice of methods. In the end, the cross-pressure was resolved in favor of a less formalized problem identification orientation.

A mixed approach was adopted. It consisted of the analysis of and inferences from five different types of data: (a) secondary analysis of existing data including census data, Federal, state and local service statistics, and several prior studies conducted by a university; (b) family interviews conducted by university sociology students; (c) a canvas of human services agencies concerning views of their own services and their perceptions of the needs of the communities they serve; (d) a series of community panel discussions which included groups of the aged, outpatients, workers, adults waiting in line for food stamps, and both high school and college students; and (e) data on hospitalized and outpatients collected from the state's patient data system, the Veteran's Administration and private hospitals.

The assessment did not result in a long compendium of "needs." Rather it pointed to fundamental problems in the local service delivery system which kept citizens from satisfactory care: extremely long waiting lines, token sessions with professionals, excessive reliance on medication, high transportation costs from outlying areas, no patient follow-up, etc. These were focused problems about which something could be done. The results were used in the design of expanded local services, the preparation of a federal continuing education grant, the revision of university-based clinical and community training programs and the development of a new self-financed para-professional training program in the local community college. Focused problem statements are better points of departure for action than general and lengthy

statements of undifferentiated need. Compared to other needs assessment approaches, the problem identification and solution approach appeared to have high payoff.

The project report has these things to say about the concept "need":

In our initial planning for this project we had difficulty deciding how we were going to define "need". In asking a person what he "needs" in the area of mental health, it is often difficult to distinguish "need" from "wants", "demands", "expectations", etc. Often need is what someone else infers such as "unconscious needs" which were the concern of one psychiatrist in our preliminary discussions. Sometimes a professional infers "needs" from previous experience and from theoretical frameworks. For example a demographic profile system for assessing mental health needs indicated, among its groups which has a high need for services, those living in overcrowded housing conditions or those without a male family head. Social scientists familiar with rural State 2 families criticized these indicators, found to be valid in some areas of the U. S., as not being valid in cultural settings where large extended families typically provide emotional support.

We decided, as a working definition of need, to use the concept of emotional or personal problems which people reported as having themselves or having to deal with in others. We would explore the variety of ways they defined such problems, the variety of ways they sought help for such problems, and their experiences with getting that help.

State 3: When a formal need assessment survey was proposed to the Working Task Force established to carry out this project, it was summarily rejected. The reasons were two. First, state and local officials claimed that a large number of prior needs assessments had already been conducted and had consumed a lot of time. Second, they saw no evidence that anything had come out of these prior assessments. As one well-positioned state official put it, "Needs assessments are going on all over the place. Every time someone new comes into the state they want to do a needs assessment. We're surveyed out. The last thing we need is another need survey." Another

official warned: "We are asking people what they need and creating expectations that we will do something and we can't."

The approach taken was a loose form of the "nominal group process" applied to discussions of the task force. A listing of manpower and training needs were generated by three work groups organized around program areas. The priority manpower "need" turned out to be administrative management training for state and county level clinicians who had just been thrust into management positions as a by-product of a statewide reorganization of services.

State 4: The assessment of manpower need in this project, like the one in State 2, relied on the secondary analysis of existing data. A formalized survey was rejected as too costly and too likely to be of marginal value. Two years after its completion the former director (a state university professor) remarked: "We weren't going to do a formal survey of need. For God's sake, what is 'need?' Whose needs? What are we talking about? You can't get hard data on needs. This push (needs assessment) is preposterous."

The tack actually taken by the state was modest and mixed in source. The bases of the assessment included:

- o Consensus of "need" based on a survey of mental health leaders;
- o A comparison of state graduate projections with vacancies, replacements and needs;
- o Use of a simple formula developed by NIMH which relates staff to the incidence of illness in a specific population;
- o Staff requirements based on criteria established by an Alabama court decision; and
- o Staff requirements projected on the basis of a standard staffing pattern for a Community Mental Health Center supplemented by projections based on average national statistics for outpatient clinics in the U. S.

Unlike the formal assessment in State 1, this one drew little criticism because it was openly acknowledged to be what it was: partial, rough,

suggestive, tentative and "soft." State leadership was aware that "need" is vague, variable in meaning and not susceptible to rigorous measurement whatever tool is employed.

State 5: Still in the process of being completed, this need assessment project is, like the one in State 1, highly structured. Technical procedures were designed and carried out by a non-profit research organization in another state. Characterized as a "clinical assessment of client needs," it is focused on the existing clients in a state mental hospital and in selected community programs. At the time of this paper only the state hospital component had been completed. It consisted of the following approach:

- o Clients were identified through a stratified sampling of beds.
- o An instrument based on multiple scales (many related to degrees of self-care and independent functioning) was administered to the resulting set of clients.
- o Multivariate statistical analysis supplemented by case-by-case judgment was used to group or cluster patients with similar kinds of characteristics.
- o A small (3-4 member) "clinical assessment team" examined the basic characteristics of the groups and prescribed "appropriate" services for them. Much of this review consisted of attempts to determine which groups of patients could be released from the hospital providing they continued to receive a minimum amount of therapeutic care in another service environment.

The assessment faced these kinds of difficulties and constraints. First, 22% of the clients were judged "non-interviewable" due to the severity of their illness or incapacity. Another 14% refused to respond to the voluntary questionnaire. An additional 5% were considered so "unique" or "outlying" that they did not fit into the designated patient groupings. In short, 41% of the clients were beyond the reach of the assessment framework. Second, due to limitations in methodology (primarily the lack of reliable measures and scales)

children under 14 were excluded. Third, the state project director questioned the validity of the service recommendations made by the small clinical team. Would another (larger and more sophisticated team) make the same recommendations? Fourth, the research group had specialized in geriatric studies and had never assessed a psychiatric population before. Disputes occurred between the off-site research team and the state project director over the appropriateness of scales developed for one specialized patient population and transferred wholesale to a substantially different population. These disputes were part of a generalized tension between the project director and the research staff who had been selected before the project director arrived. Accustomed to a high degree of freedom, the research group viewed the project as "an opportunity for tool development." The project director viewed it in terms of its potential payoff to policy and program concerns of the state agency. These divergencies in incentives and expectations persisted. Finally, field interviews disclosed that the research team had been selected by the agency head for political reasons. He wanted "credibility and legitimacy" in the form of research findings to justify a set of actions he had already decided to take. Prior policy decisions led to the assessment and to the selection of the assessors and not vice-versa.

Lessons of the Five Projects: Major conclusions which can be drawn from the set of five projects appear to be these:

- o The label "needs assessment" may be applied to any approach, procedure or method, ranging from "thinking sessions" to technically complicated surveys.
- o Needs assessments which are conducted without assumptions about future resource, budgetary or funding constraints are likely to be judged "blue sky" and unrealistic.
- o Needs assessment results which fit the political predispositions of policy makers are more likely to be used than those which do not.

- o Assessments which use multiple and existing sources of data and information are likely to be low in cost and still yield information precise enough for most agency purposes.
- o Assessments conducted by outside groups (e.g., research groups or universities) are more likely to be oriented toward technically elegant issues of interest to intellectuals than to practical issues of more interest to program and policy officials.
- o There are political and ideological issues at stake in the selection of needs assessment approaches.

C. HEW Region X's National Management Planning Study of 1976: Another example of findings on the apparent impact of needs assessment comes from a broad-based appraisal of the utility of the "overlay of planning programs" imposed on state and local governments by Federal agencies and Congress. HEW Region X staff examined planning requirements (including needs assessment) and practices associated with all 46 HEW formula grant programs for state and local governments and for eight of the largest project grant programs. They also interviewed a broad set of Federal, state and local officials. The study concludes with these telling general findings:

This study finds that HEW requirements for management planning are inconsistent and appear to yield little evidence of such planning in state 'plans' and applications. It finds that the state 'plans' are primarily compliance documents. Most significantly, it finds that the compliance requirements found in the statutes and regulations administered by HEW not only fail to generate management planning but in fact work against State and local management planning (HEW Region X, p. 81).

In its closing paragraphs the study reflects on commonplace federal planning requirements in a mood of fundamental doubt and questioning by quoting a local official:

How is needs assessment done in an adequate, meaningful and economic fashion? More basically, how does one define need, who defines it, how is it documented? What comprises resource assessment and how is it carried out in a sufficient and economical manner? What necessary relation does identification of needs bear to a

resource assessment? What real utility is there in an overlay of needs and resources for identifying "gaps" or "unmet needs"? What level of significance or role does an identification of need or inventory of resources play in setting of priorities and objectives? What are the other appropriate subjective political factors that share a place in developing priorities and how are these integrated with more objective or quantitative analyses?

D. Evidence of a National Conference: A final body of fragmented evidence on needs assessment comes from a four day conference on needs assessment in "health and human resources" held in Louisville, Kentucky in June 1976. Eighteen papers were presented to about 250 conference participants. The proceedings (Bell, 1976) tell much about the current state of needs assessment. First, most of the papers are critical of the alternative approaches to needs assessment. They point to limitations of, for example, epidemiology (Dunham), health status indicators (Turns) and social indicators (Bloom). The conclusion of nearly all the speakers was that single approaches to needs assessment are inadequate. They urge multiple approaches, presumably on the grounds that weaknesses of one approach will be offset by strengths of another. Second, despite the fact that the conference was dedicated to discussing the usefulness of needs assessment, the eighteen conference papers include only five examples of what were purportedly actual assessments. Four of the examples were provided by one speaker (Demone). Of the five examples, one was a description of the development over several years of a large sample survey which was not yet finished (Sundel). Another was a political case study, not of needs assessment, but of the failure of attempts to sell fluoridation to communities despite the scientific evidence which indicates that fluoride reduces dental cavities. A third example is a brief and vaguely described case of data collection on home health services for

the Visiting Nurses Association merely accompanied by the assertion that needs data was used in decisions about the allocation of nurses' time. The fourth example - estimating the number of mentally retarded - is one in which an actual count of retardates generated a number which was roughly 20% of the number which had been proclaimed by program advocates. The actual census indicated a retardate population of approximately 35,000 rather than an estimate of 165,000 based on the rule of thumb that 3% of the population had an IQ below 70 and therefore were retarded. Of the 35,000 only 25,000 were judged severely retarded. A follow-up was conducted to establish what had happened to retardates who had remained in regular schools. Of those who been "labeled" retarded and put in "special classes" during their school years, 85%

had been working steadily since they left special classes and they left between ages 16 and 21. Their general occupational and social adjustment was about the same as siblings and peers of comparable age. Their major problem, we concluded, was the school labeling process which they and their families (fortunately) tended to reject following school termination (p. 251-2).

Here is the author's reflection on needs assessment in this case:

My conclusion, I think is increasingly shared by most sophisticated observers in retardation, and that is that prevalence studies are unnecessary and wasteful (p. 251).

The final example relates to alcoholism in the 1950's. A set of state estimates were developed on the basis of a then-popular formula (Jellinek) and on the number of formal contacts by alcoholics with various agencies. The estimates were not generated from intellectual curiosity but out of "political necessities". "How could we compete effectively with those touting the incidence of tuberculosis, crime,

mental illness, heart disease or cancer without our own score card?' What use was made of the estimates?

As for utilization of the data by my bosses in the executive and legislative bodies, the gap, by either needs identification method was so great we frightened rather than encouraged them. At one of the Governor's budget writing sessions . . . one of those present concluded, reasonably I thought, that 'Demone was crazy.'

After the critics began to make their own calculations based on their acquaintance with known alcoholics,

The net result was that I regained some lost credibility, although the first remark was still a telling one, and the small increase in our annual operating budget was recommended to the legislature (which the legislature turned down by the way) (p. 249).

Demone also notes:

Now sixteen to twenty years later, neither state (Massachusetts and California) even now, has the resources to offer therapeutic services to those who could be identified by actual count in the 1950's.

So our problem is not apparently a bias to an over-estimation of the extent of the potential population at need. We have more alcoholics than we can use. It is a very important policy question, you see, because by the time you suddenly believe your data, (and no one really believed it for a long time) then you have to think of your policies and your program (pp. 248-250, underlining added).

The conference proceedings provide a large number of claims for the value and use of needs assessment but no additional evidence.

E. Summary: The available evidence suggests that activities carried out under the label "needs assessment" are diverse, rarely judged directly useful for policy-making purposes, and inspired or rationalized by reasons which are often only vaguely related, if at all, to resource allocation decision-making in public agencies.

VI. LIMITATIONS OF ONE APPROACH TO NEEDS ASSESSMENT: FIELD SURVEYS

One method of generating data for needs assessment, the field survey, deserves special mention because surveys are frequently mentioned in the literature and are often promoted vigorously in practice. State-wide surveys conducted by Florida and Oregon are referenced because they were large, relatively expensive, laid claims to basic validity and utility, were judged by some worthy of export to other states, and illustrate well the pitfalls of attempting to use surveys to improve allocation decisions among competing claims in a public agency context.

To some (usually survey researchers) a field survey is the preferable (superior) method for needs assessment. Yet surveys have been in use for a long time and they are not magical. The typical limitations and problems of a survey are several.

1. The cost of a survey can be high, especially when a detailed questionnaire is administered to a relatively large sample dispersed over a large geographical area. A survey of any significance will probably be more expensive than any of the alternative approaches to need assessment.

2. While samples can be drawn with statistical rigor, sample attrition and non-response rates may affect substantially the representativeness of an actual set of respondents.

3. A survey typically relies on self-report data. Self-reporting about complicated individual and social problems is frequently unreliable. Individuals may have mental health problems, for example, (or hypoglycemia or dietary deficiencies) and not be aware of them. Similarly, they cannot be expected to know of subtle physical, psychic or social problems unless the problems have been reliably diagnosed by competent specialists. Even experts disagree over the diagnosis and treatment of a wide variety of human problems. In addition, some subject areas are extremely sensitive

and do not lend themselves readily to reliable exploration through a survey interview; for example, marital problems, child abuse, alcoholism and abuse, drug use and abuse, abortions, etc. In short, surveys are not likely to be effective instruments for gathering reliable perceptions of some important and basic human problem (need) areas.

4. Survey researchers tend to prefer pre-structured and close-ended questionnaire formats because data is then easier to tabulate (although not necessarily easier to interpret). Pre-structured alternative answers to questions also speed an interview which must stay within the constraints of time, cost and the patience and time of the interviewee. But semi-structured and open-ended questions are often more effective vehicles for exploring life habits, styles and circumstances which create or intensify many human needs and problems. The exploration of "causes" of problems (and thus effective remedies) rather than symptoms requires more time and the skill of an experienced and sensitive interviewer. Anyone who has filled out, designed or read the results of survey questions has probably wondered about what difference it would make if a given question had been asked in a different way or had been preceded or followed by related or more probing questions.

5. If it is used to estimate the incidence of needs in a population, the validity of a survey depends in part on the extent to which the sample of respondents is "representative" of the larger population. Actual field surveys must rely on voluntary cooperation, and cope with a mobile and changing population, many of whose problems are "one-time" or transient. "Representativeness" may be hard to achieve. Several observers have warned against the seemingly commonplace "ecological fallacy" associated with

surveys and social indicators; i.e., attributing to individuals within a community the characteristics of a community as a whole.

AN EXAMPLE: There are a number of additional pitfalls which may result from survey sampling methods, questionnaire item construction, interviewing methods, techniques of data manipulation, etc. Some of them are illustrated by a large state-wide survey conducted by the Florida Department of Health and Rehabilitation Services, a newly formed umbrella human resources agency (3 volumes, 1976). In an effort to satisfy the Federal requirements for a social services planning process under Title XX of the Social Security Act, the Department spent hundreds of thousands of dollars to conduct a "comprehensive" needs assessment. It consisted of three surveys of 1,187 community residents, 1,769 existing service clients of the Department's services programs and 1,154 "key informants" (Department officials, teachers, employment service workers, counselors, social workers, etc.) This case is worth examining because reports of the results of the assessment claim that the surveys provide "a scientifically derived data base" which can be used to assist in planning and resource allocation decisions. The report claims that "estimated proportions of unmet need" can "depoliticize the allocation of scarce resources." Finally, this method of needs assessment was being promoted by some hhw officials for export to other states.

Despite these ambitious claims, a brief examination of the surveys reveal a set of limitations and ambiguities which significantly constrain the usefulness of the "scientific" data base. First, the client survey was heavily "categorical" rather than general. Not one, but at least eight samples were drawn, one for each of the eight major existing program areas of the Department (e.g., vocational rehabilitation, children's

medical services, retardation services, etc.). This strategy established a minimum sample representation for each program regardless of the relative size of the actual service client populations. Since a significant share of existing clients receive services from more than one program, this sampling strategy also produced double-counting and thereby exaggerated the total number of individuals in the client population with needs.

The categorical emphasis of the client survey was reinforced by a prestructured closed-end format. If clients had problems or needs which fell outside pre-selected areas, regardless of their severity, they were not asked about them. In general, the categorical emphasis of needs assessment is encouraged by federal laws and regulations which require assessments program by program and category by category. Redundancy, gaps, overlap, and double-counting are probably common.

Second, three sets of clients were excluded from the survey: those in the Department's three state institutions, and those receiving services in alcohol and drug programs. Obviously the needs of these three groups did not show up in subsequent calculations of priorities.

Third, although an attempt was made to cover 56 "problem areas", service utilization questions were not included for 22 of them because they would have made the questionnaire too long or too complex. As it turned out, four of the ten most frequent problem areas identified by respondents were among the 22 for which no estimates of "unmet need" could be calculated: inadequate nutritional intake, need for outreach services, mental health problems and needs for information and referral.

Fourth, some areas were covered by the questionnaire in such a cursory way that no sense can be made of reported findings. For example, only one "yes-no" question was included on the recreational needs of children.

while 27% of the clients and 19% of the community residents reported "recreational problems" (presumably for children) survey results provide no insight about what kind of recreational opportunities were needed or for what types and age-levels of children. Similarly, while a need for "information and referral" ranked sixth in terms of the largest "unmet needs" of clients, the survey provides no clues about subjects or services for which clients wanted information or referral.

Fifth, responses to survey questions were tabulated by frequency. Thus, in general, all answers were weighted equally in a "one person-one vote" fashion. As a consequence, the higher the response rate by program or sub-state district, the greater was the weight provided to responses in those areas. The variability in response rate seemed most extreme among "key informants". While an overall average of 77% of the individuals responded, the response rate for vocational rehabilitation counselors was a high of 96% while that for teachers was a low of 48%. As a natural result, views about needs held by VR counselors were proportionately of more weight (twice as much) than those of teachers. Variable response also characterized key informants in the 11 districts. Four counties with 42% of the population, for example, accounted for only 8.47% of the total responses. As a consequence, views of "needs" in those counties were considerably under-represented.

Sixth, the short two-page key informant questionnaire merged and thereby obscured two sets of distinctions which are important for resource allocation and policy purposes. (a) Individuals were asked to select and rank five target groups which needed the "most improvement in services such as expansion or quality." In terms of their budgetary and program development implications, improving the quality of existing services

is drastically different from expanding them. There is no way to tell from survey results whether key informants thought that services should be improved in quality, expanded, or both for the five priority groups which they selected. (b) Similarly, individuals were to rate 39 problems in terms of which were "most frequent and/or severe." Again, "frequency" and "severity" are two fundamentally different attributes of problems. Merging them in one question generated ambiguous results. Common colds are more frequent than child abuse (we hope) but most would probably agree less "severe." Lumping together problems of high and low frequency and greater and lesser severity is of little help.

The limitations and pitfalls of the Florida state surveys are not unusual or unique. Francis (1977) recently reviewed a state-wide needs assessment conducted on social services among "key informants" (officials) in Oregon. He concluded that the survey and the interpretation of its results were fraught with problems and should be given "low marks" as an aid to decision making. He concluded that surveys may be good for some purposes, "But polls are not a useful device for determining answers to complex, interdependent, mixed fact/value issues." His listing of serious short-comings of the Oregon study overlaps substantially problems reflected in the Florida surveys.

VII. PRIORITY RANKING NEEDS

According to many advocates, needs assessment is designed to guide resource allocation decisions, partly through ranking needs in priority order. The Florida surveys provide a concrete example, though the problems we will highlight are endemic to all survey assessments. An attempt was made in each of the three surveys (client, resident and key informant) to have individuals select from a list and rank-order the five most pressing unmet needs or target groups. The table on the next page compares the rankings of the three groups. As might be expected the rankings varied from group to group, confirming what has been called "Mile's Law: Where you stand depends on where you sit."

The table indicates that the clients and residents identified four of the same priorities out of five but they ranked them differently. The key informants selected and ranked areas that were, with one exception (transportation), different from the areas selected by the other two groups. Similarly, when key informants ranked both "unmet needs" and "pressing problem areas" only three of the five areas were common (unemployment, child abuse and malnutrition) and these were ranked in different order. "Mental health problems" were among the top five areas only in the list of the key informants. Finally, regardless of whose priority list you inspect, some problem areas appear interdependent in cause and remedy. Some portion of common dental problems (identified by clients and residents) are surely due to poor diet and malnutrition (identified by key informants). The reported needs for foodstamps and financial assistance (identified by clients and residents) are caused in part by unemployment (identified by key informants). Some child abuse is probably caused or triggered by the circumstances of unemployment or welfare status.

COMPARISON OF RANK-ORDER OF TOP FIVE
UNMET NEEDS BY RESIDENTS, CLIENTS AND KEY INFORMANTS
STATE OF FLORIDA

Community Resident Survey 1/ (n = 1,187)	Client Survey 2/ (n = 1,769)	Key Informant Survey 3/ (n = 1,154)	
		Unmet Need	Most Pressing Problem Area
Routine Dental Care	Routine Dental Care	Unemployment	Child Abuse
Food Stamps	Financial Assistance	Child Abuse	Abuse of Elderly
Financial Assistance	Food Stamps	Malnutrition	Unemployment
Information and referral	Utility Problems, including telephone	Transportation	Malnutrition
Transportation Problems	Transportation Problems	Low-income Medical Care	Mental Health Problems

- 1/ Department of Health and Rehabilitative Services, July 1976, pp. 35-36.
 2/ Department of Health and Rehabilitative Services, July 1976, pp. 32-33.
 3/ Department of Health and Rehabilitative Services, February 1976, p. 31.

Priority lists of unmet needs established by "voting" tend to obscure rather than clarify the nature and consequence of these potential causal problem chains."

Leaving aside the limitations of the surveys which we identified earlier, where (and why) would you put your money if you were a Florida decision-maker with, say, \$5 (or \$5 million) to allocate? Here are some alternative investment strategies which might be applied to the Florida priorities, or to any other set of ordinally ranked alternatives.

1. Invest the entire \$5 dollars in priority number one. If you choose the top priority of the clients and residents your money would go into routine dental care; but if you choose the number one priority of key informants it would go into either unemployment or child abuse. If the \$5 were allocated among these three top priorities, how much would you distribute to each area and why? Leaving aside priority order, you might decide to put the whole \$5 into the most common area across the four lists - transportation. The problem with putting the entire available amount into any one area is that the others go unaided. This seems an unsatisfactory investment strategy and one which creates choice problems despite its simplicity.

2. In the name of "equity" you might put \$1 into each of the top five priority areas. Then you would have to choose between the priorities of the clients and residents on the one hand and those of the key informants on the other since their lists are starkly different. How and why would you choose?

3. Invest in an area up to the point where estimated marginal benefits equal or exceed estimated marginal costs and then shift investment to another area and do the same. More comprehensively, you could invest in

areas with the highest benefit-cost ratios or the highest cost-effectiveness ratios. Unfortunately the Florida studies (or any other needs assessment we have seen) do not supply information on the basis of which these estimates could be made.

4. Invest in areas where there is the smallest (rather than the greatest) "unmet need" on the assumption that the know-how to reduce need has been demonstrated to be greatest in those areas.

5. Invest in programs where experience, knowledge and research indicates that there will be multiplier effects. According to this strategy, for example, an investment in employment programs may generate direct personal income and taxes which would permit further investments in the alleviation of other problems. Again, the Florida studies did not supply information necessary for these calculations.

6. Invest in areas which have the greatest "political feasibility." As a decision-maker you may decide that none of the top five are areas where investments are politically feasible. Again, needs assessments (including the Florida Studies) do not provide information about political feasibility or desirability.

7. A large number of other alternative and mixed investment or budget allocation strategies are possible.

The key point should be clear: while "priority lists" are appealing on their face, they are of little direct help in actually deciding upon reasonable resource allocation strategies.

VIII. SELECTED ISSUES AND PERSPECTIVES RELATED TO NEEDS ASSESSMENT

Efforts to "assess need" in a technical way are not new. They bear a strong family resemblance to earlier and similarly unsuccessful historical attempts like those of Jeremy Bentham who, in the 19th Century, tried to develop a "felicific calculus" by which one could gather and synthesize diverse individual preferences into consistent group choices which would supposedly ensure maximum happiness and human welfare. Since then, there has accumulated a large body of technical, esoteric and often unproductive speculation and writing on this subject. In a seminal analysis of the general problem, Arrow (1970) concluded that aggregating individual preferences into collective choices or decisions cannot be done technically in a reasonable and satisfactory way. There have since been no compelling rebuttals to Arrow's conclusion. Arrow was dealing with "preferences". The current concern is with "needs" which are analytically even more evasive and intractable. Here are some of the reasons.

A. A Merging of Needs and Wants? Some of the obvious confusion associated with needs assessments arises from a lack of clarity about the differences between needs and wants or, indeed, preferences. Except in extreme cases (e.g., abject poverty) the distinction is no longer easy to make. Commenting on this contemporary dilemma, Bell (1976) recalls that when Aristotle spoke of man's "natural needs" he meant sufficient food, clothing, shelter from the elements, care during sickness, sexual intercourse, companionship and the like. These needs are biologically derived and are limited and satiable. The use of the word "need" was then simple. Bell argues that times have changed. The "private household" where these early notions of need applied has been displaced by the "public household" where they do not. We now have

a political economy which is a mixture of government and a modern bourgeois" market economy. Now the motives for the acquisition of goods are no longer exclusively needs but also wants. "In bourgeois society, psychology replaced biology as the basis of 'need' satisfaction. . . . In Aristotle's terms, wants replaced needs - and wants by their nature are unlimited and insatiable."

. . . the public household now becomes the arena for the expression not only of public needs but also of private wants. . . . Above all the basic allocative power is now political rather than economic. . . . The fact that the public household becomes a 'political market' means that the pressure to increase services is not necessarily matched by the mechanism to pay for them, either a rising debt or rising taxes. (pp. 222-227)

This historical movement from a notion of needs as biologically based and limited, to one which is psychologically based and unlimited is part of the current cultural backdrop of social or human resources programs. The boundary between wants and needs has always been hazy because individuals are not always clear about their "real" needs versus their wants. Except in extreme cases their formulations change depending on their circumstances, available choices (including resources) and preferences. The overlap, merging and confusion of need and want (and sometimes preference) is one reason why there are often differences between self-perceived and self-reported needs of, say, a client of a social welfare program on the one hand, and needs perceived (or diagnosed) and reported by an expert (e.g., a clinical psychologist, caseworker, etc.) on the other.

The intertwining and mingling of needs, wants and preferences can be demonstrated in a simple way: Do a needs assessment on yourself. How sure are you that your needs are not your wants are not your preferences? Discuss your self assessment with someone else. How sure are you now? The merging of needs, wants and preferences is a basic reality.

B. Knowledge is limited: Proponents of needs assessment assume that if needs were only known, public agencies could do something about them. Unfortunately, we know less about how the world works and how to change it than we sometimes admit. After years of research there is still limited understanding of the determinants of child learning, the origins and cures of many diseases, the etiology and effective treatment of many types of mental illness, and the remedy for many of the social pathologies associated with poverty including crime and delinquency. Failures of many programs developed under the banner of the "great society" underscore the fact that money is not enough. Millions of dollars worth of evaluation studies later, few would claim that governments are in possession of many tried and tested remedies for our basic social, psychological and physical ills. After several years as the Deputy and then Assistant Secretary for Planning and Evaluation in HEW in the late sixties, Rivlin (1971) summarized her judgments about "What do we Know?" about the production of effective health, education and social service programs.

Again the answer is discouraging. So far the analysts can provide little useful information about the relative effectiveness of various educational methods or health delivery systems. Moreover, there is scant analytical basis for predicting the behavior of individuals and families in response to changes in incentives or availability of new services (p. 64).

A review of a recent anthology of 20 articles by experts on why we are "Doing better (spending more money) and feeling worse (showing no or little improvement)" in health confirms the boundaries of our knowledge in this area (Knowles, 1977). It appears that even if we could comprehensively identify our health "needs" we could not create services which would do much if any good to satisfy many (most) of them. There are two basic reasons.

First, only about 10 percent of the variation in health status seems attributable to medical care (p. 105). Most experts tend to agree with Knowles that "The health of human beings is determined by their behavior, their food and the nature of their environment." We do more to determine our own good or ill health than medical services do for us. It seems that "Prevention of disease means forsaking the bad habits which many people enjoy - overeating, too much drinking, taking pills, staying up at night, engaging in promiscuous sex, driving too fast, and smoking cigarettes ..." (p. 59). Mass education programs about the cancer causing effects of cigarette smoking and the death and disability consequences of excessive alcohol seem to have done little for these disease-inducing individual practices. We seem intent on making ourselves sick. Second, even though we know, for example, what the ten largest causes of death from disease are, we know precious little about what to do about them (pp. 38-41). Based on a review of "the science and technology of medicine", Lewis Thomas, President of the Memorial Sloan Kettering Cancer Center in New York City, concludes that "We are left with approximately the same roster of common major diseases which confronted the country in 1950, and although we have accumulated a formidable body of information about some of them in the intervening time, the accumulation is not yet sufficient to permit either the prevention or the outright cure of any of them" (p. 37).

Though "causal" knowledge and the art of effective program intervention varies from area to area and problem to problem, we are safe in assuming that, collectively, we know less than we think.

C. Philosophical Premises: There appear to be several implicit philosophical premises on which the needs assessment literature rests. First, the search for needs is an implied argument for "more" services

rather than less. The premise appears to be expansionist. It seems unlikely, for example, that a needs assessment would be conducted unless there were some prospect of uncovering more needs. It also seems unlikely that program officials would sponsor a needs assessment if there were a real prospect that the assessment would disclose either that a set of specified needs were already satisfied or that existing service capacity already exceeded the demand from all those "in need."

Second, and linked to the first premise, there seems to be an implicit assumption in the needs literature that government should provide whatever additional services are required. (See, for example Levitan, Lewis, and U.S. DHEW July 1976). This pro-government bias of needs assessment is interesting in light of rising public sentiment over the past 8-10 years that government is too big, too inefficient and too expensive. It is also a premise which is subject to basic disagreement on the grounds of both political philosophy and service effectiveness. It is not obvious that even if there were collective social agreement that a new service should be provided or an old one expanded that provision of that service should be made by government bureaucracy. A grand alternative to government provision of more services to the poor which has been proposed with some force over the last few years, for example, is a so-called incomes policy. Under this approach the poor would receive a minimum guaranteed income to be spent at their own discretion. Government would not be called upon to expand further the narrow, categorical support for services which grew up in the late fifties and early sixties and resulted in the overlapping, redundant and fragmentary service system we now have. In most areas there are plausible if not preferable alternatives to direct government intervention and subsidy. The needs assessment literature automatically assumes that the preferred provider is the government.

A third assumption seems to be hidden only in that portion of the needs assessment literature which proposes a survey as the preferred method. That assumption is that new data is better than existing or old data. The assumption is a push toward new data collection as the only reasonable course of needs assessment.

D. What Is To Be Done With Needs Data? A large share of the literature on needs assessment is silent on this question. The simple assumption is apparently made that if needs data are gathered they will be used automatically. When the use of needs data is considered consciously, several alternative vehicles for use are proposed. First, a number of advocates recognize that needs assessment is only one input to decision processes. To get that input into use they propose a "process". Where that process is to be located, who is to be in it and what it is supposed to do is unclear. Presumably, "the process" can be none other than "the decision-making process" itself. A second group of advocates feel uncertain about how the data from widely varying and multiple methods can be somehow synthesized and made sense of as a precondition for use. Bell (1976), for example, proposes that a "Comprehensive Assessment Model" be tried. That model is simple in concept. It has three components: (1) a service utilization component that is based on utilization data; (2) a social indicator component which is focused on a particular geographic unit; and (3) a citizen survey component. Like so many other recipes for needs assessment, however, Bell does not tell us what to do with the data from the three components. His paper concludes with these unhelpful statements " ...our goal is to triage this data base for planning." "It (the model) was predicated upon the belief that multiple assessments are important to a comprehensive view of the community" (p. 243). The reader is left again with advice which is of no help: Every needs assessment method is

weak. To overcome the weakness of individual methods, use multiple methods. To make sense out of the data from multiple methods, make them "convergent" - "triage" them.

E. The Context Is Political: Needs assessment does not occur in a vacuum. If the results of an assessment are to be useful and used they must fit the context in which all public agencies operate. That context is inherently political. In terms of one of its major functions, the political system is itself the vehicle for needs assessment. Needs are articulated, appraised, weighed and converted into action by the normal behavior of the political process. It is somewhat ironic that a set of data collection methods should be proposed as a refinement of one of the central functions of the American political system. The existing system is worth a brief review.

In broad strokes, the American political system is characterized by a high degree of social pluralism, the existence of a significant degree of value diversity and by interdependence among social means and ends. The system is fragmented and decentralized; influence is widely distributed over existing value positions. While there is consensus on the "rules of the political game," there is substantial conflict at the margin over values related to specific policies. In the decision processes, value conflict is resolved among "partisans" who mutually adjust their ends, means, and strategies through a variety of techniques such as partisan discussion, bargaining, negotiation, reciprocity, authoritative prescription, etc.

As outcomes of this process, policy is typically compromised; policy outcomes are "shared." Policy is made incrementally rather than comprehensively; that is, changes are typically made at the margin of existing policy. (Kimmel, 1968)

In this system, public agencies are not mere machines that follow rationalistic recipes of choice. Decisions do not occur in a one-time fashion but in intricate streams over long periods of time. Programs do not appear by virtue of "big decisions" but rather evolve through decentralized and fragmented processes of competition and adjustment among partisan interests. Programs, like budgets, grow incrementally and slowly, not in great leaps or quantum jumps.

Contrary to the assumptions of needs assessors there are no tidy and orderly sequences in which decision makers first assess need, then inventory resources, then identify gaps and then choose. Decision makers operate instead within vigorous constraints and small margins of freedom. Most human resources agency heads, for example, probably have "control" (and then only indirect) over no more than about 5% of their agency's budget. The rest is already committed to ongoing programs with built-in growth factors and purposes specified in statutes. Most decision making takes the form of trying to find actions which are politically feasible through marginal changes in the existing pattern of resources. This process of adjustment at the margin does not occur out of laziness or malevolence but out of the fact that the existing base of resource commitments represents the resolutions and compromises of past decisions.

In this politico-bureaucratic context, knowledge does not get converted into policy in a linear and clear way. Years of program evaluation and policy analysis bear witness to this fact. Experience suggests that the principal way that analysts have an impact on policy is by becoming, directly or indirectly, partisan participants and advocates in the policy process itself. If the results of assessments are to impact on policy they must be used and advocated by participants in the process. To make themselves felt, assessors, like analysts, will probably have to become skillful political partisans. Equally important, they

will have to learn to tailor analysis to specific problems "at the margin".
"Comprehensiveness" in a fragmented political system is a dubious virtue.

F. The "Gap" Model: Some of the literature suggests that needs assessment ought to be a step in a resource allocation model, indeed the first step. The proposed "gap" model goes like this:

First, assess needs

Second, inventory resources

Third, compare needs and existing resources and identify gaps

Fourth, establish priorities among the "gaps" (unmet needs)

Fifth, allocate resources

While it has the appeal of simplicity, this model is never followed in actual decision making. It may suit the logical ordering of a "rational" mind, but it is unsuited for collective choice. There are several reasons. First, there is no way to simultaneously assess all our needs. The model throws one into a paradox. If we cannot assess all our needs, which needs shall we assess first? If we are in a position to know which needs are more deserving of being assessed first, then we have already made up our minds about which needs are the most compelling. If that is the case, then why assess needs? Similarly, if we assess only part of our needs then how will we know whether the ones we assess are more important or worthy of meeting than the ones we have not yet assessed?

In actual practice, human resources agencies are thrown into the position of assessing only partial needs - those that are covered by categorical programs. Taken literally, federal laws and regulations which require needs assessments do so largely for individual programs: mental health centers, libraries, nutrition, vocational education, social services for the aged,

etc. What should a state comprehensive human resources agency do when confronted with requirements for multiple needs assessments through multiple federal categorical programs? Do one for each program? How will needs then be compared across programs? And what of double-counting which is sure to occur? We know, for example, that recipients of federally funded service programs often have multiple problems. If their needs are counted individually along categorical lines the total of those estimated in need will far exceed those actually in need. And what criteria shall be employed to decide which needs should be met with a limited budget? Should education needs be first, or health needs, or housing needs, etc.? Neither the model nor the literature which espouses it provides any guidance on how to choose. Standed on its first step, the "gap" model is interesting but of little use.

Even used for a single program, the "gap" model is seriously deficient. In a recent critique of estimates of need for vocational rehabilitation, Levitan (1977) found that:

Where prevailing universe of need estimates have indicated large service deficits, different assumptions yield much lower need totals and raise a new set of policy considerations.... As the level of service increases relative to need it is more and more crucial to consider whether the next increment in service is having the desired effects or an acceptable rate of return (pp. 74-75).

The consideration of marginal effectiveness is appropriate in the case of every program, and is not addressed by needs assessment methodologies.

IX. A RECAPITULATION

This paper has drawn on a sampling of the literature to expose the anatomy, espoused purposes, claims, criticisms, and uses of needs assessment. Major conclusions can be summarized briefly.

First, the Federal government has prescribed that needs assessment be conducted as a precondition for grant support or as part of a plan or planning process. Federal laws and regulations, however, are always silent on what "need" means and usually silent on what methods or procedures should be employed to conduct a needs assessment. Tellingly, HEW does not make decisions based on national needs assessments. This approach is left to State, regional and local governments and agencies.

Second, an examination of the meaning of the terms "need" and "assessment" and of the definitions and characterizations given in the literature lead to the conclusion that "need" is an empty and unbounded term. It takes on meaning only in a specific context when someone or some group establishes an absolute (e.g., an income-related poverty line) or relative (e.g., the needs of group A compared to those of B) criterion or standard for gauging need. These criteria are themselves value-laden and subject to philosophical and political debate and dispute. (See, for example, the provocative discussion of the wavering "poverty line" in U. S. DHEW, April 1976).

Third, the methods proposed for the conduct of needs assessment are many and borrowed from other places. They consist of heterogeneous mixed methods for (1) eliciting opinions or judgments of need from a variety of sources, (2) collecting data directly from the field (e.g., through a field survey), (3) inferring need from indirect indicators (e.g., social indicators), or (4) inferring need from the secondary analysis of existing data (e.g., utilization data already collected on the use of services in existing programs).

Experts tend to agree that all the individual methods have weaknesses. As a way to partially overcome these weaknesses they urge the use of multiple approaches but have never shown how any single approach or combination of approaches can actually be used in priority-setting.

Fourth, there is no theory or organized analytics which lie behind the methods of needs assessment. They are instead, only tools for descriptive data collection, not for data analysis or interpretation.

Fifth, self-conscious advocates of needs assessment realize that undifferentiated data on needs stand a small chance of influencing decisions and they therefore urge simplistic "convergent" models for data reduction and synthesis and "a process" (undefined) for bringing needs data to the attention of decision makers.

Sixth, the tools and concepts of needs assessment were compared with those of Planning-Programming and Budgeting which is directed toward the shared purposes of influencing resource allocation decisions. The comparison revealed that needs assessment is generally "market" or "target group" oriented and conducted without explicit regard for resource, budgetary or funding constraints. PPB by contrast takes such constraints as a point of departure and relies on an additional set of constraints in the form of articulated program and policy objectives. PPB carries with it tools for analysis. Needs assessment does not.

Seventh, an examination reveals that the evidence on the actual utilization of the results of needs assessments is spotty, scant, uneven and not encouraging. A very small percentage of needs assessments appears to have been used in an actual decision-making setting and the evidence suggests that much of that use may be due to the utility of needs data for purposes of program justification and advocacy rather than analysis and systematic planning.

Eighth, although surveys are sometimes promoted as the preferred approach to needs assessment, an examination of a statewide survey in Florida exposed several of the typical limitations and problems with this approach. Self-reporting on serious, subtle and sensitive psychic, social and physical problems is difficult and often unreliable. Sampling, questionnaire design and item construction involve selection, and thus the exercise of values over what is and is not important. Sample "representativeness" is hard to accomplish in real field surveys, especially those directed toward large-scale population groups subject to mobility and change in circumstances. Prestructured surveys are weak instruments for investigating the "causes" or sources of needs and problems and thus for formulating effective remedies.

Ninth, while "priority lists" are appealing in principle they are of little help in formulating strategies for investing budget resources.

Finally, a brief identification of the issues and operating context of a public agency suggested that there is often a merging of needs and wants (and indeed preferences); existing knowledge about the causes of and effective remedies for a large number of important social problems is partial, bounded and fragmentary; and the needs assessment literature seems to rest on a set of arguable philosophical premises, including the notion that remedies for all social problems should be undertaken by government.

In sum, the conceptual, methodological, and practical limits of proposed approaches to needs assessment suggest that most assessments will have only a small chance of impacting on policy and resource allocation decisions. The next section provides some guidance for deciding whether to do a needs assessment on the few occasions when that activity might seem indicated.

X. ASSESSING THE NEED TO DO A NEEDS ASSESSMENT

A. Why conduct a Needs Assessment? There are several alternative motives. Be clear on the intended purposes of a specific assessment.

1. Advocacy: Establishing estimates of the size of a social problem, usually numbers about the size of the population at risk or the target population of a proposed program, has a long and venerable history. Open any testimony given by government agencies before legislative appropriations committees whether at the Federal, state or local level and you will find numbers which purport to characterize the size of problems which proposed expenditures are to remedy. These numbers frequently magnify the size of a problem. It is conceivable that a case could be made for conducting a needs assessment for the primary purpose of getting a more systematic fix on the size of a target population for use in advocating more resources for the target population or justifying those which are currently being expended. Since the art of advocacy does not have to meet rigorous analytical criteria and is usually carried on by groups outside a public agency, this motive for a needs assessment is not considered further.

2. Formal Social Research: Some advocates view the primary purpose of needs assessment as a vehicle for social research for its own sake, independent of its relevance for policy purposes. This justification is sometimes offered for research on social indicators and for social survey research. We recounted earlier, for example, that Scheff (1976) saw needs assessment as "an end in itself." Again, it is conceivable that a case could be made for supporting needs assessment as a basic or applied research activity or as one intended to further "tool" (methodological) development. This purpose for needs assessment is not a focal point of this paper.

3. Federal Requirements: Another primary motive for needs assessment may be to merely satisfy Federal requirement. As we indicated earlier, however, Federal requirements are often vague, non-specific and admit of a number of alternative activities under that label. Assuming that a Federal requirement is intended to include analytical activity related to policy and budget development, questions and issues which should be addressed in deciding what to do are covered in the following section.

4. Aid to Resource Allocation Decision Making: This rationale is claimed most widely in the literature as the purpose of needs assessment and is the one treated by this paper.

B. Questions and Considerations: If needs assessment is to be conducted for the purpose of aiding in the allocation of budgetary resources there is a set of basic questions which should be addressed before a decision is reached to sponsor and support a particular type of assessment.

1. What is the specific issue or problem which a needs assessment is intended to address? This is probably the single most important question which can be raised about a proposed assessment. It is also the one which is most likely to be ignored, skirted or obscured. A detailed specification of the problem or issue which is to be addressed is a prerequisite to judging whether or not a needs assessment is appropriate.

One approach to elaborating policy or budgetary problem(s) is to specify a set of questions which are to be answered. A structured way to do this is an "issue paper", a short, written statement which lays out in tentative terms:

- o The structure of the problem
- o Likely causes or sources of the problem

- o Known groups in the population affected by the problem
- o Objectives which might be met by public action designed to remedy the problem
- o Criteria, such as measures of effectiveness, which might be employed to indicate progress toward resolving the problem
- o An overview of programs, both public and private, which are already directed toward the problem
- o Estimated costs and impacts of activities already underway and of new alternatives
- o An identification of significant constraints on reducing the problem
- o Major analytic or data problems which have to be handled if further analytic work is to proceed
- o A listing of the key steps of additional study and analysis which need to be undertaken and an estimate of their cost and timing

An "issue paper" is an attempt to identify and describe the main features of a problem based on what is known or can be easily learned from existing sources. It is preliminary to more extensive analysis or data collection. A well-developed issue paper should indicate whether a given policy or budgetary issue or problem can be clarified by further analysis, better estimates of costs, a more refined understanding of the sources of a problem, a more vigorous search for alternatives, etc. Results of this "pre-analysis" should help indicate whether additional analytical steps ought to be a benefit-cost or cost-effectiveness study, an analysis or evaluation of existing programs, a needs assessment or some other form of structured analytical work. Details on the contents and formats of two alternative "issue papers" are provided in Hatry, et al (1976). A principal purpose served by clarifying and elaborating major policy issues and problems before starting

analytical work and data collection is to ensure that tools are selected to fit problems rather than vice-versa.

2. If additional analytical work (including an assessment) is indicated, what timetable must be met? Studies and data collection usually take longer than expected. One precondition for the use of analysis and needs assessment is that results are completed in an organized form well before key decision points.

3. If the collection of "needs" data is being considered, these questions are appropriate:

- o What is wrong with your current estimates of need? Can they be improved to a satisfactory level short of new data collection? Can you extrapolate or interpolate national data to your area?
- o How much precision in need estimates do you really need? If current and expected resources will serve only a fraction of the likely target population (say 10-25%) what is the analytical value of knowing that a target population is 500,000 in size rather than 450,000 or 400,000? Probably little, if any.
- o What would you be giving up if you did not do the assessment? Would an assessment make any perceptible difference in decision outcomes?
- o What are likely to be the full costs of conducting the assessment? How do these costs compare to your estimate of the payoff or benefits of having done the assessment?
- o How would you validate the results of an attempt at an assessment, especially deriving estimates of need from a survey?

Since all available approaches to needs assessment have limitations and drawbacks, it would be worthwhile to consult the critical literature on the methods under consideration in an attempt to determine the validity and reliability of results which will be generated.

4. Explore the relevance and availability of needs estimates already available in other locales, especially in comparable settings. Since other jurisdictions are being required by Federal programs to conduct needs assessments, the likelihood is high that they can be located

by contacting neighboring jurisdictions. This may be especially helpful if it can be established that a needs assessment in an area of state interest has already been conducted on a population group similar in demographic composition, urban-rural mix and other significant factors. If appropriate estimates of the needs of comparable populations can be located, findings may be roughly transferable through extrapolations and adjustments in demographic data and associated findings.

Similarly, social indicator studies, surveys and policy analyses abound. They can be accessed through conventional library and document search procedures. In some instances broad based searches of existing polling data have already been completed. The Gerontology Program of the University of Nebraska, for example, conducted an examination of national opinion polls in the U.S. for the purpose of inventorying and extracting data which related to the needs, attitudes and behaviors of the aging. Their report (1976) would be a useful point of departure for a new needs assessment in the area of aging services. Lewis (1973) did a careful and comprehensive analytical job of examining the needs, costs, benefits and alternatives to day care. The Policy Analysis Source Book (1976) abstracts and cross-classifies thousands of existing policy studies. A little research on existing studies, analyses, surveys, indicator studies, and needs assessments may save a considerable amount of time, energy and cost.

5. Attempt to estimate the risk which the results of a needs assessment might pose for the sponsoring organization. Though there are a number of potential factors which might be considered, Murrell (1976) suggests two:

- o To what extent are "maintenance inputs" of the organization stable and safe? These include funding, clientele, and the support of higher organizational levels. When these factors are safe and secure the organization will be more tolerant of the possible threat of new information. If they are unstable the organization will be less tolerant of risk and the potential threat of new information.

- o To what extent is the organization oriented to growth and change? If the ideology of an organization is oriented to a steady state, the chances for use of new information will be lower than if it is oriented to growth and change.

6. If an assessment or an analysis is conducted, maintain regular involvement of appropriate agency program staff. This will ensure that knowledgeable individuals are involved in the design of the study and acquainted with the strengths and weaknesses of the approach as results are made available to agency staff.

7. Explicitly consider the potential utility for policy purposes of a problem-oriented and problem specific issue or policy analysis as a major alternative to or method of needs assessment. Good analytical work, even if crude, using existing data and secondary analysis, and performed on a small scale, will illuminate actual policy choices better than extensive data collection.

SOURCES

- Anonymous, THE POLICY ANALYSIS SOURCE BOOK FOR SOCIAL PROGRAMS. Washington, D. C.: GPO, 1976.
- Arrow, Kenneth J., SOCIAL CHOICE AND INDIVIDUAL VALUES. New Haven and London: Yale University Press, 1963.
- Bell, Daniel, THE CULTURAL CONTRADICTIONS OF CAPITALISM. New York: Basic Books, Inc., 1976.
- Bell, Roger A. and Martin Sundel, Joseph F. Aponte, Stanley A. Murrell, NEED ASSESSMENT IN HEALTH AND HUMAN SERVICES: Proceedings of the Louisville National Conference: Louisville 1976.
- Bell, Roger A., "The Use of a Convergent Assessment Model in the Determination of Health Status and Assessment of Need," in Bell, Roger A., NEED ASSESSMENT IN HEALTH AND HUMAN SERVICES, already cited.
- Booz, Allen Public Administration Services, Inc., ASSESSING SOCIAL SERVICES NEEDS AND RESOURCES: FINAL REPORT. Washington, D.C., August 15, 1973.
- Bowers and Associates, A GUIDE TO NEEDS ASSESSMENT IN COMMUNITY EDUCATION PROGRAMS. Reston, Virginia: January 1976.
- Caplan, Nathan, "Factors Associated with Knowledge Use among Federal Executives," in Policy Studies Journal. Urbana, Illinois: University of Illinois, Spring 1976.
- Center for Social Research and Development, ANALYSIS AND SYNTHESIS OF NEEDS ASSESSMENT RESEARCH IN THE FIELD OF HUMAN SERVICES. Denver, Colorado: Denver Research Institute, University of Denver, July 1974.
- Davis, James A., "On the Remarkable Absence of Nonacademic Implications in Academic Research: An Example from Ethnic Studies." San Francisco: Academic Press, Inc., 1975. Reprint from SOCIAL POLICY AND SOCIOLOGY by N.J. Demerath et al.
- Department of Health and Rehabilitative Services, Program Planning and Development, Office of Evaluation, State of Florida, STATEWIDE SYSTEMATIC NEEDS ASSESSMENT PROJECT: COMMUNITY RESIDENT SURVEY. July 1976.
- _____ . A FLORIDA KEY INFORMANT NEEDS ASSESSMENT FOR TITLE XX. February 1976.
- _____ . STATEWIDE SYSTEMATIC NEEDS ASSESSMENT PROJECT: CLIENT SURVEY. July 1976.
- Florida Department of Health and Rehabilitative Services, Division of Planning and Evaluation, Bureau of Research and Evaluation, ANNOTATED BIBLIOGRAPHY OF NEEDS ASSESSMENT. April 1975.
- Francis, Walton, "A Report on Measurement and the Quality of Life and The Implications for Government Action of THE LIMITS TO GROWTH." Washington, D.C.: U.S. Department of Health, Education and Welfare, January 1973.

Francis, Walton, Unpublished letter to HEW Region X Office reviewing the Oregon Needs Assessment Project (November 1977).

Gerontology Program, University of Nebraska. "Public Opinion and the Making of Social Policy." Omaha: March 31, 1976. Prepared for the Office of Human Development, Department of HEW Region VII Office.

Hargreaves, William A., and C. Clifford Attkisson, Larry M. Siegel, Marguerite H. McIntyre, PART II: NEEDS ASSESSMENT AND PLANNING. San Francisco: National Institute of Mental Health, 1974.

Hatry, Harry and Louis Blair, Donald Fisk, Wayne Kimmel, PROGRAM ANALYSIS FOR STATE AND LOCAL GOVERNMENT. Washington, D.C., Urban Institute, 1976.

Hitch, Charles J. and Roland N. McKean, THE ECONOMICS OF DEFENSE IN THE NUCLEAR AGE. New York: Atheneum, 1965.

Human Services Institute for Children and Families, Inc., NEEDS ASSESSMENT IN A TITLE XX STATE SOCIAL SERVICES PLANNING SYSTEM. Location unstated, April 1975.

Kimmel, Wayne A., "Mental Health Manpower Development at the State Level: Five Pilot Projects." Washington, D.C.: National Institute of Mental Health, June 1977 Draft. A contract study.

Kimmel, Wayne A., and William R. Dougan, John R. Hall, MUNICIPAL MANAGEMENT AND BUDGET METHODS: AN EVALUATION OF POLICY RELATED RESEARCH, Final Report-Volume I: Summary and Synthesis. Washington, D.C.: The Urban Institute December 1974.

Kimmel, Wayne A., "PPB: Analysis, Planning and Processes of Choice." Cambridge, Massachusetts: Harvard University, June 1968, Unpublished paper.

Knowles, John H. (ed.), DOING BETTER AND FEELING WORSE. New York: W.W. Norton & Company, 1977.

League of California Cities, HANDBOOK: ASSESSING HUMAN NEEDS Sacramento, August 1975.

Levitan, Sar A. and Robert Taggart, JOBS FOR THE DISABLED. Baltimore, Md.: Johns Hopkins University Press, 1977.

Lewis, Vivian, "Day Care: Needs, Costs, Benefits, Alternatives," in STUDIES IN PUBLIC WELFARE, Paper No. 7: Issues in the Coordination of Public Welfare Programs. Washington, D.C.: U.S. Government Printing Office, July 2, 1973.

Mckenzie, Richard B. and Gordon Tullock, THE NEW WORLD OF ECONOMICS: EXPLORATIONS INTO THE HUMAN EXPERIENCE. Homewood, Illinois: Richard D. Irwin, Inc., 1975.

Minnesota State Planning Agency, NEEDS ASSESSMENT: A GUIDE FOR HUMAN SERVICES AGENCIES. St. Paul, Minnesota: January 1977.

- Murray, Thomas and Richard Weatherman, EDUCATIONAL NEEDS ASSESSMENT AND PROGRAM DEVELOPMENT FOR CHILD CARING INSTITUTIONS. Minnesota: State Department of Education, Reprint November 1973.
- Mustian, David R. and Joel J. See, "Indicators of Mental Health Needs: An Empirical and Pragmatic Evaluation," Journal of Health & Social Behavior, March 1973.
- Peterson, Roland L., "Social Mandates and Federal Legislation: Implications for Health and Planning" in Bell, Roger A., NEED ASSESSMENT IN HEALTH AND HUMAN SERVICES, already cited.
- Project Share, HUMAN SERVICES BIBLIOGRAPHY SERIES: NEEDS ASSESSMENT. Rockville, Maryland: August 1976.
- Redick, Richard W., "Annotated References on Mental Health Needs Assessment." Rockville, Maryland: National Institute of Mental Health, February 1976. Typescript.
- Region X, U.S. Department of Health, Education & Welfare. TIES THAT BIND.... HEW NATIONAL MANAGEMENT PLANNING STUDY - 1976. Seattle, Washington, July 4, 1976.
- Rivlin, Alice M., SYSTEMATIC THINKING FOR SOCIAL ACTION. Washington, D.C. The Brookings Institution, 1971.
- Saslow, Michael G. NEEDS ASSESSMENT: A State-wide Survey of Local Social Service Problem Areas. Draft Final Report. A contract Study for HEW Region X Seattle: HEW/OHDS Public Services Division, October 1, 1977.
- Scheff, Janet, "The Use of Client Utilization Data to Determine Social Planning Needs," in Bell, Roger A., NEED ASSESSMENT IN HEALTH AND HUMAN SERVICES, already cited.
- Schneider, Mark, "The 'Quality of Life' and Social Indicators Research," PUBLIC ADMINISTRATION REVIEW, May/June 1976.
- Shapek, Raymond A., "Problems and Deficiencies in the Needs Assessment Process." PUBLIC ADMINISTRATION REVIEW, December 1975.
- Siegel, Larry M. and C. Clifford Attkisson, "Mental Health Needs Assessment: Strategies and Techniques," in Hargreaves, et al., PART II: NEEDS ASSESSMENT AND PLANNING, already cited.
- Thomas, Lewis, "On the Science and Technology of Medicine," in John H. Knowles, DOING BETTER AND FEELING WORSE, already cited.
- U.S. Department of Health, Education, and Welfare, A FIVE-YEAR PLAN FOR THE DEVELOPMENT OF COMMUNITY MENTAL HEALTH CENTERS. A Report to the Congress Pursuant to the Community Mental Health Centers Amendments of 1975, July 1976.
- U.S. Department of Health, Education and Welfare, THE MEASURE OF POVERTY: A Report to Congress as Mandated by The Education Amendments of 1974. Washington D. C.: GPO, April 1976; GPO Publication No. 017-046-00039-0.

Varenais, Kristina, NEEDS ASSESSMENT: AN EXPLORATORY CRITIQUE. Washington, D.C.: Office of the Assistant Secretary for Planning and Evaluation, HEW, May 1977. HEW Publication Number: OS-77-007. **ED165033**

Warheit, George J., and Roger A. Bell, John J. Schwab, PLANNING FOR CHANGE: NEEDS ASSESSMENT APPROACHES. Rockville, Maryland: Department of Health, Education and Welfare, Alcohol, Drug Abuse and Mental Health Administration, Undated.

Zangwill, Bruce, A COMPENDIUM OF LAWS AND REGULATIONS REQUIRING NEEDS ASSESSMENT. Washington, D.C.: U.S. Department of Health, Education and Welfare, May 1977. HEW Publication Number: OS-77-006.