

DOCUMENT RESUME

ED 338 903

CE 059 666

TITLE Rehabilitation Needs Assessment for Vocational Rehabilitation Agencies. Volume I. A Guide to Needs Assessment in Rehabilitation Agency Planning.

INSTITUTION Rehabilitation Services Administration (ED), Washington, DC.; Southern Illinois Univ., Carbondale.; Wisconsin Univ.-Stout, Menomonie. Stout Vocational Rehabilitation Inst.

PUB DATE Mar 91

NOTE 117p.; For volume II, see CE 059 667.

AVAILABLE FROM Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, Menomonie, WI 54751-0790 (\$18.50; both volumes \$39.00).

PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS Agency Role; Compliance (Legal); Definitions; *Disabilities; Federal Legislation; Models; *Needs Assessment; *Program Development; *Rehabilitation Programs; *Social Agencies; *State Legislation; Statewide Planning; Vocational Rehabilitation

IDENTIFIERS Rehabilitation Act Amendments 1986; *Wisconsin

ABSTRACT

This guide was developed to help Wisconsin agency assessment, evaluation, and planning personnel to develop a perspective on how needs assessment fits into their state's vocational rehabilitation program planning. It is intended to offer practical and responsible suggestions that meet the intent of federal and state mandates. Volume I of the guide focuses on the needs assessment process. It provides background information on contemporary needs assessment approaches and the methodology for carrying out comprehensive rehabilitation needs assessment. The five chapters of the volume (1) examine the issues that constrain the rehabilitation program and the needs assessment and planning processes; (2) relate how comprehensive needs assessment became a requirement in the 1986 Amendments to the Rehabilitation Act and how that requirement affects state plan development; (3) review and contrast contemporary needs assessment definitions, models, and techniques for what they have to offer to agency planning; (4) offer practical advice on what needs assessment information and requirements mean for the agency that contemplates a comprehensive needs assessment; and (5) present a concept and step-by-step methodology. The guide includes 25 references and 18 tables/figures. (KC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED338903

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R R Fry

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

REHABILITATION NEEDS ASSESSMENT FOR VOCATIONAL, REHABILITATION AGENCIES

VOLUME I

A Guide to Needs Assessment in Rehabilitation Agency Planning

by

The Region V Study Group

U.S. DEPARTMENT OF EDUCATION
 Office of Educational Research and Improvement
 EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CF059666

BEST COPY AVAILABLE

**REHABILITATION NEEDS ASSESSMENT
FOR
VOCATIONAL REHABILITATION AGENCIES**

VOLUME I:

**A Guide to Needs Assessment
in Rehabilitation Agency Planning**

by

The Region V Study Group

March 1991

With Participation of

**The Research and Training Center
University of Wisconsin-Stout**

**Rehabilitation Continuing Education Program
Southern Illinois University**

**Region V Regional Office at Chicago
Rehabilitation Services Administration**

Preface

The Region V Study Group is composed of individuals on staff at state rehabilitation agencies in the region. The Research and Training Center at the University of Wisconsin-Stout (RTC), the Rehabilitation Continuing Education Program (RCEP) at Southern Illinois University, and the Regional Office of the Rehabilitation Services Administration at Chicago (RSA) provided consultation, facilitation, technical support, and publication resources to the Study Group. Rehabilitation Needs Assessment for Vocational Rehabilitation Agencies is the second project completed by the Region V Study Group. The concept, development, direction, and product, however, are those of the staff of the state agencies.

This project began after completion of the "Gender Study."¹ A series of project concepts was identified by Region V program evaluation staff at their Annual Meeting at Madison, Wisconsin, in October, 1987. Four concept papers were prepared and presented to the Region V Council of State Administrators of Vocational Rehabilitation at their winter meeting. The "needs assessment" issue was given highest priority as most state agencies were searching for methodologies with which to meet the expanded requirements in the 1986 amendments to the Vocational Rehabilitation Act that the state plan be based upon a "comprehensive needs assessment." The council anticipated that a guide, tool kit, or state-of-the-art document that was developed from current legislative requirements by and for agency personnel would be of greatest benefit to state agencies.

Each state agency selected members for the Study Group and the Group met in January, 1988, to review the charge; develop a working timeline; establish commitments from the RTC, RCEP and RSA; and prepare a working budget for the Council's response and support. The first meeting in May produced a working concept of rehabilitation needs assessment that incorporated rehabilitation legislation requirements, developed a general outline for the guide, identified specific research and writing assignments for the Study Group, and clarified the goals and purposes for the project.

The identified goal of the Study Group's project was to produce a document which would put needs assessment within the contexts of providing rehabilitation based on identified consumer needs, preparing the State Plan for Vocational Rehabilitation, and meeting state and federal requirements. The purposes of the project were broadly conceived as follows:

¹The first project was a formal research study to determine how women fared in the vocational rehabilitation process. Region V Study of Access, Services and Benefits from Vocational Rehabilitation 1972 to 1984: A Gender Perspective was completed and published by the Research and Training Center the University of Wisconsin-Stout in September 1987.

- Develop a practical guide for conducting needs assessment in rehabilitation.
- Develop simple methods for conducting needs assessment studies.
- Develop cost-effective methods for conducting needs assessment studies.
- Identify additional and useful information sources and resources with which to conduct needs assessment studies.
- Describe the application of needs assessment methodologies to specific problems in planning.
- Develop improved models of needs assessment for improving decision making, including providing accurate technical assistance data and proactive information on emerging issues.
- Develop general methodologies or conceptual models for the various types of needs assessments.
- Clarify fundamental needs assessment issues.
- Improve the availability of information to support decision making.
- Establish an ongoing resource for state agencies to conduct needs assessments.
- Develop needs assessment methods that will assure that state agencies will obtain needs data of a quality they can rely upon.
- Promote comparability among state needs assessment studies.

The outcome of the project was to be a document that would both provide appropriate technical information for planning and conducting rehabilitation needs assessment and provide guidance on how to effectively perceive and apply rehabilitation needs assessment findings to rehabilitation planning and delivery.

Subsequent meetings held periodically during 1988 combined training in the principles of needs assessment and work on the developing document. Materials prepared by the Study Group, in keeping with their assignments, were the bases for both the training and the work sessions. Training attended to developing basic concepts and studying the legislative history behind the requirements for comprehensive needs assessment found in amendments to the Rehabilitation Act. The work sessions concentrated on critical review of materials submitted by writers and on revision, integration, and improvement of the structure and focus

of the proposed document.

Following the October 1988 meeting, an editorial committee was formed to integrate all materials and determine final segments of the document that needed to be solicited from the Study Group. The editorial committee met in March; new assignments were made, and all final materials were reviewed and integrated by between May and July, 1989. In October, 1989, the full Study Group convened at the 10th Annual Meeting of Region V Program Evaluators, at Chicago, for further considerations before the document was submitted for review by the Region V state administrators. Final editing took place in fall, 1990. The Study Group's product was presented to the winter meeting of the Region V Council of State Administrators of Vocational Rehabilitation.

The Editors:

Fredrick Menz, RTC, Wisconsin,
Senior Editor and University Coordinator
Duane Sermon, Minnesota General, Chair
Rick Hall, Wisconsin General
George McCrowey, RSA, Chicago

March 1991

Acknowledgements

We wish to acknowledge the many individuals and organizations involved in the preparation of this document. First, our appreciation goes to the state directors of vocational rehabilitation for their foresight, for their willingness to allow this to be part of staff responsibilities, and for the resources they allocated to development of this inter-state product. We must acknowledge the help of Dr. Henry Wong of the RCEP for his contributions and for coordinating arrangements and meeting sites for Study Group and editorial committee meetings. We thank Dr. George McCrowey of the Chicago Regional Office of the Rehabilitation Services Administration for his continuing participation, contributions, and guidance throughout the project.

We wish to acknowledge Drs. Fredrick Menz and Daniel McAlees of the Research and Training Center for their continuing involvement in helping the Study Group embark on this book writing task and not letting the Group stop until they had finished the product. Thanks also to them for effectively facilitating the Study Group's growth in their understanding of needs assessment from "doing a survey" to the conceptualization of needs assessment as the cornerstone for rehabilitation planning that we present throughout this book and for securing funds to publish and disseminate this document. We thank Dr. Frank Corrigan, Acting Commissioner, Rehabilitation Services Administration, for his insightful presentation at the 9th Annual Program Evaluation Conference and the paper he subsequently prepared on the evolution of needs assessment under the Rehabilitation Act. We thank the U.S. Department of Education's Rehabilitation Services Administration and National Institute on Disability and Rehabilitation Research for the partial funding that made this document possible. A very special appreciation goes to Ms. Julie Larson at the Research and Training Center who guided the scripting, preparation, and printing of this document through all of its rough and final phases.

Special commendation goes to a particularly important Study Group colleague: Dr. Robert Struthers, who retired as Director of Program Evaluation, Michigan Rehabilitation Services, in 1989 and left the Study Group. Dr. Struthers has been and continues to be the true inspiration behind the development of documents like this by state agency personnel. While it is more often academics who can assume leadership in a profession, Dr. Struthers has demonstrated that those of us engaged as functional evaluators and planners can also have an impact on our profession beyond the boundary of our state agency. Bob has been the single most identified person in state agency program evaluation for the past 15 years. To those of us attempting to document and improve our state's rehabilitation programs, Bob's name, publications, and ideas are considered synonymous to Quality. His competence and leadership have made it possible for many of us to look beyond the confines of our daily responsibilities to the possibility of what and how we relate to each other as professionals and how our collective skills can be enriched and do enrich our profession. His gentle reach continues to help us bridge those gaps and has

helped us immeasurably to produce a document with quality. He continues to help us realize that where we are now is but one step to what we will be able to do tomorrow.

The Region V Study Group 1988-1990:

Duane Sermon, Minnesota General, Chair
Michael Murphy, Illinois General
Barney Bruzetti, Illinois General
Richard Schrempf, Illinois Blind
Leland Moon, Indiana General
Robert Struthers, Michigan General
William Leavell, Michigan General
Kenneth Ziegler, Michigan Blind
Karl Nitardy, Minnesota Blind
Greg Shaw, Ohio General
Rick Hall, Wisconsin General

Regional Ex Officio Resources:

George McCrowey, RSA, Chicago
Fredrick Menz, RTC, Wisconsin
Daniel McAlees, RTC, Wisconsin
Henry Wong, RCEP, Illinois

Study Group Editorial Subcommittee:

Fredrick Menz, RTC, Wisconsin,
Senior Editor and University Coordinator
Duane Sermon, Minnesota General, Chair
Rick Hall, Wisconsin General
George McCrowey, RSA, Chicago

Table of Contents

Chapter	Page
Preface	iii
Acknowledgements	vii
Table of Contents	ix
List of Tables	xv
List of Figures	xvii
1 Introduction	1
Definition and Overview of Needs Assessment as a Part of Rehabilitation Agency Planning	1
Purpose and Audiences for the Guide	4
Organization of the Guide	5
2 Issues Surrounding Rehabilitation Needs Assessment	7
The Socio-Political Environment of Rehabilitation Planning and Delivery	7
Structural Issues in Rehabilitation	10
Changes in Public Expectations and Needs	10
Changes in the Scope of the Rehabilitation Program	11
Changing Expectations for Needs Assessment, Planning, and Evaluation	12
Coordination and Functions for Needs Assessment	14
Ethics and Humaneness	16
Ethical Concerns	16
Informed Consent	17

Table of Contents (Cont.)

Chapter	Page
2 Identifying and Accessing Relevant Data	18
Formal Versus Informal Assessment	19
Disability and Need	19
Needs and Expectations	19
Desire, Demand, and Need	19
Dynamics of Needs	20
Who Knows Needs Best	20
Sensitivity to Handicapping Conditions	20
Resource Use	21
Obtaining Quality Needs Data	21
Knowing What Information is Needed	21
Comparability of Estimates from Secondary Sources	21
Language and Meanings	22
Low Incidence Populations	22
Meaning of Findings	22
Using Needs Assessment Findings in Planning	23
Validity of Data From Needs Assessment	23
Consensus on Agency Mission	24
Differences in Agency Policies	24
Process for Acting Upon Needs Assessment Findings	24

Table of Contents (Cont.)

Chapter		Page
	Ethics in Decision Making	25
	Political and Economic Constraints	25
3	Federal Perspective on Rehabilitation Needs Assessment	27
	Context of Needs Assessment in the State-Federal Rehabilitation Program	28
	Provisions for Planning in the Rehabilitation Act	29
	A Federal Conceptualization of Needs Assessment	33
	Implementation Considerations	35
	State Plan Requirements	37
	State Plan for the Basic State Program	37
	Continuing Statewide Studies and Program Evaluation for the Basic Program	38
	State Plan for Rehabilitation Facilities	38
	Order of Selection for Services for the Basic Program	39
	State Plan Supplement for Providing Supported Employment Services	39
	State Plan for Independent Living Services	39
	State Studies and Evaluation in Independent Living	40
	Order of Selection in Independent Living	40

Table of Contents (Cont.)

Chapter	Page
4 Contemporary Needs Assessment Practices	41
Definitions of Needs Assessment in Human Service Programs	41
Contemporary Needs Assessment Approaches	43
Discrepancy Model	43
Marketing Model	46
Decision-Making Model	49
A Generalized Structure	51
Common Methods for Locating Needs Assessment Information	53
Existing Data Sources to Determine Need	55
Original Data Collected Through Surveys of People to Determine Need	58
Group Approaches to Needs Assessment	61
Estimating Capacities and Resources	62
5 A Needs Assessment Methodology	65
A Working Definition for Rehabilitation Needs Assessment . .	66
Assumptions About How Needs Assessment Can Influence Program Planning	67
A Conceptual Structure for Rehabilitation Needs Assessments	68
Stimulus for Needs Assessment	68
Conceiving an Appropriate Needs Assessment	69
Carrying Out the Needs Assessment	71

Table of Contents (Cont.)

Chapter		Page
5	Using Needs Assessment to Influence Program	72
	Continuing the Comprehensive Cycle	72
	Qualities of a Useful Rehabilitation Needs Assessment	73
	The Needs Assessment Process Steps and Activities	73
	Conceiving the Needs Assessment	74
	Carrying Out the Needs Assessment	86
	Using Needs Assessment to Influence Program Development	93
	Toward Developing State Specific Comprehensive Needs Assessment Models	99
	References	101

List of Tables

Table		Page
1	Typical Functions for Needs Assessment in Developing Programs and the State Plan	15
2	Stakeholder Involvement and Task Force Guidelines	76
3	Identifying Key Planning and Decision Making Issues	78
4	Probes Used by Region V Study Group to Interview Agency Program Specialists	80
5	Content of the Assessment and Utilization Design	81
6	Technical Plan Format	84
7	Guidelines for Analysis and Reporting	90
8	Format for the Assessment Report	92
9	Plan for a Change Strategy	97

List of Figures

Figure		Page
1	The Socio-Political Context Shaping Rehabilitation Planning and Delivery	9
2	Discrepancy Model of Needs Assessment	45
3	Marketing Model of Needs Assessment	48
4	Decision-Making Needs Assessment Model	50
5	Generalized Structure for Needs Assessment	52
6	Region V Conceptualization of Rehabilitation Needs Assessment	69
7	Conceiving an Appropriate Needs Assessment	75
8	Carrying Out the Needs Assessment	87
9	Using Needs Assessment to Influence Program Development	94

Chapter 1

Introduction

American society is becoming increasingly aware of more of the actual needs of persons with disabilities. Much of this increased awareness has occurred because of the efforts of a better informed and more politically active constituency of individuals with disabilities. As needs are identified, service-providing agencies are challenged to respond. Since the 1986 amendments to the Rehabilitation Act, vocational rehabilitation agencies have been asked to expand services to specific populations and to provide new and different services.

Prior to the amendments, vocational rehabilitation agencies adhered to a clear goal of providing services that would result in people being competitively employed. This perspective led many agencies to design a product-oriented program in which a basic set of "services" was available to achieve the client's rehabilitation: For example, assessment, restoration, counseling, training, and placement of the person in a job that was most consistent with his/her assessed potentials and limitations.

The orientation of many state programs now is influenced by the increased range of "possible outcomes" and the broadening of activities and supports now allowable under the Rehabilitation Act. Options like Independent Living and Supported Employment are leading many state agencies to seek new need-based approaches to serving increasingly diverse populations.

The Rehabilitation Act now requires the state agency to assess the rehabilitation needs of individuals within its state and to clearly relate its planning of programs and services to those needs. In effect, state programs are required to become more responsive to the assessed needs of their various client populations. Therefore, state programs are actively seeking broader input and insight from potential consumers and other stakeholders and trying to use those findings in planning their rehabilitation program.

To remain proactive in planning for the needs of the populations they serve, agencies must develop cost-effective ways to identify changing needs of individuals with disabilities. New and different information must be acquired and used to develop better strategies for continuing to deliver high quality rehabilitation services. This was the spirit in which the Region V Study Group proceeded to learn more about needs assessment and to develop this guide for state vocational rehabilitation agencies.

Definition and Overview of Needs Assessment as a Part of Rehabilitation Agency Planning

There are many definitions of needs assessment in the literature which

influenced the Study Group's development of its concept of needs assessment in state agency program planning and development. For instance, Anderson, Ball, and Murphy (1975) define needs assessment as a discrepancy, or difference, between a preferred condition and the present condition. Miller and Wargel (1979) define needs assessment as a set of procedures "either to estimate or to measure the number, location, and needs of specific disability groups within the potential ... [vocational rehabilitation] population of the agency service area" (p. 7). Likewise, Struthers (1986) defines needs assessment as the "study of how many people need the services of ... [vocational rehabilitation] and the types of services they need" (p.2). Auvenshine and Mason (1982) and Eastmond and Nicholls (1986) view needs assessment as an administrative tool for conducting effective organizational planning.

While the above definitions may differ in some respects, they are in common agreement that the assessment results should direct or guide the planning and delivery of human services. The definition of needs assessment in keeping with the changing demands on contemporary state rehabilitation agency programs adopted by the Study Group and used throughout this guide is the following:

Needs assessment is a continuing process for systematically gathering and synthesizing valid information on the needs of individuals that is relevant to the planning and development of vocational rehabilitation service delivery programs. Needs assessment is a proactive, intentional activity. Although incidental and casual sources of data may influence planning, needs assessment is carried out on an ongoing basis, in a systematic manner, as an integral part of the agency's planning function.

Clearly the Study Group says that needs assessment is an integral part of program planning and the development process. Although it may not be conducted consciously and systematically by an agency, it is probably occurring informally among staff involved in program planning and development. Systematic needs assessment is a critical activity in careful planning and must be undertaken to guide effective organizational responses to identified needs. It is an administrative tool for identifying and relating the needs of specific populations to the resources that organizations can apply in serving those populations.

Based on needs assessment results, current needs of target populations can be identified, the needs of different groups can be prioritized, and the organization can plan how resources will be brought together to address important needs. Needs assessment can be considered an investment to assure that planning and future programs continue to meet the changing needs of those the program serves. Policy development, priority setting, program development,

and program marketing all require the kind of information that needs assessment provides.

The comprehensive needs assessment must be designed on a scale that is appropriate to the planning process that the needs assessment is supposed to support. The initial step in designing a comprehensive needs assessment study is to develop a general framework for the study. This framework interrelates the primary issues that prompted the assessment with appropriate information gathering procedures, synthesis methodologies, and the program's developmental goals. The most programmatically important issues provide scope and guide the assessment in program planning. Information-gathering procedures and synthesis methodologies are developed to efficiently address the identified issues and provide useful guidance for program decision making.

Information useful for identifying needs can come from various formal and informal sources. Needs information may be acquired from existing data collected by the agency or by other agencies and government sources. Valuable internal sources of information are client service personnel, program managers, agency planners, evaluation researchers, and current consumers. External sources may include former consumers, service providers with whom the agency contracts, other stakeholders (e.g., advocacy groups, employers), other public agencies, and members of the populations the agency might eventually serve. Various methods can be used to gather information, including secondary analyses of data contained in reports or data bases and analysis of specific new data collected through mail surveys, personal interviews, telephone interviews, community forums, or representative focus groups.

If findings from the assessment are to influence decision making and actions of the state agency, they must be integrated into planning and development. It is likely that the use of multiple sources (or several approaches) will provide the most balanced perspective on priority needs. Inclusion of both data-oriented (e.g., incidence) and perception-oriented (e.g., public opinion) sources can help assure that the pertinent issues are meaningfully responded to in planning.

Needs assessment information must be available to management when planning and decision making take place. Further, it must be presented in formats relevant for application to the planning issues that management is expected to resolve. Because it can be pertinent to the agency's long-term planning, a utilization section should be included in the assessment report that addresses the following: First, the report of findings from the assessment should relate to the strategic planning and program development issues around which the assessment was designed. Second, the report should identify the program, population, and service areas to which the findings can be applied. Third, the report must succinctly present implications that the findings have for future agency policy development and program planning.

Purpose and Audiences for the Guide

The purpose of this guide, therefore, is to help the agency assessment, evaluation, and planning personnel develop their perspective of how needs assessment fits into their state's vocational rehabilitation program planning. It is intended to offer practical and responsible suggestions that meet the intents of federal and state mandates. Between the covers of this two-volume guide, the reader will find that the following are discussed or described:

- The purposes and uses of needs assessment in planning rehabilitation programs.
- The relationships among evaluation, planning, and needs assessment.
- Some common approaches to assessing specific population needs and program specific needs required under the legislation.
- Examples of needs assessment methods that may be of help in the State Plan requirements of the Rehabilitation Act.

This guide is intended for state vocational rehabilitation agency personnel concerned with using needs assessment results for planning statewide vocational rehabilitation programs. The primary audience is the agency program evaluation, planning, and research staff who have responsibility for the state's assessment efforts including responsibilities for advising on, planning, coordinating, or conducting needs assessments for the state agency. This document should also be useful for program managers and for planning and development managers who must redevelop and implement services consistent with assessed needs of persons eligible for the program.

The Study Group did not attempt to answer all questions about rehabilitation needs assessment and the federal requirements for needs assessment. The diversity of approaches and opinions brought to the project quickly alerted the Study Group to two obvious facts: There is no single technique which should be followed and there is no "fail-safe" method of needs assessment that will guarantee that their state will be in full compliance with State Plan requirements of the federal regulations. However, some suggestions are offered on how to meet the requirements of the federal mandate.

The guide does not replicate the many valuable texts already available on the technology of needs assessment. Rather, the ideas from many of these sources were borrowed by the Study Group and were used to develop the position which the Group adopted. Lists of resources that the readers can use to take them to whatever level of expertise in needs assessment techniques they wish to go are included in the companion volume.

Finally, the reader should find alternate ways for integrating needs assessment into an agency's planning and management systems. Hopefully, the examples will provide the reader with an understanding of how needs assessment information can aid the four basic purposes for rehabilitation planning:

- Develop and expand client services under the basic vocational rehabilitation and independent living programs.
- Develop and expand client service programs for new special client populations.
- Redevelop and redeploy old and develop new rehabilitation resources within the state.
- Establish staff development and training programs that provide skills and experience relevant to needs of rehabilitation clientele.

Organization of the Guide

This guide consists of two volumes. Volume I focuses on the needs assessment process. The chapters in this volume focus on the issues underlying needs assessment in today's rehabilitation planning (Chapter 2), federal requirements (Chapter 3), different ways of conducting needs assessments (Chapter 4), and practical advice for designing, conducting, and using needs assessment findings in program planning (Chapter 5).

Volume II examines the specific mandates from the amendments to the Vocational Rehabilitation Act. Requirements for a comprehensive needs assessment and the State Plan are explored. Guidance and resources are suggested for assessment of needs of target populations and the service programs identified in federal regulations. Different sources for useful data, ways to collect relevant information, and special considerations that are important for assessment among the identified populations and service programs are examined. Practical examples from existing studies are included when possible. The last chapter in the volume lists a variety of resources and materials, including bibliography, references cited or used to develop the guide, and relevant sources of data or assistance in developing needs assessment methodologies.

Chapter 2

Issues Surrounding Rehabilitation Needs Assessment

Meaningful needs assessment cannot be conducted in a vacuum. Like the programs that it is intended to help define, it will be influenced by the state's socio-political environment and influenced by the breadth of human vision and the limitations of present social institutions. This chapter provides a two-fold discussion intended to sensitize the reader to the important conditions and issues that they must be aware of if they are to conduct a needs assessment that is meaningful to agency planning and management.

The chapter begins with a discussion of the broader socio-political environment and of the constraints under which vocational rehabilitation planning and service delivery take place. The remainder of the chapter then examines six sets of issues surrounding the design, conduct, and use of assessment findings: (a) structural issues in rehabilitation; (b) issues related to the changing expectations for needs assessment, planning, and evaluation; (c) issues related to the functions and coordination of assessment; (d) issues of ethics and humaneness; (e) issues in accessing relevant data; and (f) issues in using assessment findings in planning.

This chapter is intended to help the reader become aware of some of the critical issues in advance of their planning, conduct, and applications of needs assessment information. The solutions to many of these issues will come about as the state conscientiously implements and gains experience from use of comprehensive needs assessment in planning. Some of the issues will clearly limit the scope of the agency's needs assessment effort. Others will affect what the agency will be able to accomplish in its planning based on assessment.

Through its choice of rigorous assessment technologies, the assessment team may be able to control the impact of some of the critical issues. Others will require that considerable caution is applied as findings are interpreted for other decision makers and planners in order to minimize undue impact of their influence. Many of the issues will require action by agency policy makers. All will require agency commitment to planning based on formally conducted needs assessment.

The Socio-Political Environment of Rehabilitation Planning and Delivery

How rehabilitation programs function in a broad socio-political environment is much like that suggested in Figure 1. As depicted in the figure, the continuing core program (shown as a solid box in the lower portion of the figure) continually evolves or develops in response to both internal and external pressures of a social and political nature. These internal and external pressures

can provide constraints or open avenues and resources for agency decision making, for agency planning, for needs assessment, and for growth and improvement in delivery of a rehabilitation program responsive to citizen needs.

Planning intended to influence programs must take into account how such pressures work and how they will compete with planning efforts and influence the structure of the state's program. The extent to which management is aware and responsive to those influences can determine how responsibly the agency's program complies with federal mandates and how vital it continues to be to the needs of the constituencies it serves.

Needs assessment and program planning are both conducted in this same broad socio-political context. How the assessment team conceives, constructs, and uses needs assessment findings will be similarly affected by those pressures. From the time the needs assessment is initiated through the planning and implementation of changes in the program, the agency's planning efforts are constrained (or enabled) by the types of pressures depicted in the figure. When the assessment is being planned, the state's current investment in its program (both fiscally and professionally by agency staff) may suggest that the agency will be intransigent to significant program restructuring. However, as assessment results suggest need for new program options, emerging technology and favorable economic conditions may allow options that once were considered impractical to be both possible and acceptable to agency personnel. Similarly, as program changes are implemented and the impact of those changes become felt among significant constituencies of the agency, the political processes may again place significant restrictions on how fully the new need-based initiatives are implemented.

The figure suggests, therefore, how the broader context in which all social programs are set effectively enables, shapes, and controls what the rehabilitation program is and what it can and cannot accomplish. Because planning is affected by what takes place within this broader context, important problems or issues are raised that affect the design and conduct of the agency's needs assessment. The figure also intends to show that needs assessment is not a simple linear set of technical activities. If needs assessment is to impact planning, it must planfully anticipate such influences in its design, in its selection and collection of relevant data, and in its interpretation of findings to planning and decision making. Once this simple fact is fully considered, certain important structural, methodological, ethical, and utilization issues are apparent.

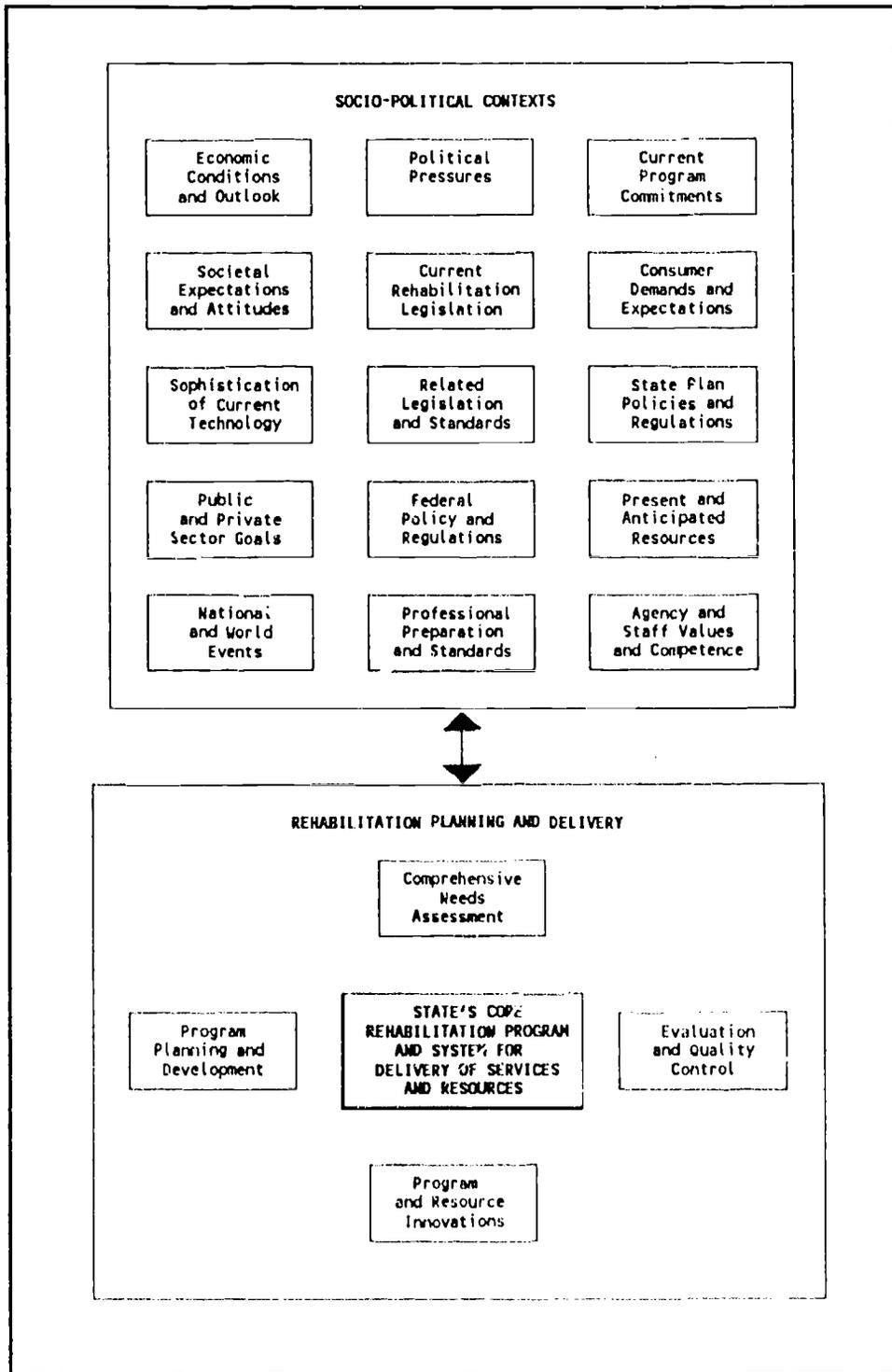


Figure 1. The Socio-Political Context Shaping Rehabilitation Planning and Delivery

Structural Issues in Rehabilitation

Structural issues relate to how the state and federal rehabilitation program is being reshaped and how its scope is changing. They are partly causes of change and partly consequences of the constraints discussed above. Among these issues are (a) changes in public expectations and needs; (b) changes in the function and structure of the state/federal rehabilitation program; and (c) changes in how needs assessment and program evaluation studies are considered in the planning, development, and implementation of needs-based agency programs.

Changes in Public Expectations and Needs

Structural issues arise partially because of the way all federally and state sponsored social programs are currently being reconsidered by the American public. There are increasing pressures upon public service agencies to both demonstrate how their programs and actions were planned and document the value of those activities for the people they serve. These pressures are based on changing assumptions about how social programs can achieve socially meaningful ends. The first assumption is that our contemporary knowledge base contains adequate information about public needs and social alternatives. The second assumption is that effective solutions to many social problems can be obtained if there is adequate input from the concerned stakeholders and if consensus is achieved prior to implementing a course of action. Competent analyses and applications of knowledge, then, are expected to lead to appropriate solutions to social problems. Adequate knowledge guides selection of sound practices, it is assumed, and these practices must then lead to real solutions.

More specifically, there have been significant changes in public expectations for vocational rehabilitation programs and services. The general American public, the community of disabled consumers, the advocates for persons with disabilities, and the professionals who serve vocationally handicapped persons are better educated and more informed than they were 8 to 10 years ago. This increased sophistication has led to public expectations for better and more comprehensive services. Some constituencies are perceiving vocational rehabilitation services as a public right (or entitlement), rather than as services available to persons who meet specific program eligibility requirements.

Advocacy in the community of persons with disabilities is having greater influence on what goes into, who develops, and how public policy is developed. Consequently, consumers and advocates not only are more vocal about their expectations, but also are less willing to accept vocational rehabilitation services on the advice of the rehabilitation professional and are becoming increasingly unwilling to abide services that do not meet their expectations. There is now an increased call for the program to actively reach out to assure access to and the appropriate use of services by a wider range of populations with disabilities.

Increasingly, they are demanding proof of the need for and the effectiveness of vocational rehabilitation programs.

Changes in the Scope of the Rehabilitation Program

This broader community participation in and sense of responsibility for vocational rehabilitation programs have fostered changes in the function and structure of the state/federal rehabilitation program. In the 1950s and 1960s, the vocational rehabilitation program subscribed to a clear goal of maximum employment, given the person's potential and the agency's use of counseling, training, and restoration services. Its focus was also on those who had been working or who could "realistically" be expected to be able to work competitively.

The rehabilitation program has broadened its scope. Its constituencies and goals have become more complex. The rehabilitation program now includes not only the basic rehabilitation program, as delivered by the state programs and the rehabilitation facilities with which it contracts. Its planning horizon has come to include other populations (e.g., disadvantaged persons, the most severely disabled, the elderly disabled, youth in transition from special education) and other program options (e.g., independent living, supported employment, rehabilitation engineering).

This reshaping of the basic program requires that "needs" addressed by agency programs be much broader than just "needs in relation to achieving a common vocational goal." When rehabilitation was a "single outcome eligibility program," relatively few restrictions were placed upon it. As occurred with other complex social service programs and as its goals increased, more expectations and requirements were introduced. In the 1986 amendments to the 1973 Rehabilitation Act, specific requirements were introduced stating that the state program be planned around a formal, comprehensive assessment of consumer needs. A considerably more important role was defined for the use of needs assessment information in determining agency direction, and a greater need was introduced to come up with processes that efficiently identify those needs.

In addition, competition among social service programs has become keener. This competition is not necessarily a competition to serve the same individuals, but the populations being served through different state-federal program combinations are becoming increasingly similar. The competition came about as the different agencies attempted to derive unique solutions to remarkably similar problems that these persons bring with them. This competition is particularly problematic as "real dollars" available for human service programs plateau.

In order to maintain previous levels of effort (and comparable funding),

various programs are increasing their "pool of promises," with the obvious result that more agencies are now attempting to achieve "first source" status among persons with disabilities. Rehabilitation must compete not only for a larger portion of a shrinking source of funds, but also to retain its preeminence as lead agency in the rehabilitation of disabled persons in its state. This competition is keenly notable between rehabilitation and education, welfare, labor, developmental disabilities, and most recently social security. Therefore, there is added pressure on all public service program administrators to demonstrate the value of their programs and agencies.

Administrators and managers are required to identify consumer-based program values, goals, and objectives. They must also formulate alternative plans for implementing programs and for accomplishing program goals. Such alternative scenarios are expected to help the agency engage in strategic or contingency planning by carefully analyzing (a) what might happen to program performance if different funding levels occur (e.g., due to legislative response, decreased competitiveness with other agencies); (b) how goals would be effectively achieved when collaborating with other agencies; (c) how accessing other agency resources can be achieved and directly benefit their clients and the program's capacity.

As state programs start to conduct comprehensive needs assessments, there are basic structural, political, methodological, and ethical issues involved in obtaining and using needs assessment information. These are also issues which come about because of practical and political consequences, including how strictly agency planning and resource allocations can be based on the results of the agency's needs assessment.

Changing Expectations for Needs Assessment, Planning, and Evaluation

How to respond to public demands for change in a reasonable manner are now constant pressures facing today's program administrators and managers. Policy makers, program administrators, and managers are now finding a variety of uses for needs assessment and program evaluation findings: (a) In defining what might be the possible needed changes, (b) in suggesting the extent of desired need for change, (c) for outlining the risks involved in the development of new programs and services, and (d) for developing management principles that can be used in implementing need-based program changes. Increasingly, they are looking to the needs assessment and program evaluation studies conducted internally as having the potential to contribute to setting program standards that can be used to guide and control the scope of change that the agency implements.

Needs assessment looks to the goals that the agency should pursue and to setting the standards to judge the agency's future performance. Program

evaluation looks at present performance, judging the extent to which the agency has accomplished what its constituencies expect of it or what it expects of itself. In combination, these two processes are expected to empirically determine the extent to which program goals are being achieved, to locate barriers to the achievement of program goals, and to identify the need for new goals and programs. While top level administration views needs assessment and program evaluation as tools to help control or alleviate the impact of such non-client specific issues, they are likely to cautiously embrace them in practice.

A useful needs assessment product can do more than satisfy the current information requirements for managing the vocational rehabilitation agency. If it is comprehensive, it may provide information that identifies required and unmet needs of individuals with disabilities from a variety of socio-economic backgrounds. It may even suggest how the conditions that precipitate need may be altered to enhance the quality of the lives of the individuals who receive rehabilitation services. And it may offer guidance as to where and how needs are most responsibly met, both by the agency and by other community resources.

Getting beyond a narrow perspective of rehabilitation needs assessment and including attention to quality of life needs, as well as vocational needs, is an important consideration that could make rehabilitation needs assessment a product useful to the entire disability-concerned rehabilitation community. Quality of life issues are important, common concerns of the entire community of individuals with disabilities and the advocacy and service organizations that work on their behalf. The rehabilitation needs assessment product could provide valuable needs data that would help to securely link the rehabilitation system to the broad array of service and advocacy options within the state.

As needs assessment comes to be considered a more useful and important tool in organizational planning, it is expected that issues will be debated similar to those debates which occurred over program evaluation and auditing issues in the 1970s: "What is its appropriate role and function in planning?" "Which of its procedures are most efficient and appropriate in a state agency?" "How much of the agency's planning resources should be allocated to its role in planning?" Some adherents will also propose that it is a data gathering and synthesis function of the research or evaluation unit of the agency. Others will suggest that it has a broader and more important function as "public conscience" for the agency's strategic planning process. Functionally, though, the model and scope of needs assessment will likely come to be defined in terms of each state's own experience and evolving planning practices.

Methodological camps will propose that "true need" can only be determined through a particular methodology (e.g., prevalence studies, case studies), while others will focus on which potential constituency can best provide accurate input on need (e.g., professionals, former clients). The amount of time

and money allotted for needs assessment will affect the quality of the final result. Quality in the needs assessment process, from whatever point of view an agency chooses, should be the foremost consideration. How significant the stimulus issue is that sets needs assessment into motion, how precise the data must be, and how long the agency will plan from the results of the assessment should provide the bases for establishing limits on the resources the agency puts into the assessment.

More attention will be required of rehabilitation needs assessment researchers to consider the impact and application of their findings. Both community attitudes and administrative use will have to be considered when designing and implementing needs assessment or evaluation studies. Public input will become increasingly important to determine not only what the public knows about vocational rehabilitation but also what the public believes these programs do or should do. Public input will be used to help set limits on what they are willing to contribute (as taxes or payments) and establish standards for what they are willing to accept as an outcome of the program. Finally, in the process of preparing and presenting needs assessment results, the issues and political context in which the needs assessment information will be used must be considered as different users of the results will require different presentations and synthesis.

Coordination and Functions for Needs Assessment

Rehabilitation agencies are expected to use far more data (in planning) than they have been able to in the past. As an ongoing process, the linkages among those doing assessment, those planning, and those with responsibility for overall management of the agency will have to become formal and effective. Table 1 lists some of the more commonly cited functions which the assessment will typically be expected to provide for the state agency.

The specific assessment activities must be tied to the decisions that managers need to make and the processes they use in making decisions. Organization, evaluation, and synthesis of such assessment findings to improve management decisions may require development of new skills and sharing of expertise among agency personnel with these functions. Managers and analysts will need to work together to conceptualize the management system, to generate the data which are valid and appropriate to the range of planning decisions under consideration, and to compile and prepare findings so that conclusions can be reliably made from such assessments.

Different units in a state agency may be equipped to coordinate the assessment. In most cases, the agency's evaluation, research, or planning units will likely have personnel with the skills needed to design and conduct the technical phases of a comprehensive assessment of need. Responsibility for

Table 1. Typical Functions for Needs Assessment in Developing Programs and the State Plan

Identify areas where staff training is needed for the vocational rehabilitation and the independent living programs.

Establish facility service agreements to address new client needs, including

Identify gaps in facility capability to provide the type, quality, and quantity of services needed by vocational rehabilitation clients;

Profile geographic coverage of facilities throughout the state; and

Project expansion, establishment, or redeployment of facilities.

Identify common and unique needs of minorities and special populations for the purposes of policy development, program planning, and expansion of service programs (e.g., for Asian populations, for urban and rural Indian populations).

Identify needs of specific groups of individuals with disabilities in the state and how existing resources can be used to address those needs.

Determine the relative need for vocational rehabilitation services among different identified segments of the population of handicapped individuals and establish priorities (e.g., in eligibility determination, in order of selection).

Estimate the adequacy of current program coverage and help develop methods to improve coverage for targeted disability groups.

Estimate the need for specific services (e.g., supported employment, independent living) and resources (e.g., assistive technology, engineering supports) among persons with severe disabilities in order to

Attend to the mobility, sensory, and physical requirements of persons with specific disabilities;

Reflect equitable statewide distribution of services;

Estimate requirements for expansion, establishment, or redeployment of centers and service programs; and

Prepare plans and budget resources to meet identified needs.

Provide data and rationale for development of a State Plan and adaptation to Plan relative to changes in Federal and State mandates; for proposals and contracts; and for development of specific services.

Provide description and analysis of the agency's environment (political, social, and economic), including services offered by other agencies.

Provide information on need and capability to federal agencies, related state programs, service providers, advocacy groups, and the legislature.

Serve as resource, consultant, and repository of information relating to needs for various types of habilitation and rehabilitation services in the state.

conceptualization and planning utilization and interpretation of assessment findings, however, should include or be in the purview of those most likely to be affected by changes promoted from the assessment finding, both inside and outside that unit: Key decision makers, planners and evaluators, implementors, and recipients of the program.

Systematic organization and interpretation of the assessment data for their needs implications are considered critical functions for the needs assessment. Depending on the scope of the needs assessment activity, assessment findings may apply to a variety of planning and development issues.

It is especially important that the agency assessment team has clear agreement with agency administration as to what constitutes needs information and what functions the needs assessment will serve. Once the issues of coordination and function are settled, it is then important that the assessment and planning team clearly understands the environment in which the agency operates and who it is that the agency really expects to benefit.

Ethics and Humaneness

Information received from people whose lives can be affected by the decisions that are made based on that information must always be considered sensitive and treated as privileged information. Special precautions and responsibilities must be assumed by the assessment staff to insure individual privacy and protection. These precautions must be made when designing the assessment and when collecting, compiling, and formulating conclusions and recommendations from the assessment data. These are basic issues of integrity and humaneness and issues of the ethics of appropriate consent procedures in needs assessment.

Ethical Concerns

There are five ethical principles underlying a responsible relationship between agency researchers and the constituencies with whom they engage when conducting needs assessments. These principles are beneficence, nonmaleficence, autonomy, justice, and fidelity.² These principles apply as guidelines, whether the data being accessed are from social indicators or from surveys and personal interviews.

² See the Code of Professional Ethics for Rehabilitation Counselors (1987), Beauchamp and Childress (1983), Fitting (1986), and Rubin, Garcia, Millard, and Wong (1988) for additional discussions of ethics in rehabilitation practice and research.

Beneficence implies a duty to promote the good of individuals or their legitimate interests. Subterfuge and entrapment are to be avoided. One way of providing protection is by honestly explaining, prior to obtaining cooperation, why and how information from interviews will be used. Another way is to use sufficient qualifications when reporting to account for the unreliability of data obtained from "similar" samples (e.g., data based on Census definitions of disability).

Nonmaleficence is the duty to avoid intentionally harming an individual. Procedures should be sensitive to the problems that participation may create for individuals (e.g., questions which may be embarrassing, offensive, or self-incriminating). Participation must not be based upon real or implied coercion (e.g., the implication that eligibility is contingent upon participation).

Autonomy refers to permitting freedom of choice by the individual without controlling constraints. Individual choice must be respected unless these choices violate the rights of others (e.g., discriminatory or false statements about others). No individual should be required to participate, or continue to participate, using implied or explicit threats (e.g., your benefits might be jeopardized).

Justice concerns rendering to others that which is fair on the basis of need and balancing the claims and interests of the many persons. Results from the assessment should be used without preconception and prejudice (e.g., not interpreting results to comply with agency expectations).

Fidelity refers to the responsibility to tell the truth and keep promises involving loyalty to the participants, their family, and to others. Promises to maintain confidentiality or to provide feedback must be kept.

Informed Consent

Informed consent³ is the primary issue whenever original research information is sought from human subjects. Consent is defined as a legal concept implying or expressing agreement, approval, or compliance when something is done or proposed. Three required elements of informed consent include (a) capacity to participate, (b) disclosure of information, and (c) voluntariness of participation.

³ See Schwitzgebel and Schwitzgebel (1980), Turnbull (1977), and American Psychological Association (1973) for further information on appropriate informed consent procedures.

Capacity refers to a person's ability to participate, taking into consideration mental ability and age. For example, children under age 18, as well as some persons with mental disabilities, may not be considered legally competent to make decisions concerning their consent. Consequently, information would have to be obtained through a legal guardian.

Disclosure of information refers to information provided by participants and how that information is caused to be revealed. Instructions and information should be provided in language that is understood by the individuals (e.g., sign, native language). The burden of responsibility falls upon the researcher that adequate and sufficient information about the purpose of the research and its consequences were provided and understood. Furthermore, explanations to the individuals about their right to refuse to consent, to withdraw consent at any time without consequences, and to have their questions about the research answered must be made. Discussion of any risks and discomforts due to participating in the study and the benefits (e.g., physical or psychological) must also be provided. If personal information will be disclosed to persons or agencies other than the researcher, this must be understood by the participant.

Voluntariness refers to a person exercising freedom of choice to participate or not participate in the research without coercion, duress, or fraud. Although participation in a survey or interview may be considered implied, specific consent should be obtained from the participant either orally or in writing.

Surveys and interviews sometimes involve potentially embarrassing or sensitive topics. Consequently, persons conducting the needs assessment should be responsive to this issue and avoid creating physical and mental stress caused by asking unnecessarily sensitive questions.

All information that can potentially expose an individual (e.g., surveys, personal interviews, videotapes) should be safeguarded. Data should be stored in a secure location so that access is limited to authorized persons and confidentiality and anonymity of individuals are assured. Data used in analysis and reporting should be coded such that individuals cannot be identified.

Identifying and Accessing Relevant Data

While federal law and regulations require that the needs of individuals for services be determined, there are a number of issues that arise when attempts are made to determine what are individuals' needs and how to improve programs with such information. The following issues and limitations should be recognized and addressed to the greatest degree possible in rehabilitation needs assessment.

Formal Versus Informal Assessment

Formal needs assessment intentionally and systematically obtains information for the purpose of planning programs and services to meet service needs as effectively and efficiently as possible. Much information or data relating to needs for services are obtained informally by state rehabilitation agencies and do become part of the agency's planning process. Informal sources of information are generally not representative even though they may be more vocal (e.g., offered by advocacy groups or by elected officials) and appear to be compelling (e.g., control appropriations, public attitudes). Formal assessment must not only produce accurate data, it must also provide information that is more compelling than the suggestions offered from informal sources.

Disability and Need

It is difficult to determine when a person is in need of services and what services are needed. While there may be fair agreement on the numbers of people with handicaps, it may be considerably more difficult to estimate the number of people with needs for specific services. Further, many people have more than one disability. In estimating the numbers of people with different needs, it is necessary to know about people who have different combinations of needs. Inferring need from presence of disability alone is tenuous.

Needs and Expectations

For many years, services were directed toward competitive employment for all vocational rehabilitation clients. In recent years, goals are being pursued on an individual basis, and the state program may include goals in nonvocational areas (e.g., independent living) and view vocational outcomes from different perspectives of what qualifies as valued employment (e.g., lifelong supported employment). Individualization and different expectations may require different service patterns. Needs must be estimated in relation to this potential array of program and service goals.

Desire, Demand, and Need

There will be important differences in which goals a program pursues, depending on whether planning is based upon desires for services, on needs for services, or on demands for services. The needs assessment often asks individuals to indicate their desire for specific services about which they may have little understanding. For example, "Could you benefit from job placement services?" or "Do you need vocational assessment services?" may only reach only a potential desire or demand for the services. Questions like "Do you need help deciding what kind of work you might be able to do?" and "Do you find it difficult to manage your finances?" address an individual's limitations and

capacities. Questions like these get at what functional needs a planned or redesigned service might appropriately address for the individuals who will receive the service.

Dynamics of Needs

The extent of need and the relative importance of various needs of people will change over time and across the state. Most need studies in rehabilitation involve determining conditions at a point in time. Program planning is usually more effective when it is based on new evidence of need and patterning of need systematically gathered over time, rather than relying on static descriptions at one or two points in time. Program development must consider the incidence of new need as well as the prevalence of current need.

Who Knows Needs Best

Former clients can tell which of their needs were met and which perhaps could have been met. Unserved or potential applicants may not know enough about their disability to accurately identify the special services their disability might require. Professionals will often know what needs for service there are among served populations but not necessarily what the needs might be among a population they have never served. Service providers may be able to identify the quality and level of service they can provide. But, like other professionals, they may be limited in their understanding of the needs of individuals they have little experience in serving and how those needs could be affected by their services.

Who knows needs best is an important issue in that each of these sources can provide data on only a few parts of the entire picture of need. Samples drawn from a variety of perspectives should be used whenever possible in order to acquire a better sense of the multi-faceted needs of a given population.

Sensitivity to Handicapping Conditions

There are special problems in acquiring information directly from people with handicaps: (a) when the disability has cultural or social significance, (b) when exposure of disability could have adverse social or economic effects, (c) when information may be of such a personal nature as to cause embarrassment, and (d) when the population comprises a relatively small proportion of the general population. Gathering these types of information will require considerable tact and subtlety in technique and questioning. Additional expense and time may be required to locate and solicit necessary indicators or data. Even then, there may be such considerable problems in identifying who has the disability and the extent of their impairments that quality and level of need may still be underestimated.

Resource Use

Identifying, accessing, and acquiring useful information takes real time, money, and personal energy away from other activities of the agency. These costs must be recognized up front and planned for in agency operations. Resources assigned to planning functions cannot be used to meet current client needs or other ongoing management operations. The planning of needs assessment must consider this fact. The scope of the assessment effort must be checked against the importance of the issue driving the assessment and the level of precision required to meaningfully plan with the findings.

Obtaining Quality Needs Data

Issues and problems arise in designing studies and information collection procedures that will affect the yield of quality data for the assessment and planning efforts of the agency. These issues and problems include (a) what information is useful in planning, (b) cautions in the use of secondary data, (c) problems when data sources are based on different definitions, (d) problems in using estimates from different data sources, (e) problems that arise due to low incidence, and (f) problems in obtaining meaning from the results.

Knowing What Information is Needed

When asked what information they need to have in order to effectively plan, managers can rarely specify the type of information that would be most useful, least of all be precise as to the form that such information should be presented in to be of greatest value. Learning to understand how managers are likely to apply needs assessment findings is probably the best starting point for identifying useful needs assessment data. Experience, on the part of both the assessment team and managers, will also help to provide guidance to efficiently identify the type of information needed and the form it should be presented for greatest application.

Comparability of Estimates from Secondary Sources

Secondary data may be obtained from the literature, from research summaries, from other agency case records and data collection, or may be in the form of social indicators. These types of secondary data are typically available through human service agency records and government data banks and can be aggregated to obtain statistical measures of the characteristics of large groups (e.g., race, age, residence, income) and their needs (e.g., based on their incidence in a location).

Secondary data, however, were collected for specific purposes and rarely for the same purposes as those of the state agency. Most often they will provide only a gross estimate of need. Ethical issues also arise whenever confidential

or potentially damaging information about an individual is included in such records even though no single piece of data is sensitive. Staff responsible for collecting or using secondary data must safeguard its confidential nature so that individuals cannot be identified, especially if the data are made available to other planners or are to be published.

Estimates of need from different sources will also often disagree. This occurs because different purposes, methods, audiences, and definitions were used to gather the information and to prepare estimates. Critical information about sample characteristics (e.g., respondent age groups) that might be used to adjust or equate different estimates are frequently not reported (e.g., some estimates might be for all ages, others may have been prepared only for persons of working age).

Language and Meanings

While much information is available through studies, reports, and other agency data systems, that information is rarely based on the same definitions used by rehabilitation agencies. For example, the U.S. Census definition of handicapped is much broader (i.e., more inclusive) than the one used in rehabilitation. Often, while there is information on the presence of health conditions or on impairments, there is little or nothing on the extent of the handicap and need for services resulting from such impairments.

While this problem is especially obvious when compiling needs information from secondary sources, it is not limited only to the use of secondary data. Terms and definitions that have specific meanings in the professions may not have the same precision for people who respond to interviews and surveys. For example, how individuals answer a question about "the extent to which their disability limits or affects their ability to work" will vary widely because of differences in their understanding of each of the words "disability," "limit," "affect," "ability," and "work."

Different sampling units and methods of aggregating original or secondary data (e.g., compiling, analyzing data) will lead to widely differing results. For example, if divorce rates are computed based on the current number of divorcees and the total number of ongoing marriages or simply from the numbers of new marriages and new divorces within a given period vastly different estimates will be obtained. Aggregating unlike units is not a desirable practice. Where aggregation is necessary, however, the "rules" originally applied when composing such estimates should be precisely adhered to and clearly described for the would-be user of those estimates.

Low Incidence Populations

Level of need and incidence are not necessarily synonymous. If a

population is of low incidence and there is expectation that real needs exist, efforts may have to be made to oversample in order to assure an accurate picture of need. Many estimates of need often do not adequately reflect the incidence of a new disability need (e.g., among HIV positive persons), within a low incidence population (e.g., Hmong), or how critical a unique need is among such populations (e.g., need for native language interpreters). The cost to obtain accurate estimates of these apparent needs, however, can conceivably outstrip resources available for assessment.

Meaning of Findings

In analysis and reporting of results, the emphasis should be on presenting significant information as simply and clearly tied to the original planning issues as is possible. For example, the recipient of the assessment finding should never have to guess whether the results represent "needs for services" or represent "individuals who need services." The discussion of the implications and options must, of course, be findings well supported by the assessment. While needs information is rarely complete, the degree to which it is reliable for the intended issue should be clear to the user.

The limitations of the findings also must be evident. Statewide patterns are rarely appropriate for regional or community planning. If findings are intended to be applied to a given region, the original sample must include adequate representation of that region in numbers sufficient to insure the reliability of any statements made about the region.

Using Needs Assessment Findings in Planning

There are several key issues which promote or detract from the use of needs assessment findings in agency planning. These include (a) perceived validity of findings, (b) extent to which there is consensus among personnel regarding the agency's basic mission, (c) variability in agency policies, (d) whether decision making is data-based, (e) ethical issues that assessment may raise, and (f) the extent to which economic and political considerations are influencing decision making.

Validity of Data From Needs Assessment

The information from a single source may not adequately represent true need or justify conclusive planning decisions. Needs assessments that use several appropriate sources of information are more likely to produce valid and reliable estimates of actual need. These estimates are more likely to be compelling and, therefore, more likely to be used in planning. When decision makers are provided this type of analysis of needs, they are more likely to make reasonable and sound planning decisions.

Consensus on Agency Mission

One of the substantive issues for a state agency trying to plan future programs based on the needs of target populations is whether there is a clear understanding and agreement on the agency's mission. The agency's mission is what ties the organization together during controversy and through change. It is like a belief system in this respect. If there is a consensus or a shared vision of what would occur if its mission were accomplished, then it will also be possible to develop methods to determine how well the agency is progressing. While needs assessment researchers must be objective and critical, they also need to understand the agency mission.

Differences in Agency Policies

Federal regulations provide guidance for the rehabilitation program, but these regulations are often subject to much interpretation. As a result, agency responses and policies differ. Even when there is consensus that the goal is employment, there may not be uniform agreement about how services are provided to attain that goal. In some agencies, there may be an emphasis on attaining entry into employment for each client with the least cost to the program and, thereby, serve as many individuals as possible with the agency's resources. In other agencies, the emphasis may be on seeking the highest level of employment for clients who show the greatest capability. This will translate into a preference to serve fewer people with greater long-term benefits and will require planning and resources quite different from those in the former example.

Process for Acting Upon Needs Assessment Findings

This issue is not with obtaining appropriate needs information, but rather with the mechanisms which promote the application of needs assessment findings in program decision making and in improving agency plans and programs. Too often, elaborate needs assessment studies are conducted, but the results of these elaborate studies have little real impact on agency decisions and the program's development or redevelopment.

Such a dismal lack of impact for needs assessment research can be altered only if two fundamental reasons for nonuse are recognized and dealt with. The first reason for nonimpact resides in management's decision-making philosophy and practice. Precedent or policy may encourage spontaneous decision making, rather than ongoing long-range planning. The agency may not have a conceptual basis or a management scheme in place that would allow it to base decisions on hard data. This is particularly evident when goals, policies, and measures of effectiveness and efficiency are not stated in relation to real data. There may be no process for reviewing and acting upon assessment results. Until there is a conscious commitment to do ongoing and long-term planning, needs assessment will not be used, except perhaps as justification for decisions arrived

at by other means.

The second reason for nonuse of needs assessment findings is the way in which needs assessment results are typically reported. This problem must also be addressed. Too often, results are presented in a single, academic format. "The report" is seemingly developed and prepared with little consideration for the context within which planning and program decisions are made or with little expectation that the results will be used. The report is often too long on technical merits, on numbers and tables, and on qualifications of the findings. And, it is often too short on interpretation, on reasonable conclusions, and on recommendations about what steps the agency should consider or take.

Several smaller reports (in a variety of formats) may have to be prepared. The preparation of these reports will have to involve the stakeholders outside the assessment unit. Each of these reports should emphasize or promote thoughtful reactions to findings (i.e., not stress research method) and provide structure and guidance for integration of the findings into the ongoing planning process of the agency (e.g., likely implications or alternatives).

Ethics in Decision Making

A particularly difficult dilemma comes about when needs assessment yields unpopular priorities or reflects negatively on the agency's performance. There are no easy solutions to dilemmas of these types, whether the agency has contracted for or conducted the research itself. No after-the-fact solution will be completely acceptable.

That the assessment will reveal unpopular or unsettling findings should be anticipated. Positive, nondefensive reactions to such findings may be forestalled by involving key constituencies and users of assessment findings throughout the assessment and planning stages. Early planning stages should forthrightly address the possibility of unpopular results. The integrity of the assessment in the planning effort is established up front, not after the fact. Then, when the careful needs assessment has been conducted (i.e., it is valid and reliable), the conclusions (negative, as well as positive) will have greater likelihood of being constructively responded to and accepted. Continued involvement of key constituents provides an opportunity to look for acceptable responses and direction, from both the agency's and other's perspectives.

Political and Economic Constraints

As previously argued, both economic and political considerations can outweigh specific findings obtained from a systematic needs assessment. Funds sufficient to achieve all of the changes suggested by a comprehensive needs assessment are not likely to be available in these times. Coalitions and public pressures, broader and statewide interagency planning, the state's economic

stability, and the balancing of competing demands from the public and private sector moderate the extent to which planning is founded on "needs assessment data."

Decision makers encountering economic and political constraints will make decisions that have advantageous consequences for some and disadvantageous consequences for other potential populations the agency might serve (e.g., by adding or eliminating a service). The needs assessment researcher and planning team should be aware of this dilemma and help promote the use of objectively obtained needs assessment results in agency decision making. How much responsibility assessment researchers or the assessment team have for promoting the changes which the assessment suggests will remain an issue that both the agency and needs assessment staff will have to regularly resolve.

Chapter 3

Federal Perspective on Rehabilitation Needs Assessment

Major changes in focus for the rehabilitation program and the requirement to redeploy rehabilitation resources often occur in response to

- Progress made on the technological-scientific frontier (e.g., improved methods and technology for overcoming impairments).
- Progress made on the socio-economic frontier (e.g., changes in access to work opportunities).
- Pressures for change and the evaluation of public policy, prompted in part by advocates and persons with disabilities.

The impact of such progress and pressures is reflected in the amendments to the Rehabilitation Act. These amendments often mandate fundamental changes in the focus for rehabilitation programs. Related legislation may also increase access and opportunities for persons with disabilities to public aid, medical services, employment, or community participation (e.g., Americans with Disabilities Act of 1990, Assistive Technology Act of 1989, Developmental Disabilities Act of 1987).

Historically, amendments to rehabilitation legislation have specified which segments of America's disabled population are to be given priority for services. In recent years, the specific forms in which services should be delivered have also been indicated (e.g., the use of rehabilitation facilities, provisions for independent living services, supported employment programs and services, and rehabilitation engineering services). Current rehabilitation legislation (a) establishes the state authorities and responsibilities for providing rehabilitation programs; (b) enables state rehabilitation agencies to plan and use their resources to meet the needs of targeted groups of persons with disabilities; and (c) requires state agencies to use, as a basis for the planning and delivery of services, a comprehensive assessment of needs. These legislative requirements and authorities have caused rehabilitation program managers to readdress basic management issues and have stimulated intensive program planning. The agency's assessment and planning resources must provide management with solutions to the following management problems:

- Who will be given greater priority for services and resources.
- What existing or new services are required.
- How to allocate or redeploy existing resources.

- How to identify and acquire new and presently unavailable resources.
- How to maintain program quality as shifts in program emphasis or in priorities for specific populations occur.

Resolutions of these issues are essential to effective program planning and development. The answers to these questions and legislative requirements will, for the most part, guide the program management and planning process. The importance and need to obtain answers to them must guide the development of the agency's assessment efforts.

This chapter serves two purposes. First, it provides the reader with an understanding of how needs assessment has evolved to what it currently is under federal regulations. A presentation made by Dr. Francis Corrigan to the Region V Program Evaluator's 9th Annual Conference in 1988 is included to achieve that purpose. The second purpose is to provide an overview of the federal requirements for developing state plans for state rehabilitation programs that are of importance in the agency's design of its assessment efforts. A synopsis of a document prepared for the Study Group by the Regional Office at Chicago is included here for that purpose.

Context of Needs Assessment in the State-Federal Rehabilitation Program⁴

Corrigan's discussion of the context of needs assessment begins with a synopsis of the history of the processes of planning as interspersed in the various Rehabilitation Act amendments and then touches on some of the current statutory provisions. Subsequently, Corrigan suggests a framework for needs assessment. Lastly, he explores some questions and implementation considerations about conducting needs assessment in the contemporary environment.

⁴At the time Dr. Corrigan made his presentation in St. Paul, Minnesota, he was both the Deputy Commissioner and the Acting Commissioner for the Rehabilitation Services Administration. He offered his observations and comments from his extensive experience with the Rehabilitation Services Administration in program evaluation, in policy development, and in administration of federal requirements for the state-federal rehabilitation program. Since then, Dr. Corrigan refined his comments to help meet the goals of this document. Dr. Corrigan's contributions do not go without notice and the Study Group's sincere appreciation nor do the contributions of Donald Thayer to the development of Dr. Corrigan's comments and historical perspective concerning the Rehabilitation Amendments Act.

Provisions for Planning in the Rehabilitation Act

In the period of the 1950s, there were no specific state requirements for comprehensive planning or needs assessment. While there were no specific requirements at that time, there were planning and program development expectations incorporated into discretionary grant provisions which Mary Switzer⁵ was encouraging and testifying to Congress about regarding expansion of the vocational rehabilitation program beginning with the 1954 amendments. The discretionary grants (a) were for extension, improvement, expansion, and planning and (b) were designed to enable states to prepare for the expansion of programs and to provide additional services to more categories of individuals with disabilities. These were two-year grants at that time. As a complement to them, new authorities were included for the establishment of facilities; for training professional personnel; for technical assistance to states and facilities; as well as for discretionary grants for special studies and investigations, research, and demonstration projects.

Subsequently, in the 1966 amendments there was provision for further expansion of the rehabilitation program. The goal for the program, as presented during the 1965 Congressional Hearings on the Rehabilitation Program, was that within five years it would be able to achieve the same number of individuals rehabilitated as number of new cases. Then, so the testimony suggests, the rehabilitation program would be in a position to deal with the backlog and resolve it from that point on. Congress responded to these various proposals. First, it provided for expansion and improvement of discretionary grants for up to five years, with the expectation that services would be available to all individuals with disabilities by 1975. Second, similar provisions were added on to the grants that had been awarded beginning with the 1954 amendments. Third, in addition to expanding planning and improvement efforts, Congress provided for extended evaluation of individuals for whom the prognosis for competitive employment was not readily discernible. Finally, the Congress provided for planning to expand the program to cover additional areas of disabilities, specific disability groups, and other similar considerations.

It is interesting to note in the historical context of the 1960s that a number of other programs, specifically the Elementary-Secondary Education Act and the mental health statutes, were already requiring, or at least in the process of incorporating, such assessment requirements for their programs. In

⁵ Mary Switzer was among founders, major proponents, and the first Rehabilitation Commissioner for what is now the Rehabilitation Services Administration. It was her energy and indomitable spirit that pushed much of the original rehabilitation legislation through the Congress. Subsequently, she developed a foundation for the state-federal program and for the establishment of vocational and medical rehabilitation facilities.

rehabilitation, on the other hand, these specific requirements were not to be mandated until 1986. As such, a number of other programs have had substantial experience with--and as a consequence have developed fairly elaborate--needs assessment models.

Returning to the 1966 amendments for a moment, there were two activities that received particular attention in terms of a planning emphasis underlying the rehabilitation program. First, the amendments provided for statewide efforts so that in building facilities, states would be able to set priorities in an orderly way much like with Hill Burton funds for medical facilities. Secondly, the amendments provided for statewide planning efforts on the part of state agencies. These were intended to complement a number of specific categorical programs such as Hill Burton facilities, mental retardation programs, and mental health programs that were being funded at the time.

Miss Switzer in March 1965 said "The time has come for the state vocational rehabilitation agency to have an opportunity to plan across the board, to tie in with these special emphasis planning, of course, but to make their own long range plans say for the next 10 years. Just because a special planning effort is not authorized with this disability, or that disability, should never mean that proper attention is denied to a group."

The legislative enactments of the 1973 amendments (P.L. 93-112) lead to the present provisions for statewide planning for facilities and rehabilitation agencies in the form of a single State Plan requirements under Section 101(a)(15). Beginning in 1973, the emphasis began to be placed on services to "individuals who had severe disabilities." In 1978, the Congress began to require that the states study not only the state's need for facilities but also the capacity and condition of facilities, plans for improvement of facility services, and policies for the use of facilities by state agencies.

Some of this interest was apparently predicated on the concern that facilities were not being adequately utilized by state vocational rehabilitation agencies. This was also a reflection of efforts linked with other major social movements. In this period of the 1970s, deinstitutionalization was being initiated and receiving considerable national attention.

In 1986, needs assessment was finally specifically included in two sections, 101(a)(5)(A) and 101(a)(15). Requirements pertaining to needs assessment were contained in both the Senate and House Bills. Essentially the only difference between the House and Senate Bills was with respect to two sets of terms: use of the term "all individuals" and the use of the word "comprehensive." The Senate did recede from the House version on the word "all," so you will note that in the quote referenced below that "comprehensive" is retained, but the word "all" is dropped in the statutory provision.

By way of background to various legislative proposals pertaining to the 1986 amendments, the Rehabilitation Services Administration (as one of many constituencies) was suggesting that states should make provision for documenting what they were doing in transition, in independent living, in rehabilitation engineering, in community-based services, and in supported employment. The rationale was that while these programs were still developmental, it was important to insure that data were available to the federal program, to state agencies, to the Administration's Regional Offices, and to other concerned parties in order to establish baselines, examine trends, look at changes in the state-federal program's accomplishment, and determine the efficacy of different approaches. In other words, by establishing a sound database on these innovative efforts, such a database would enable the Rehabilitation Services Administration to monitor progress, suggest new program directions, and suggest potential statutory changes.

The concerns of Congress at the time of the 1986 amendments were broadened. They sought to include services to Indians, services in rural areas, services to individuals with severe handicaps, and the service of rehabilitation engineering. In terms of the very specific 1986 amendments to the Act, provisions were formally introduced requiring that the State Plan incorporate the "results of a comprehensive statewide assessment of the rehabilitation needs of individuals with severe handicaps residing in the state, as well as the state's response" to that needs assessment. These provisions were finally included in both statutory and regulatory requirements for state programs. They were included in legislation because of concerns raised by various individuals and organizations when they testified before Congress regarding the number of people with disabilities who were not getting adequate attention or services under the basic Title I program.

Congress, as a reflection of its concern for needs assessment, anticipated that assessment would result in the provision of more adequate services to persons within each group, not that it would be used as a basis for choosing to serve one group of individuals with severe handicaps over another. This intent or concern was expressed in the language of one of their reports. In the statute under Title I it states that each State Plan shall include "the results of a comprehensive statewide assessment..." as was the wording in both the House and Senate bills. It reads that the State Plan must be based on "... the results of a comprehensive statewide assessment of the rehabilitation needs of individuals with severe handicaps residing within the state and the state's response to the assessment...."

Section 101(a)(15) of the amendments provides for continuing statewide studies. This poses a further question about how frequent or continuous the needs assessments must be. Section 101(a)(15) says that it must examine how these needs may be most effectively met including a full assessment for serving individuals with severe handicaps. The Finance Committee's report language

made clear that Congress wanted to have needs assessment address the needs of groups and, then, not neglect the needs of one group in consideration of another, but rather to provide the basic information for addressing the needs of additional groups of individuals with handicaps.

Another point to be made about the 1986 amendments is that Section 403 amended Section 304. This amendment to the training provision granted new authority to the Commissioner for training personnel to identify, assess, and meet the rehabilitation needs of individuals with severe handicaps. Further, there was a substantial increase in attention by the Congress to assessment of individual needs and the consideration of concerns for groups with respect to those identified needs. Under Title VI Part C, the supported employment portion of the Act, Section 634 provides that each State Plan supplement shall "specify" the results of a needs assessment conducted as required by Title I of the Act. For individuals with severe handicaps, "... such assessment identifies the need for supported employment services including the coordination and use of information within the State relating to Section 618(b)(3) of the Education of the Handicapped Act." In essence, this provision encouraged (if not expected) coordination between the state rehabilitation agency and the special education program.

In terms of the vocational rehabilitation regulations, the State Plan must consist of a "summary of the results of a comprehensive statewide assessment of the rehabilitation needs of individuals with severe handicaps residing within the state..." and, as mentioned above, the state's response to that assessment. One requirement that must be met in the State Plan for vocational rehabilitation services is that of reporting the results, in summary fashion, of the comprehensive needs assessment. The summary must also include the results of the assessment related to the need for supported employment and, finally, the state's response to that summary of the assessment.

While in 1988 state agencies were first required to provide data in support of their State Plan, the Rehabilitation Services Administration did not have sufficient time to conduct a thorough analysis of what was being submitted by state agencies. The Rehabilitation Services Administration is now looking at the information accompanying State Plans and trying to distill from it what might be useful at a national level and is also working with our Regional Office staff regarding use and improvement in the quality of information that states are providing.

What has been accomplished through the Region V effort gives an idea of what others are doing in the area of needs assessment. A few highlights from the documentation that has been submitted by states, thus far, may be helpful in considering alternatives for conducting and reporting needs assessments. Observations about the methodologies that the states have used may be of some interest along with the recommendations they are formulating pursuant to the

various types of needs assessments that have been undertaken:

1. States have used a variety of methods, including surveys of rehabilitation service providers and of consumers. In addition, various kinds of advisory committees have been used. Statewide forums and public hearings have been conducted to provide a basis for assembling needs assessment data. Additional sources of data have been used, such as the U.S. Department of Education, Special Education, Mental Health, Census reports, and a host of other reports. For instance, the state occupational information coordinating council and such other entities prepare reports from the Bureau of Labor Statistics that could prove useful in certain circumstances.
2. Other approaches that some states have utilized involve focus groups. They have identified, in the course of pursuing these investigations, a broad range of service needs such as the need for (a) accessible public transportation and enforced parking ordinances, (b) attendant care, and (c) improved job placement services. Some of the identified needs almost go without saying, but they are elaborated on to the extent that these needs assessments are fine-tuned and quantified. In your particular state, they will undoubtedly require more detailed documentation to justify and establish measures for some of these goals and objectives in contrast with some that are highlighted from across the country.
3. Training in the area of independent living was another category that was identified as an important need. Improved employer attitudes, job training, job-seeking skills, job site modification, affordable legal help, recreation, rehabilitation engineering, and adaptive equipment were seen as additional areas of need. Housing is another critical need. Lack of public education and awareness of the needs and abilities of the severely disabled were noted as other problems and needs. Lack of program information for consumers and their families; lack of coordination with school systems; services in rural areas; the need for systematic transition planning, not just from school to work, but within various phases of life; and the splintering of various special interest groups and how that impacts on them were indicated. Staff development to upgrade skills and knowledge in working with the severely disabled; statewide meetings with other state agencies; formal and informal agreements being worked out with these agencies; public service announcements addressed to the local media describing job availability; establishing of rehabilitation engineering facilities and staff; and increased job marketing by interfacing with business, industry, community, business advisory councils, and the like, were also indicated.

A Federal Conceptualization of Needs Assessment

Now, it would seem beneficial to provide a brief perspective on the question of needs assessment. First, needs assessment should be viewed in the context

of a comprehensive planning process. It is a basic, or cornerstone, activity for any kind of planning in which the rehabilitation agency may engage. It is essentially a critical component in the comprehensive planning process. Needs assessment should provide vocational rehabilitation with critical information on the problem areas in which it must invest its greatest resources.

Needs assessment should provide the base for program planning, development, budgeting and cost analysis, monitoring, and evaluation. A point worth underscoring is the fact that needs assessment must really and intentionally involve people, people like those whom it expects to serve. It also requires participation by vocational rehabilitation counselors, supervisors, administrators, community representatives, and a host of others throughout the whole process of providing information and defining values.

Essentially, what needs assessment does is provide a systematic means for all those individuals, groups, and organizations to examine "what is" and suggest "what should be." This, in a sense, if we were to define needs assessment as distinct from other planning and research activities, would be that it looks at "what is and what should be," not just what is or was. A second point worth underscoring is that there is really no one best way to conduct a needs assessment. Depending on the in-house capacity and resources that the agency has, there will be limits on the kind of needs assessment activity that can be undertaken. Third, regardless of those limitations, the results of a needs assessment should be used for establishing goals and priorities, for considering alternatives, and for designing and developing programs. It should meet at least one important test: A needs assessment should provide sound, usable information upon which to base program development and planning.

An alternative method can begin with a process antecedent to a full scale needs assessment in which the agency and all of its constituencies are involved in some goal setting, priority setting or the like, at the outset of planning. Needs assessment would (a) identify potential program goals and objectives; (b) define them from research; (c) assess program capability against those goals and objectives; (d) analyze the resultant data achieved from formal data gathering; and (e) establish priorities, as well as define outcomes that are to be sought. As the agency's planning moves from this process of needs assessment, defining what is and what should be, it encounters the question of program development. At this point, the planning process moves from definitions to development of strategies, the kinds of services that are needed, and program criteria that will guide the program development activities.

Another dimension of this comprehensive planning process would be budgeting and cost analysis. Here the program looks at questions of resource allocation, cost, benefits, and financial plans--essentially, how much the program should cost. These might include questions of the kinds that are concerned with the process of services, reflecting not only on the needs assessment or what it

has led to in program development, but to the financial planning arena as well. Program monitoring completes the cycle and becomes a continuous process whereby reporting systems are in place (using approaches such as discrepancy or variance analysis) and where appropriate program interventions are initiated as problems develop or as new needs are identified. Finally, the planning process includes program evaluation which includes (a) assessments of the delivery of the process and (b) assessment of impact and cost.

This would be a way needs assessment could be defined in the context of a comprehensive planning process. There are a number of ways to approach needs assessment and this simply outlines one that may be useful. In addition, there are a couple of points that should be addressed. One is the importance of uniform definitions. While one would want to allow for a great deal of diversity at the state and local levels, reporting to Congress and others imposes another set of constraints on what kind of information might be amenable to standardized reporting across many states or within a region. This issue is that of what is the acceptable unit of analysis: "What level of detail?" "Is the individual, group of individuals, a particular service component, or whatever level you may be addressing in planning the appropriate unit of analysis?" Uniform definitions must constitute an important consideration in any activity relating to needs assessment and subsequent reporting.

Implementation Considerations

Before closing, I have listed below how we approach some of the evaluation activities in the Rehabilitation Services Administration⁶ and then have highlighted some specific thoughts on developing assessment models.

1. The Rehabilitation Services Administration has a separate line item in the budget for evaluation activities. It is funded each year by Congress pursuant to a request from our agency. Previously it had averaged about two million dollars a year. However, recently it has been only one million dollars. The kinds of studies that the Rehabilitation Services Administration has been conducting include a drug and alcohol study that is currently under contract and a data validity study that should contribute some insights pertaining to data collection and reporting in the rehabilitation program.
2. Congress will also mandate specific studies. An indirect cost study was initiated, an assessment of the management control project is underway, and

⁶ Most of these are conducted as contract research through request for proposals. These request for proposals are developed by the Rehabilitation Services Administration, with input, and announced in the Business Commerce Daily.

a study of issues like the IWRP process are candidates for evaluation studies.

3. The statutes authorize the Rehabilitation Services Administration to conduct evaluations of all programs addressing such questions as general effectiveness and their structure and mechanisms for delivery of services, and it admonishes us to use appropriate methodologies and research designs. An interesting item that was included in the 1986 amendments, as well as being referenced in the report language, was a prohibition against control group studies. As you can see, Congress has specified some of the general directions that can be pursued and the relative degrees of emphasis that the evaluation program relating to rehabilitation shall emphasize.

Several points that I think should be addressed in needs assessment that are raised by those who advocate for changes requiring state agencies to conduct comprehensive needs assessments, and referenced in various testimony to the Congress in preparing for the Rehabilitation Act Amendments of 1986, are the following:

1. One of the ways to have attention focused on the need identified and, hopefully, the resources addressed to it, would be to insist on a needs assessment at the state level both in the Title I and in the Title VI C programs.
2. The Rehabilitation Services Administration perceives needs assessment as a program planning and development activity and a program evaluation activity. It is a key part of a larger planning process and can contribute significantly to the kinds of activities that would be undertaken or developed as a state agency or may be even developed with respect to budgetary proposals for state legislatures and others.
3. There is the expectation that there would be a wide variety of approaches that are experimented with among the states. We support this with the caveat that there is a need for standard definitions and related concerns if data are ever to be aggregated across states, regions, or the country. The problem would be very complicated if everyone had unique data that could not be aggregated. On the other hand, I do not think that anyone is proposing to aggregate all of these results in a particular way.
4. State agencies' needs assessments should be developed to meet the unique needs of each state agency. While this should be the case, there are concerns with doing so; the problem of uniform definitions is but one such concern.

Finally, some other topics that are not dealt with in these comments but that are probably worth highlighting are (a) the technical considerations pertaining

to needs assessment, (b) the development of questionnaires and statistical controls, (c) the myriad other requirements for mounting a valid needs assessment activity, and (d) other technical considerations that are accounted for in reporting findings. Some of these matters may relate to the types of consulting or other assistance you feel you need. Another consideration is the capacity you have within your state agency staff, the Rehabilitation Research and Training Centers, the Regional Continuation Programs, and others that can bring various forms of expertise to bear and are critical to the ultimate viability of the needs assessment activity that you undertake. Such considerations are a worthy part of the needs assessment activity as well.

State Plan Requirements

Federal requirements for rehabilitation needs assessment may be translated into a series of Vocational Rehabilitation Agency State Plan items and issues. The following is only a brief description of some of the salient requirements for the Rehabilitation Agency State Plan and which the development of the comprehensive needs assessment must also, therefore, consider. This summary is based on the final regulations published in the *Federal Register* on May 12, 1988⁷ (U.S. Department of Education, 1988).

State Plan for the Basic State Program

Staffing and Staff Development. State agencies must have sufficient numbers of staff available with appropriate qualifications to carry out all functions required under the Act. These will include staff available for program planning and evaluation, staff development, rehabilitation facility development and utilization, medical consultation, and rehabilitation counseling services for severely handicapped individuals. Staff development efforts must include determining training needs, implementing a plan for needs-based training, and providing training and orientation to staff to retain their competence.

Use of Rehabilitation Facilities. The state may enter into agreements with the operators of facilities to provide vocationally related services to eligible handicapped individuals. The State Plan must describe (a) the method to be used in entering into agreements with the facilities, (b) how it will ensure appropriate use of facilities, and (c) how it will assure use of existing rehabilitation facilities to the maximum extent feasible.

⁷ A much more detailed discussion of each of these requirements and the specific issues that should be addressed through assessment and in the State Plan are contained in Volume II. That detailed analysis of the requirements and issues was prepared by Dr. George McCrowey and the RSA Regional Office staff at Chicago for this guide.

Establishment and Construction of Facilities. If the state provides for the establishment and construction of public or other nonprofit rehabilitation facilities, then the Plan must describe how (a) it was determined that there is a need for establishment or construction of a rehabilitation facility, (b) such construction or establishment is in conformity with its State Plan for Rehabilitation Facilities, and (c) such construction of a facility is in accord with requirements in 34 CFR 361.1 (c) and 34 CFR 361.52.

Services to American Indians. The state should provide services of the same scope, quality, and extent as to other significant groups of the state's handicapped population. Services shall be provided, as specified in the Act, to handicapped American Indians residing in the state, including American Indians on reservations served by a special tribal program under Section 130 of the Act (i.e., Vocational Rehabilitation Services Grants for American Indians Located on Federal or State Reservations).

Continuing Statewide Studies and Program Evaluation for the Basic Program

State Studies. The state should conduct continuing statewide studies of (a) needs of handicapped individuals within the state, (b) state's requirements for rehabilitation facilities, and (c) methods by which these needs may be most effectively met.

Annual Evaluation. The annual evaluation should measure adequacy of the state's performance in providing vocational rehabilitation services, especially to those individuals with the most severe handicaps, and should be conducted according to the general standards for evaluation developed by the Secretary.

Changes in Policy Resulting from Studies. Findings derived from statewide studies and annual evaluations should be reflected in the State Plan, in amendments to the Plan, and in the state's development of other plans and policies for the vocational rehabilitation services it directly provides or purchases from rehabilitation facilities.

State Plan for Rehabilitation Facilities

The state should maintain a State Rehabilitation Facility Plan which includes (a) an inventory of rehabilitation facility services available within the state; (b) the utilization patterns of facilities and their utilization potential; (c) any needs for new, expanded, or other modifications of rehabilitation facilities and the services they provide; and (d) a priority list of facility projects necessary to achieve short-range state goals.

Order of Selection for Services for the Basic Program

Outcomes and Service Goals. If an order of selection is in effect in the state, the Plan should include (a) a statement of the general outcome and service goals to be achieved for handicapped individuals in each priority category within the order of selection and (b) the time within which these goals are expected to be achieved.

Expansion of Services to Individuals with Severe Handicaps. The State Plan should include a description of the methods used to expand and improve vocational rehabilitation services to the persons with the most severe handicaps, including the methods used to utilize rehabilitation facilities to accomplish service goals.

Referrals and Applications. The state shall establish and maintain written standards and procedures to assure expeditious and equitable processing of referrals and applications to the rehabilitation program for vocational rehabilitation services.

State Plan Supplement for Providing Supported Employment Services

Statewide Assessment of Needs. According to Title VI, Part C, the State Plan should describe (a) the extent to which individuals with severe handicaps require supported employment services, (b) the state's response to the assessment, and (c) how it coordinates and uses information provided by state's special education agencies.

Quality, Scope, and Extent of Services. The State Plan should include a description of the quality, scope, and extent of supported employment services to be provided to individuals with severe handicaps.

State Plan for Independent Living Services

Staffing and Staff Development. The State Plan should assure that the staff of the designated state unit includes specialist personnel skilled in the coordination and provision of independent living services and similar services to handicapped individuals. The Plan should assure availability of persons able to communicate with severely handicapped individuals because such individuals (a) rely on special modes of communication or nonverbal communication devices and (b) have limited English speaking ability and are from ethnic groups that represent substantial segments of the population of the community in which the independent living services are being provided. The staff development program should (a) provide for development of all classes of positions providing independent living services within the agency and (b) emphasize improving skills of staff directly providing independent living services.

Technical Assistance in Poverty Areas. The state should undertake special efforts to provide technical assistance to public and other nonprofit agencies and organizations interested in developing capability for providing independent living services in urban or rural poverty areas.

Establishment and Construction of Facilities. The state should provide for the establishment and construction of rehabilitation facilities to ensure the availability of a facility with the capacity to provide independent living rehabilitation services to severely handicapped individuals.

Priority for Program Eligible Clients. When a program of independent living rehabilitation services is conducted by a local public agency or private nonprofit organization, supported in part under 365.12 (e), the program should be designed primarily to serve those severely handicapped individuals who have been determined eligible for independent living rehabilitation services under the State Plan.

State Studies and Evaluation in Independent Living

Scope of Studies. The state should conduct studies to determine independent living rehabilitation services needs of severely handicapped individuals within the state. These studies should include (a) comparative studies of different methods for providing services, such as regional and community centers, centers for independent living, halfway houses, and patient release programs; (b) studies to determine effective alternatives to institutionalization; and (c) full use of findings from previous relevant studies.

Evaluation. The state unit should conduct evaluations of the effectiveness of the independent living rehabilitation program in meeting the service needs of severely handicapped individuals in light of program and financial resources in the state.

Use of Findings. Findings from state studies and evaluations should be utilized in planning for and improving future independent living services.

Order of Selection in Independent Living

If the designated state unit cannot furnish independent living rehabilitation services to all severely handicapped individuals who apply and have been determined eligible for independent living rehabilitation services, then an order of selection should be implemented and should be in force in accordance with 34 CFR 365.34.

Chapter 4

Contemporary Needs Assessment Practices

This chapter is intended to provide the reader with a sense of current thinking on needs assessment in human service areas. The selected review of contemporary literature examines various ideas about needs assessment and suggests how assessment can fit into the agency's planning process. Selected definitions are reviewed in terms of how they relate to program evaluation and planning. Brief descriptions of three of the most common approaches to needs assessment (or models) are then discussed to help develop a generalizable concept of assessment and develop a sense of how an agency's choice of a model will influence its subsequent planning and program development. This is followed by a discussion of ways needs data are obtained and how some of those methodologies are applied in needs-based planning. The review of contemporary practices concludes with a brief discussion of important limitations the reader must consider when trying to "compile" needs information from alternate sources.

Definitions of Needs Assessment in Human Service Programs

Quality and accountability in human services are demanded by consumers, mandated in rehabilitation legislation, required by accreditation and certification organizations, and necessitated by limited financial resources. Quality and accountability and the achievement of acceptable outcomes in human services can be greatly improved if needs assessment methodologies are developed, implemented, and applied as an integral part of an agency's strategic planning.

Definitions of needs assessment are often partially imbedded in terminology and definitions of program planning and program evaluation. Struthers (1986) applied a specific definition of needs assessment and noted that the two major management issues rehabilitation programs face are (a) to locate eligible disabled individuals and (b) to provide them with the appropriate rehabilitation services. Eligible disabled individuals are the target population and rehabilitation services are seen as the solution.

Crystal (1978) assigned needs assessment a role in the rehabilitation agency planning when discussing it in relation to agency program evaluation:

Goals and objectives are determined through a) examination of the legislative basis of the program, b) survey of program administrators and counselors, and c) survey of client needs. None of the three procedures can stand on its own. The assessment of client needs indicates the specific services required by clients within the scope of the

legislation. The development of a comprehensive rehabilitation program evaluation strategy could be based, in part, on the results of the evaluation needs assessment instrument. (p. 61)

The view of needs assessment as a major component of program evaluation is also stressed by Auvenshine and Mason (1982). They view needs assessment as a systematic approach to identification of needs in a broad social context which then provides a basis from which program objectives are developed. Auvenshine and Mason suggest that there are service needs when there is a discrepancy between a preferred condition and the present one. Such levels of discrepancy can be used to subsequently evaluate how adequately and equitably services were provided to various groups.

To obtain optimal benefit, needs assessment must go considerably beyond gathering information. It should also provide the basis for the potential success of the plan that is finally implemented to meet the needs. (p. 57)

McKillop (1987) suggests a working relationship between program evaluation and needs assessment in that evaluation seeks answers to questions about past performance while needs assessment addresses questions of what should happen in the future. McKillop prefers the term "needs analysis" over needs assessment and defines it as follows:

Needs analysis involves the identification and evaluation of needs. Needs identification is a process of describing problems of a target population and solutions to these problems. Needs assessment evaluates the importance and relevance of the problems and solutions. (p. 7)

The Wisconsin Division of Community Services report to the Governor on county needs assessment (1981) suggests the breadth of activities that can comprise the comprehensive needs assessment process in human services:

Needs assessment includes the activities aimed at using the information obtained through problem identification, evaluation of resources, and other existing information together with value judgments in order to determine program priorities for program planning and service development. (p. 6)

These definitions suggest that needs assessment is a critical and inseparable part of effective program planning. Needs assessment, then, can be conceived as a planful way of collecting relevant information about peoples' needs, of solving problems relating to setting priorities among competing needs, and of identifying solutions to delivering services that address the important needs of target populations.

Federal and state legislation and regulations (a) prioritize targeted segments of the population eligible for services, (b) set goals for the state-federal rehabilitation program, and (c) prescribe the services and other resources that can be available to meet the rehabilitation needs of disabled people. The scope and methods used to identify needs will also be guided by the regulations, but minimal compliance should not be the reason for doing needs assessment. Rather, rehabilitation needs assessment should be viewed as that part of the state agency's planning cycle that collects, analyzes, and evaluates information about the service needs of prospective constituents. Its goal should be that of providing the information that makes it possible for management to plan, deliver, and make decisions about service priorities which are need-driven. It can be the first important step to insuring that the appropriate services are available and that the services are provided in an equitable manner to the state's rehabilitation populations.

Contemporary Needs Assessment Approaches

A variety of approaches to needs assessment are found in the human services literature. Among the more popular are (a) the discrepancy model, (b) the marketing model, and (c) the decision-making model. This review of approaches is intended to offer the reader a simplified concept of the major stages in the assessment and planning cycle as represented in these three models. The reader will likely see elements of all three models in their agency's current planning or assessment practices.

The type of needs assessment approach selected by an agency will be contingent upon available agency resources, time and fiscal constraints, political or legislative mandates, and the agency's own purposes for collecting specific need data. Each of the following models makes different assumptions about the end to which and how assessment results are used in planning and decision making. The discussion should help the readers sort through their purposes and assumptions and are how different conclusions may be reached based on the application of each type of model.

Discrepancy Model

The discrepancy model, displayed in Figure 2, is perhaps the most widely understood and straightforward of the needs assessment models. It is often referred to as the "gap model."⁸ Under this model, needs assessment focuses on determining the difference between what currently exists and some desired or normative level of performance or impact. Need is evident when there is a notable and meaningful difference between the program's performance and the

⁸ For further discussion of discrepancy models see Moore (1987) and Wittkin (1977).

norm for performance in a specific area of program responsibility.

Needs assessment under the discrepancy model involves three stages:

1. Determine the norm or desired level of performance.
2. Measure current performance among the relevant groups to determine how well need is currently being met.
3. Estimate discrepancies and the meaningfulness of gaps between what has been observed and what is preferred.

The emphasis is on determining needs based on some normative expectations. Norms may have been set by experts, set according to an administratively targeted level of performance, set by legislative mandate, or based on other known data (e.g., prevalence rates in the general population). Norms are likely to be set for different populations and for each area of program responsibility. For instance, professionals may estimate the numbers of people who could successfully complete a service program. Need for additional service resources would exist when there are differences between numbers of persons served and those able to profit by the service. The norms may also be established based on actual knowledge of the prevalence of a given condition within a state. (e.g., if recovery rates from coronary disease are 8 in 10 among an identified population, need for a modified procedure exists when that rate drops to 7 in 10.)

Performance expectations are typically obtained from an expert group during the goal setting for each program or performance area. Outcomes are assessed for the target group in each performance area. Various methods like surveys, interviews, and structured groups are used to gather these performance data. Gaps or discrepancies are then identified between what should be in contrast with the current situation. Needs exist when actual performance differs in some important way from desired outcomes. Needs are prioritized and programs developed to respond to areas of need with highest priorities.

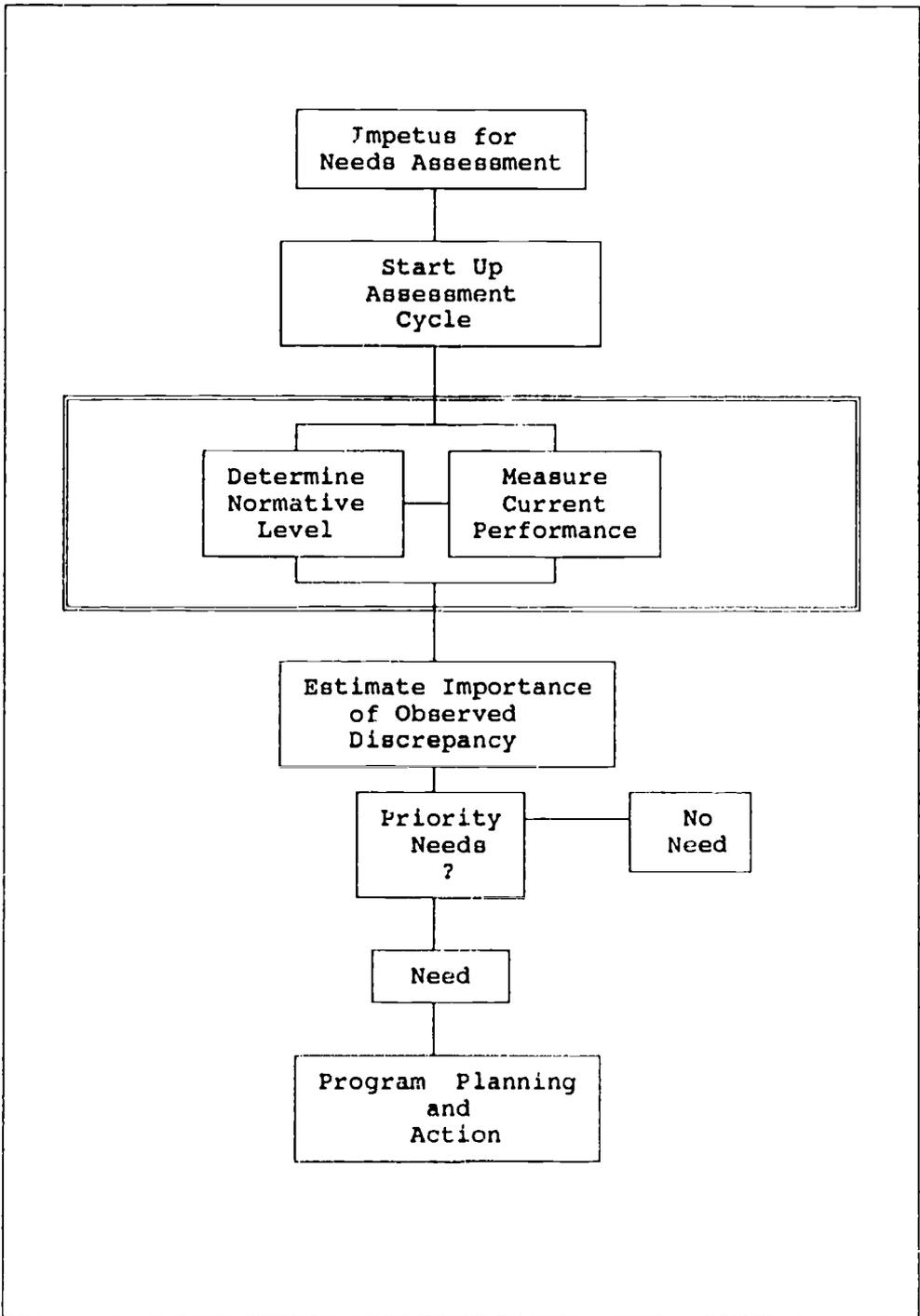


Figure 2. Discrepancy Model of Needs Assessment

Marketing Model

Marketing is the "analysis, planning, implementation, and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives" (Kotler, 1982, p. 6). Assessment under the marketing model estimates which needs of consumers can be met given the capabilities or resources of the organization. Needs are expressed as "desires" or "wants" of consumers wishing to exchange something of value with the agency providing services.⁹

Needs assessment and utilization are integrally tied together under this model (see Figure 3). Consumers are seen as having needs which have relative importance to them. The environment and the manner in which any of these needs is met can be influenced by **promotion** of one or more options, **product** or service desirability, **price** for alternatives that have to be given up, and availability or **physical distribution**. Most "valued" needs are given highest priority and offered to consumers. For the agency using this model, needs assessment is seen as a process for identifying and choosing among service options that a target population values and would, therefore, find worthwhile and use.

Generic to all marketing plans for meeting consumer demands in the marketing environment are the following elements (Smith, 1985, p. 4-5):

1. Clarify or define the organization's business or mission.
2. Analyze services, products, opportunities, and threats to the organization's capacity.
3. Estimate consumer preferences and receptivity to product line.
4. Set priorities among services and product lines, select target markets, and set a marketing mix.
5. Establish standards for evaluating results.
6. Promote and distribute the products and services.

A variation of the marketing model is a marketing audit. A marketing audit is an evaluation of an agency's marketing for the purposes of determining what

⁹ See Kotler (1982), Pride and Ferrell (1984), and Smith (1985) for further information on marketing models.

is currently being done in contrast with recommendations as to what should be done (Herron, 1978). It may be an internal audit or an external audit conducted to determine how well the agency meets or satisfies consumer needs. Comprehensive marketing audits include an analysis of an agency's mission, environment, services, pricing for services, marketing practices, and public relations. The planning and implementation stages then include:

1. Selection of the target population (actual or potential) eligible for the service and able to make the necessary exchanges.
2. Choice of competitive position which distinguishes the agency's services from those offered by other agencies and providers.
3. Development of an effective marketing mix and selecting from a range and quality of services which can maximize utilization by the target population.

The basic marketing model is becoming more popular in rehabilitation but not without some controversy. The marketing model views the client as a customer to be satisfied. Customer satisfaction with the product of rehabilitation is considered a major indicator of program effectiveness. Analysis of cases which report high or low satisfaction with services are thought to lead to adjustment of vocational rehabilitation agency priorities under this model.

Since clients do not directly pay for rehabilitation services, they may not be thought of as consumers in the marketing sense and the model may not be appropriate. On the other hand, because clients do exchange time, effort, and some independence when they involve themselves in a rehabilitation plan, their satisfaction should be a concern in how services are delivered. Concerns, though, are also raised with the use of this model because potential consumers may not be fully aware of the investment they must make to obtain benefits from each option or of the effectiveness of each option in relation to the impairments produced as a result of their disability.

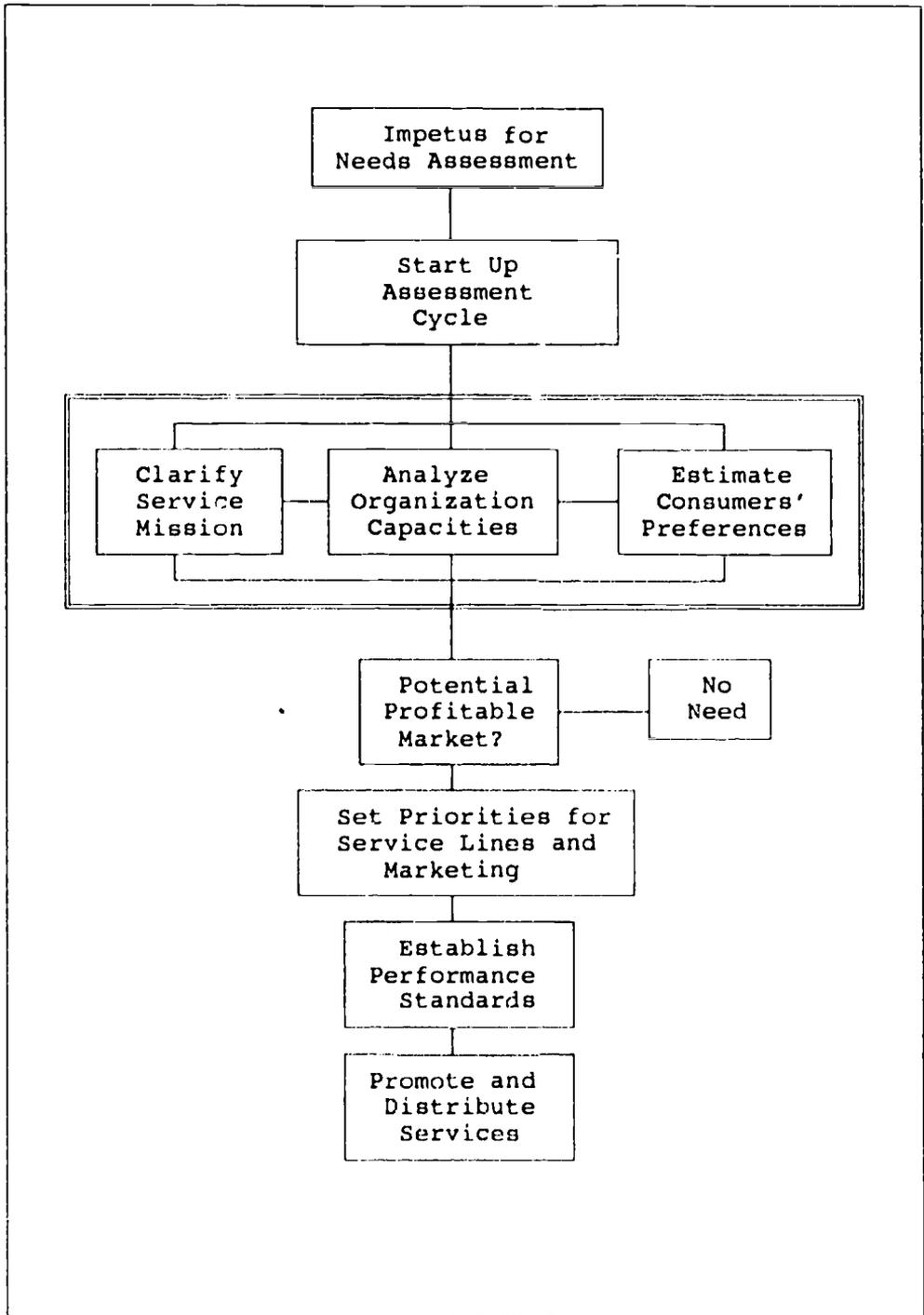


Figure 3. Marketing Model of Needs Assessment

Decision-Making Model

The decision-making model, displayed in Figure 4, was adapted from multi-attribute utility analysis to problems in applied research. Under this model, needs assessment is tied directly into the decision-making process, and needs assessment and planning are integrally linked to each other. Assessment is not a distinct phase in the planning process. Collecting the needs information is but one step in planning.

A primary distinction of this model from others is that a limited set of decisions or management alternatives is the direct outcome of the assessment. The decision options are prioritized using specific statistical methods to assign meaningful weights to each decision option. Decision makers then set policy and plan programs based on needs found to have the highest weights.

Under the decision-making needs assessment model, three assumptions guide its application:

1. Applied research is more likely to be used if it directly relates to the information needs and issues of concern to the potential users of the results.
2. No single indicator defines a construct perfectly, and needs will be most accurately depicted when multiple indicators are used.
3. Decision-maker bias in judgment will occur when complex, multidimensional information has to be relied upon. Bias can be limited if objective statistical rules are applied to simplify and synthesize complex information.

The three stages in decision-making needs assessment are problem modeling, quantification, and synthesis. During the **problem modeling** stage, probable needs are identified and problems are conceptualized as options that could be pursued by agency decision-makers. Additionally, sources of information that are appropriate to each option are identified. The potential results that are likely from social indicators, key informant surveys, or cost analysis are considered first before collecting data and are linked to each option.

In the **quantification** stage, measurements of identified needs are translated in relation to the issues of concern to the decision makers. Each need and option is statistically weighted. These weights may reflect the importance of each source of information to the decision and, perhaps, the resource costs associated with each option should that option be selected.

During **synthesis**, needs are ranked, and the needs with the highest numerical indexes are the most important needs. These are the options that should then be pursued in program development.

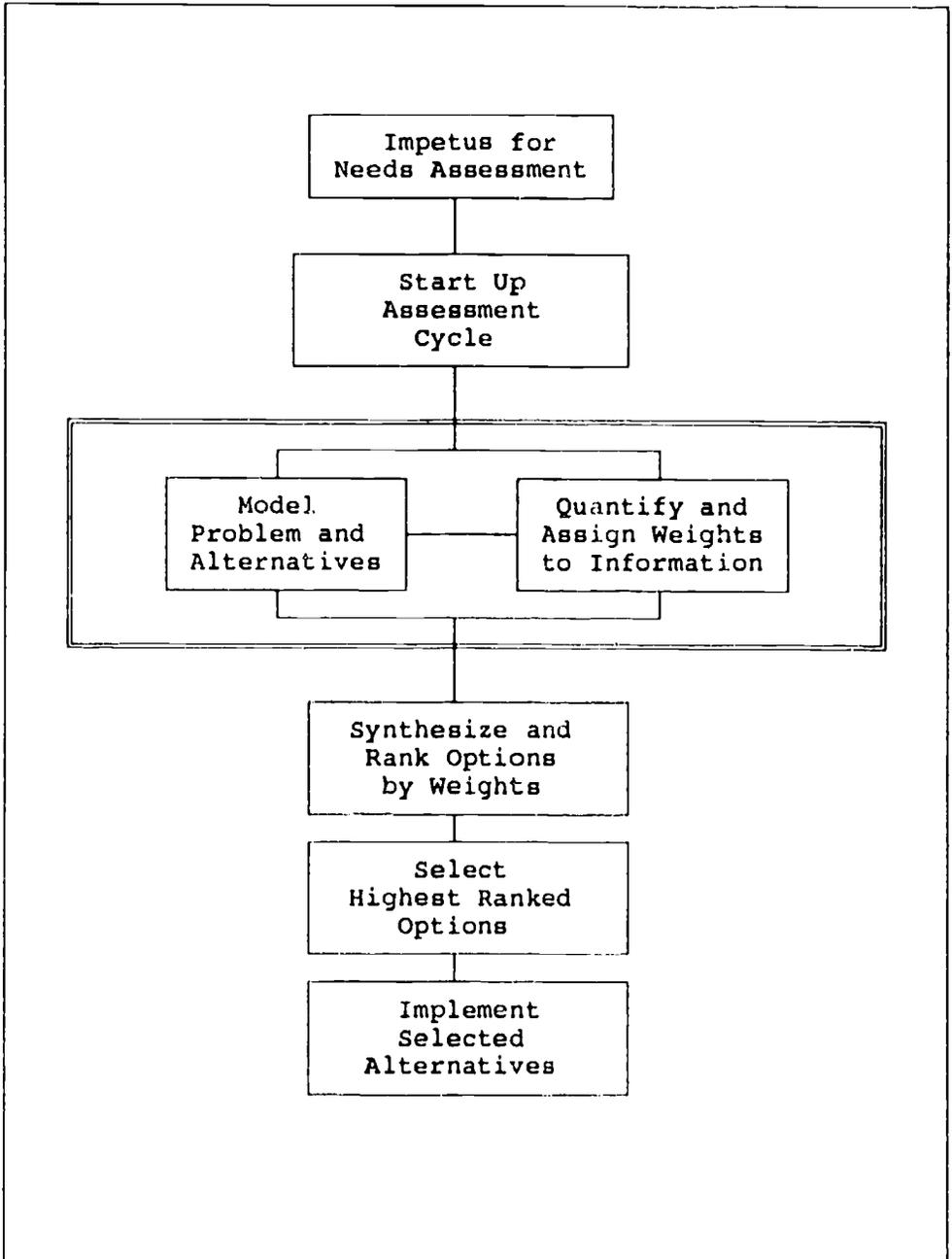


Figure 4. Decision-Making Needs Assessment Model

A Generalized Structure

A generalized concept or structure¹⁰ of the needs assessment process can be found in the models as shown in Figure 5. This structure provides a reference point for considering different models and helps outline the basic relationship between needs assessment and program planning. As shown on the figure, the needs assessment activity starts because of some **impetus for change** in the way the agency serves people. This impetus may come from changes in national legislative mandate (e.g., the establishment of the supported employment program) or from a state level initiative (e.g., a major revision of the state welfare programs).

The **start up of the assessment cycle** involves assignment of agency staff to examine the scope or to address the general requirements of the impetus for change. Questions are raised by the impetus such as "How many people in this state might need this new service?" or "What resources and costs would be involved in this service?" and "How can we get answers to these questions?" It is at this point that some of the most critical decisions are made which affect both the design and usefulness of the assessment results in planning and decision making.

Shown in the middle of the figure is the needs assessment--the actual process of designing, conducting, gathering, and analyzing needs information. In most models there are several **need assessment stages**. Under some, these stages occur sequentially while under others one or more may take place simultaneously. Many needs assessment approaches encourage the use of multiple sources of data or information and more than one technique for collecting those data. The necessary input may be obtained from consumer surveys, public hearings, analyses of disability population statistics, and surveys of opinions of key informants. The mixture of methods used will be unique to each state rehabilitation agency, since the context in which each program operates and the resources it has are as different as is its history of needs assessment activities.

Once the technical stages of needs assessment are completed, those responsible for conducting assessment face the challenge of **synthesizing the relevant information**. This is where both technical and interpretive skills are brought together, especially when the assessment approach requires compiling

¹⁰ This generalized structure of the Region V conceptualization is only introduced here. It is returned to in Chapter 5 where a more specific method is presented. In general, the reader will find that the Region V conceptualization is a framework for systematizing the various ways in which agency needs assessment and planning efforts take place.

and integrating data from a variety of sources. One or more reports (and alternate formats) are prepared in this stage that are expected to be directly usable by agency management personnel planning and decision making.

Following the synthesis of the needs assessment information, **planning and program development** occur. The key question answered by the assessment is "What needs were identified?" The assessment may reveal both new and continuing important needs.

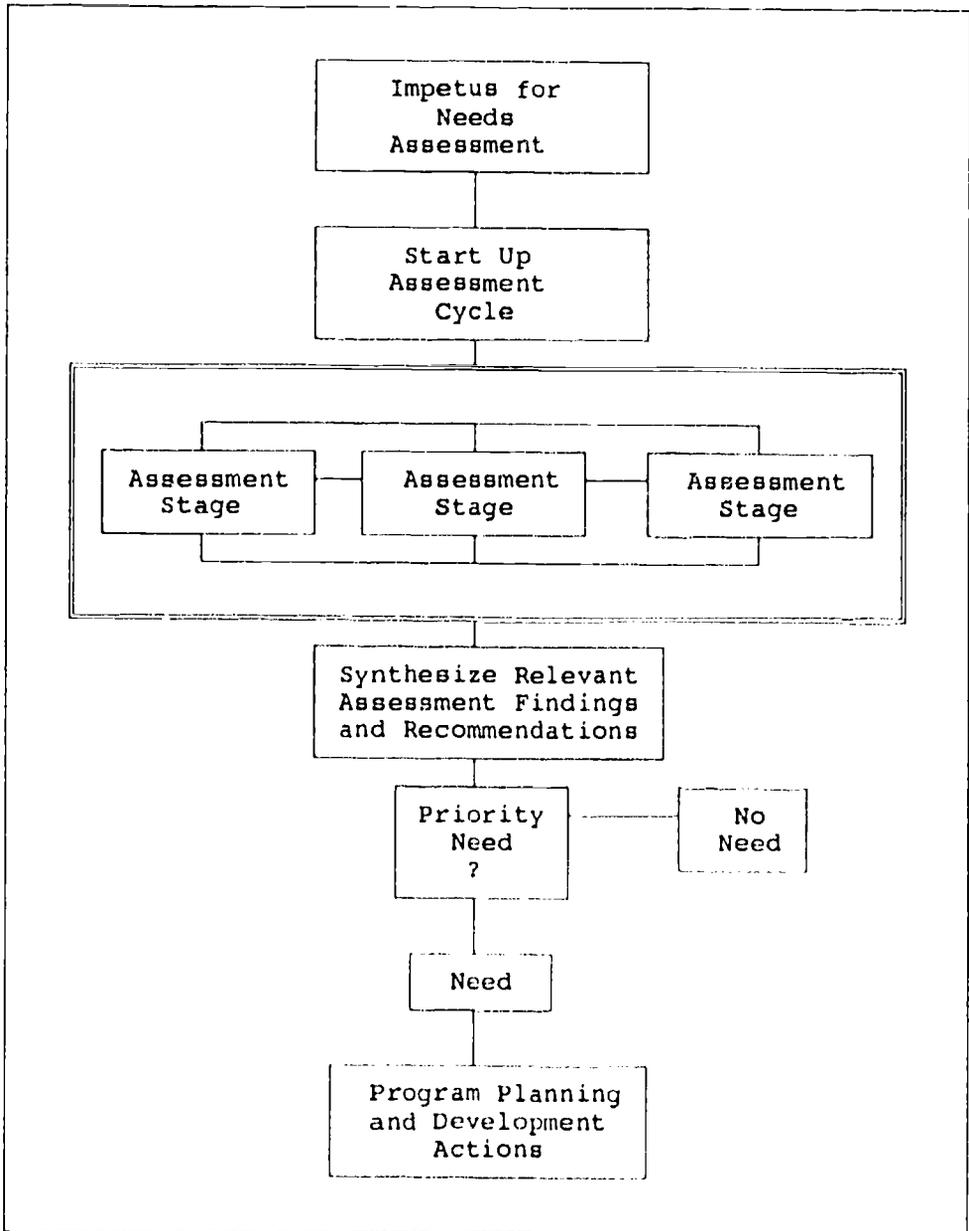


Figure 5. Generalized Structure for Needs Assessment

It is possible that the agency may find that its programs are already adequately addressing or able to address most important identified needs. It is likely that some important needs will be identified that the program cannot begin to meet with its present resources. It is also likely that important needs will be identified that the program is not intended to address. The fundamental question addressed in planning though is "What must and can the agency do in response to identified needs?" New needs may require development of alternate programs, or the agency's response might be to redeploy staff or case service dollars to areas of high need. Or it might be to approach other agencies in order to enlist or encourage them to direct more of their resources to respond to the needs.

Common Methods for Locating Needs Assessment Information

McKillop (1987), the Ohio Department of Mental Health (1983), and the Public Management Institute (1980) reviewed over 30 alternate needs assessment techniques commonly used in human service needs assessment research.¹¹ Each technique has its costs, each has its special utility, each will be appropriate for different needs assessment issues. In one instance, a survey of former clients may be most appropriate in order to identify unmet needs that current services may have been able to meet. In another, knowledge of the prevalence of disability across the state may be more important to estimate where new service providers may be required. In another case, carefully conducted census level interviews of a low incidence population may be appropriate for determining how to provide meaningful services to native Americans living in a tribal context. On other occasions, two or more approaches might be appropriate in order to determine specific needs among an underserved population and to determine willingness of the public to support funding increases.

Each approach can be used to obtain partial understanding of need and the demands those needs might place on the agency and other available resources. In all likelihood, more than one method will be useful. Also, as several techniques are included, increased accuracy and decreased bias in the assessment

¹¹ McKillop, the Ohio Department of Mental Health, and the Management Research Institute go into considerable detail describing the attributes of each technique. Any potential assessment researcher should consider their evaluations when deciding among them. Specifically, they provide ratings of each technique according to the resource requirements (cost, time, skills, manpower), analysis and reporting values (flexibility, utility, usability, generalizability, detail), audiences to which they would be most relevant, and compatibility with other assessment techniques. The three sources were used to prepare the discussion of techniques presented in this chapter.

are likely to occur. The issue is with how to carefully choose procedures that are methodologically sound and that will most likely lead to clear and valid directions for the program.

One way to think about selection of assessment techniques is in terms of the intrinsic structure of information the different methodologies provide: Techniques that are data-oriented provide quantitative information on needs, and techniques that are perception-oriented provide qualitative inferences about needs. Though the classification of approaches in this way may seem to suggest a distinction between them in terms of rigor, the methods frequently complement each other when systematically used in assessment and planning.

Data-oriented approaches attempt to derive a common metric with which to estimate level and intensity of need and, for instance, how needs are distributed across the state or among target groups and services: "How widely spread is the need, who has it, which of these services do they require?" The choice among these types of approaches is often based upon the desire for objective and reliable estimates that can be used in monitoring changing needs and that yield estimates of need which are least subject to argument among differing political points of view. These approaches provide information on questions of status, extensiveness of need, capacities and costs, and relative needs among different constituencies.

Perception-oriented approaches emphasize less the quantitative value of the data and emphasize more the qualitative themes or meanings of identified needs. While "data" may be compiled, the approaches attempt to rigorously draw out the "larger whole" of the issues. These approaches often supplement information obtained through data-intense methods (e.g., surveys, social indicator analyses, and resource use analyses). Rigorous use of these offers balance and suggests tests of interpretation achieved through "quantitative" findings. These approaches often expand understanding of applicability: "What should be included in the service to meet an identified need, how might the program be configured to achieve the solution, and what resources might have to be redistributed?" These approaches address questions of value, subtle differences in need, and the meaningfulness of how needs might be addressed.

Included among the assessment techniques most likely to be used by state agencies are (a) existing data sources (social indicator analyses, epidemiological studies, rates under treatment studies, case studies); (b) data on needs gathered through surveys of individuals (key informant surveys, prevalence and incidence surveys, community surveys); (c) group approaches to needs assessment (structured groups, community forums and hearings); and (d) techniques for identifying capacities to meet need (resource inventories, provider surveys). Each of these approaches will be considered in relation to how it can be applied in the rehabilitation planning setting, its evident strengths and weaknesses, and

the types of planning issues each is designed to help resolve.

Existing Data Sources to Determine Need

Social Indicator Analyses. This approach uses existing descriptive data found in public records to estimate need. Social indicators provide indirect sources of information on need. They are generally aggregate statistical measures that depict important aspects of a social situation or underlying historical trends and developments. Although synthetic, the characteristics and relative needs of subgroups may be estimated from data to the larger group.

There is a variety of social indicator data bearing on the need for vocational rehabilitation services available for the price of the publication in which they are found. Among the most often used are the U.S. Census data, the National Health Survey, and U.S. Department of Labor employment, labor market, and industry statistics.¹²

These records may contain data on relevant characteristics (e.g., presence of a work-related disability) and are helpful in comparing needs among different geographic areas (e.g., minority and disability distributions common to inner-city and rural areas). Bowe, for instance, used the 1980 Census to estimate total numbers of disabled persons, state-by-state, among the working-age population, and the extent of their labor market participation. While such analyses do not identify specific service-related needs, they do suggest the extent to which there might be needs. Secondary analyses like these provide a broad foundation upon which to base local or more detailed needs assessment activities.

Another example of these social indicators is data on risk factors that predict undesirable outcomes (e.g., unsuccessful closures, readmissions to psychiatric programs). Risk factor data may indicate types of services needed and offer profiles of the likely target population that could be served through those services. Representative of the questions that social indicator data can help answer include the following: "To what extent is the state's vocational rehabilitation caseload reflective of the national disabled population in terms of major disability type, age, and sex?" or "How does the state's unemployment rate for persons with disabilities compare to the national rate?"

The primary shortcoming of social indicator data is that it is only an indirect measure of need. Definitions of disability, age ranges, nature (e.g., non-institutionalized versus all), and scope (i.e., national, regional, or state) of the populations used to compile such social indicators usually do not correspond to those definitions and classifications used in vocational rehabilitation needs

¹² See Volume II for specific lists of these sources.

assessment. For example, the definition of handicapped used by the Census is much broader than that used in rehabilitation. The second shortcoming of social indicators is that these data are not updated very frequently and therefore may fairly quickly become dated. Social indicators normally can be expected to provide only rough approximations of the true need for services.

Epidemiological Studies. Analysis of epidemiological data on the distribution of disease and disability is another method frequently used to estimate possible needs. These studies are sometimes conducted directly by an agency or may rely on national or state data on disease, injury, disability, and death. Their use is similar to that of social indicators and may be subject to the same kinds of limitations for needs assessment purposes. Data from these studies may make it possible to estimate the rate, geographic location, and distribution of citizen problems or potential needs for service in an area.

This technique provides estimates of prevalence and incidence and requires a carefully determined sampling of the target population or a broad and, equally, carefully conducted survey of relevant sources or populations. This type of needs information has relatively long-term usefulness but requires considerable investment of time, money, and personnel. For that reason alone, agencies often prefer to rely on "secondary" data reported by other agencies and organizations: for example, hospital statistical reports of admissions and incidents of death and communicable and noncommunicable disease; insurance company statistical compilations on industrial, vehicle, and non-vehicle related injuries and deaths; state and national health surveys; and education agency surveys of disability among school age youth.

Rates Under Treatment Studies. This approach involves review of current system data (e.g., recent clients with a specific disability) to estimate service needs based on patterns of services that were accessed by former clients. This approach is useful for telling the extent to which the program is presently reaching a target population, if the incidence of that population is known, and is often useful for estimating how resources may have to be allocated if there is a change in utilization by a given group of individuals.

Use of system data can shed light on the following types of questions: "Is this county receiving an equitable share of vocational rehabilitation resources?" or "What are the state-wide acceptance and rehabilitation rates for traumatically brain injured persons, and how do these rates compare with the entire caseload?"

Many of the applications of this approach assume that historical patterns of use, disability density, and impact of the program are useful in predicting future service demands. Berkowitz (1967) and Haber (1985, 1987) have used such rehabilitation data to forecast need for rehabilitation services. Berkowitz derived some general methods for estimating future demands, relating intake application

data and data on labor market and economic conditions for comparable time periods. Haber used demographic correlates of disability to estimate total need for rehabilitation services. This research developed forecasting formulas for projecting service needs and resource allocations using caseload movement data, special education student information, and economic and employment data. If one can assume that present caseloads have characteristics similar to those of unserved populations, then some useful inferences can be made about needs identified with these methodologies.

Case Studies. Case studies are a fourth type of needs assessment using secondary analyses of data. Case studies involve review and analysis of demographic, service, cost, and outcome data for selected samples or targeted groups of vocational rehabilitation clients. These data can be gleaned from automated data bases, case file reviews, and former client follow-up studies.

Because client data for needs assessment purposes already exists in the agency's databases or case files, these types of assessments usually can be done at low cost. Unlike other secondary approaches, when case files are used, a subtle understanding of the dynamics and interplay between individuals and the program can be acquired, with the resulting benefit that qualitative dimensions of needs are also reflected in the analyses.

Summarized client data can yield information on the types and outcomes of services provided to selected disability groups which nicely complement the results of other needs assessment approaches. Equity of services provided to groups can be assessed by calculating program coverage, program representation, and other indicators of interest to management for each group. Comparing these indicators across disability groups can provide planners an overview of the potential strengths, weaknesses, and gaps in agency services. When such an overview is shared with other service providers affiliated with the agency, improved communications can result.

Like other secondary approaches, its weakness is that it assumes that needs of clients in service are similar to those who have not accessed services and that existing services do in fact address needs. Such an assumption may or may not be valid. Second, reconciling client data supplied by different organizations within the service delivery network such as facilities and other state agencies may be time consuming. Third, this approach, more than any other, requires considerable skill in synthesis, lest unreliability be introduced by errors of extrapolation. Fourth, considerable care must also be taken in this approach to assure client anonymity.

Original Data Collected Through Surveys of People to Determine Need

The survey is the most popular method for gathering information on needs. Surveys may include mail and telephone questionnaires, structured personal interviews, and electronically activated technology (e.g., dial-up voting on public issues). It can provide a flexible means for assessing the expectations and needs of subgroups of the target population and other audiences concerned with the needs assessment.

Surveys are often the method of choice because of their seeming economy, the seeming ease with which instruments can be constructed, and the numerous software programs available for compiling the results. On the one hand, the growing disillusionment of the American public with projections based on survey results belies the inappropriate proliferation of surveys (e.g., politically driven polls). On the other hand, the precision with which established pollsters like Harris and Gallup are able to accurately estimate buyer habits suggests the level of sophistication that is required if surveys are to be an effective tool for predicting real needs of the state's population.

There are disadvantages to relying on surveys for information on need, not the least of which is that some people simply will not respond to any form of a survey. Among the many reasons that people do not respond to surveys are that people (a) do not have the time or opportunity to participate, (b) consider them an infringement on their right to privacy, (c) fear self-incrimination, (d) are suspect of the negative impact that may result once the survey results are public, (e) become confused or are unable to understand the survey, and (f) do not have ready access to the information that is requested.

The effects of some of these concerns can be only partially controlled (e.g., by using an 800 phone number, by providing explicit assurances). At best, though, survey returns are biased. Needs assessment findings based solely on survey results reflect the needs or perceptions of needs of those who are willing and able to complete the survey. Whether the findings generalize beyond the group that participated always remains unknown.

The advantages, though, are equally attractive. Significantly larger numbers of persons and their specific perspectives on need can be acquired with a carefully constructed survey than by any other method. If numbers of responses are large enough and if the valuing of a need approaches consensus level, the possibility that nonrespondents' perceptions are not reflected becomes less likely. Also, when personal interviews are included among the survey techniques, qualitative depth can be obtained to supplement the quantitative data most generally obtained from a paper-pencil questionnaire.

Careful, systematic selection of appropriate samples, construction of

technically sound instruments, and follow-up sufficient to assure representativeness among the returns are among the requisites for proper use of this class of techniques.¹³ The costs and constraints this technique poses should be fully considered at the outset of the assessment planning process before selecting it as the option of choice. The most popular types of surveys include key informant surveys, prevalence and incidence surveys, and community surveys.

Key Informant Surveys. Key informant surveys attempt to acquire needs information from persons who are expected or known to be knowledgeable about the need issue but who usually are not participants in vocational rehabilitation. These informants may include advisory groups, advocates, government officials, and family or friends of persons with disabilities. A variation may include former clients and current clients to corroborate their perceptions regarding unmet needs, persons whose needs could not meet one or more eligibility criteria for the program, and individuals whose needs could not be met by the program (e.g., they dropped out, they failed training).

This approach can be relatively inexpensive and straightforward as questions can be posed directly to well placed and influential people. Both questionnaires and structured interviews may be used to elicit needs data. Some of the types of questions key informant surveys can help answer are the following: "Which disability groups are being underserved or not served at all?" or "What are the types of services they need?"

Whether the responses of key informants are representative or adequate will depend on at least three factors. First, if appropriate key informants can be identified, then their opinions can be obtained and the survey will be representative of their perceptions (e.g., parents and dropouts are often difficult to locate). Second, if the needs assessment issue is not seen as very important, there may be widespread nonresponse to the survey (e.g., advocacy organizations refuse to participate). Third, where there is a high level of activism, the responses and perceptions of need from one or two sets of "key informants" may be disproportionate and skew estimates of actual needs.

One of the important by-products of relying on key informants comes about because they have a vested interest in the study. As they are occasionally well placed and influential as well, feedback from these key informants may suggest how well a new service initiative will be supported or opposed by community and state leaders. Additionally, such surveys may surface issues of importance

¹³ There are many fine texts and guidebooks on these technical issues. The appendix in Volume II provides a list of some which the Study Group found useful.

among a vocal and active segment of the community.

Key informant surveys have some potential liabilities, however. Input may identify politically sensitive issues or emotionally loaded problems an agency would prefer not to confront. Second, some key informants may be overlooked, or some segments of the disabled population may not have access to these community leaders. Either of these can reduce the representativeness and utility of informant results for program design.

Prevalence and Incidence Surveys. This technique is a special purpose survey. In some agencies, this approach to needs assessment is preferred, if not the only acceptable form of needs assessment for management. Representative samples of the general population within a state (or portion of a state) are surveyed. The objective of these surveys is to estimate how many people need rehabilitation services and the types of services they need. Findings derived from the sample are then extrapolated to the entire population.

Surveys designed to estimate only the number of individuals who became in need of services during a particular time period (e.g., the past year) are called **incidence** studies. Surveys designed to estimate the number of individuals in need of services regardless of when their need began are called **prevalence** studies. The types of questions that prevalence and incidence studies can help answer are as follows: "How many people within the state need various independent living services?" or "How many people residing in the state need supported employment services?" or "How many people in each county need other vocational rehabilitation services?" or "Where are the people who need various rehabilitation services located within the state?"

These surveys are considered by some to be the most direct and scientifically valid and stable of the needs assessment approaches (Public Management Institute, 1980). The same methodological problems other surveys encounter will also be encountered with these surveys. Sampling must be done with extreme care to assure representativeness of survey results. The sampling plan for these studies must carefully and intentionally assure that need can be estimated both for the state as a whole and for each meaningful geographic regions of the state (e.g., by county, by population density).

The choice of survey media is important for eliciting a satisfactory response rate from some groups. For example, telephone interviews are more productive with blind and visually impaired individual than any other media. Paper-and-pencil mail questionnaires are not effective with nonreading populations. Even with these precautions, respondent inhibitions may cause biased reporting of service needs.

While these surveys are difficult to conduct, costly, time consuming, and

require high levels of staff expertise, they provide baseline information on how need is distributed across the potential service areas. The findings obtained under many other needs assessment approaches can oftentimes be anchored to a prevalence study.

Community Surveys. The community survey is a large-scale effort involving a general questionnaire for the population in a "catchment" area of the state. In many respects it is a hybrid for assessing needs of people, opinions and attitudes, and availability of resources to meet needs in a particular area. Former clients, current clients, persons who did not meet one or more eligibility criteria for the program, individuals whose needs could not be met by the program (e.g., dropped out), individuals who may have need, and the general public may all be targets for a community survey.

Group Approaches to Needs Assessment

Structured Groups. Structured groups usually provide supplemental needs information, rather than being an alternative to surveys, social indicator analyses, or resource use analyses. Structured groups can give "qualitative" information to balance and test "quantitative" findings. Structured interaction techniques (e.g., the nominal group approach, the delphi technique) can be used to help participants generate ideas and interpretations and form consensus among various needs or options.

The technique may be combined with a more quantitative approach or may be used following more rigorously conducted assessments. This technique is often applied to problems where the topic may be sensitive, where spontaneous opinions may not be readily expressed by some persons, and where consensus is sought on priority needs.

Community Forums and Hearings. The community forum is really a variation of the structured group approach. In this variation, testimony from the general public is secured at open meetings arranged by the agency at strategic locations within the state on the service needs of the disabled population. Usually consumers and key informants, as well as the general public, participate in these forums or hearings. Sufficient public notice must be provided, but attendance is often low unless the topic is fairly controversial. It is not a substitute for systematically collected needs information. Rather it can be an important supplement to the process.

This approach has several advantages. First it is especially useful in establishing public awareness and is good for public relations purposes. Second, though forums may be poorly attended and input from them cannot be considered representative, they do provide useful exposition of issues, particularly in nonquantitative terms. Input from community forums and

hearings can help to clarify which groups are being underserved or not served at all; which types of services need to be added, modified, or deleted; and why underserved persons need unique resources or services.

Community forums are usually relatively easy and inexpensive to promote as information gathering procedures go. While receiving citizen input, community forums also afford agency staff a unique opportunity to educate those present about vocational rehabilitation. Exchanging information can increase attendee understanding and cultivate support for the program. Forums also permit the public to verify the agency's perception of the service needs of people with disabilities.

Like other approaches, community forums have potential shortcomings. Attendees may not fairly represent the intended population as a whole, or their perceptions of service needs may be biased or inaccurate. Second, public hearings can degenerate into gripe sessions. Third, forums can inadvertently raise attendee's expectations for change to unrealistically high levels. Each of these can result in greater expenditures of agency time and funds than originally anticipated.

Estimating Capacities and Resources

Resource Inventories. Resource inventories provide descriptions of existing sources of services in terms of their capacities, coverage, costs, and outcomes. These inventories may narrowly examine caseloads and performance of rehabilitation staff directly responsible to the agency. They may be broader inventories of organizations with which the agency contracts for services (e.g., vocational facilities, hospitals, and clinics). They may be even broader in terms of organizations that meet similar human service needs as required by current or forecasted clientele (e.g., outpatient care centers, day activity programs, psychosocial centers, universities). These inventories are of particular value once client needs have been accurately determined.

If resource data are organized by service need, by type of provider, and by capacity, the inventory will be especially useful for planning. Typical questions which can be addressed with data from these inventories are the following: "What is the current capacity and utilization of basic facility services?" or "What additional types of services and service capacities are needed in northern counties?" or "Which rehabilitation office's staff are best skilled to work with this population?" or "Which community provider could establish an area-wide, economical technology referral service?"

Inventory data may be compiled from existing reports but are more often obtained with specifically designed surveys. These inventory data suggest the extent to which present resources serve an identified or targeted population, how

many persons are served, how well current resources lead to important outcomes for them, how many additional persons might be effectively served, and where gaps in present resources may exist and cannot be extended to meet newly identified client needs.

Analyses of these inventories are especially useful for determining where and how well resources are currently being used (or distributed). These analyses may also examine potential barriers in awareness, availability, accessibility, and acceptability of existing services. When other needs data are available, utilization analyses can help the agency plan how its internal and external resources could be redistributed to achieve new goals or help define which additional resources must be developed.

Provider Surveys. This approach secures input from the professionals and paraprofessionals who provide services directly to clients. These may include the vocational rehabilitation counselor, facility staff, independent living center staff, residential workers, volunteers. The approach uses either a survey instrument or a structured interview to obtain a sampling of the perspectives which these groups have regarding client needs. They are often useful as a precursor to other surveys, as they can help provide direction for questioning potential consumers.

It is assumed that quality input and needs data can be obtained from persons with experience working with individuals with disabilities, particularly about the needs of individuals in a targeted disability group with whom they work. The expectation is also that service providers can address needs more objectively, broadly, and subtly than any other group. They may be able to view the impact of disability beyond the confines of the service in which they are working and be able to operationally define need in relation to client functional goals. Among the unique qualities that they bring is an understanding of barriers (i.e., intra- and extra-personal barriers) that may also have to be considered when planning services around assessed need.

Depending on the richness of their experience in working with the targeted disabilities, these workers can provide insight into what may or may not work in helping individual clients achieve their various rehabilitation goals. They can also provide a sensitive picture of the service network in their geographic area, including its strengths, weaknesses, and gaps. These data complement data gathered by other assessment methods. If they are shared, communications among various parts of the service delivery network may be strengthened and a necessary condition established for achieving a state's planned changes in delivery.

Provider surveys are, however, susceptible to several problems. First, input may reflect only the needs of clients who are already receiving services (e.g.,

providers may not be working with individuals with multiple or severe forms of disability). The needs of individuals not served (e.g., rejected, not yet found) may differ markedly from the needs of those who currently have access to services. Providers sometimes cannot be as objective as might be hoped. Professional commitments to a discipline and economic needs may bias their estimate of functional needs of their clients in their responses.

While there are problems with this approach, it can be one of the least expensive needs assessment approaches, and higher than normal rates of return can often be achieved. If broad insight and subtlety are sought, open-ended questions and interviews may be the most desirable format in these surveys. However, open-ended questions increase the latitude for individual responses and analyses of responses may require considerable skill. As with any form of semi-structured study, unreliability has to be controlled by careful survey development and by using agreed upon conventions for synthesizing open-ended questions.

Chapter 5

A Needs Assessment Methodology

Why is your agency giving preference to persons with developmental disabilities and not to persons with traumatic brain injury? Why is there such little service coverage for people in rural areas of the state? How successful has the program been in rehabilitating chronically mentally ill persons? Is the program providing fair treatment to persons who are less severely disabled? Is the program providing comparable services to Blacks in the inner city? Are there enough qualified personnel in rural facilities to start up supported employment services? What unique needs do migrant workers have in order to access rehabilitation services? Has the distribution of disabilities changed across the state in the past 5 years? Where should the agency establish new program initiatives? Why should I, as a state legislator, vote for a full state-match for federal Vocational Rehabilitation funds?

State directors and program managers face questions like these almost daily. Typically, program evaluators are directed to retrieve program data showing what currently is **being done** for a given client group or locality, **not** what the **needs are** and **to what extent they are being met**. The former is typically easier to do because much of the needed data is available, while the latter is more often difficult because the needed data are not often available. Whom to serve, what resources are needed to serve them, where services should be located, how much will adequate coverage cost, and whose needs will agency programs not be able to meet are all questions for which administrators and planners must have answers. These are the fundamental questions that rehabilitation needs assessment is expected to address.

Previous chapters have provided much background on contemporary needs assessment. The previous chapters have (a) examined the issues which constrain the rehabilitation program and the needs assessment and planning processes; (b) related how comprehensive needs assessment became a requirement in the 1986 Amendments to the Rehabilitation Act and how that requirement affects State Plan development; and (c) reviewed and contrasted what contemporary needs assessment definitions, models, and techniques offer to agency planning.

This chapter presents the Region V Study Group's concept of a methodology for carrying out comprehensive needs assessment. The chapter is intended to offer practical advice on what needs assessment information and requirements mean for the agency that contemplates "a comprehensive needs assessment." In these several pages both a point of view about what needs assessment is if it is comprehensive and suggestions about how it fits into program planning are provided. First, the Study Group's definition is restated. Second, assumptions identified in various parts of the previous chapters about needs assessment and program planning in rehabilitation are summarized. Third, the Study Group's point of view on needs assessment, based on the generalized structure introduced

in Chapter 4, is further refined for use by the state rehabilitation agency. Finally, a step-by-step methodology is outlined for conceiving, designing, carrying through, and utilizing assessment findings in program planning and redevelopment. This last very practical section walks the reader through a way of looking at and planning the assessment, conducting the needs assessment, and preparing the agency for utilization of the results.

As has been discussed before, no single technique or model for needs assessment for state vocational rehabilitation programs is proposed. While the general management and planning issues an assessment will address are likely to be quite similar among states, the specific method appropriate in a particular state will depend on the unique features and composition of the state, the particular resources the agency can avail for planning and delivering rehabilitation services, and the state specific issues which will drive the current assessment activity. The process for planning and conducting the assessment presented in this chapter, however, can help the agency achieve the intended goals for needs assessment both in the legislation and, historically, in agency planning.

A Working Definition for Rehabilitation Needs Assessment

The following definition was adopted by the Region V Study Group:

Needs assessment is a continuing process for systematically gathering and synthesizing valid information on the needs of individuals that is relevant to the planning and development of vocational rehabilitation service delivery programs. Needs assessment is a proactive, intentional activity. Although incidental and casual sources of data may influence planning, needs assessment is carried out on an ongoing basis, in a systematic manner, as an integral part of the agency's planning function.

In this definition, comprehensiveness implies that assessment is a dynamic function integral to the program's ongoing cycle of planning and evaluation. It is not synonymous with a large-scale, single-point-in-time gathering of information. Depending on the issue stimulating a particular needs assessment effort, the scale and sources of data used to assess needs may be large or small, broadly or selectively acquired. For example, a planning issue requiring statewide incidence estimates of persons with handicapping conditions would require large-scale data collection efforts. On the other hand, an assessment driven by an issue of needing to plan for the rehabilitation needs of Southeast Asian refugees would require a smaller scale and more specialized effort. Both examples comprise instances of assessments that are part of a comprehensive assessment process. Neither example, in and of itself, is an inclusive example of comprehensive needs assessment.

Assumptions About How Needs Assessment Can Influence Program Planning

The fundamental assumption behind the above definition and the Region V conceptualization of needs assessment is that what the state agency does and how the agency approaches its rehabilitation mission can be influenced by the findings and recommendations from its needs assessments. As conceived, rehabilitation needs assessment is expected to lead to changes in state agency goals, objectives, and use of resources. However, it is important to realize that the extent to which specific needs assessment activities will be used in planning and decision making is related to how well the following considerations (assumptions) are incorporated into conceiving the assessment:

- Program planning and development take place in a socio-economic-political context. Restricted perceptions of socio-economic opportunities and conditions and consumer, professional, and public pressures influence how and which rehabilitation goals are selected and, as a result, influence how rehabilitation resources are deployed.
- Program development remains dynamic as long as political, economic, and social pressures are extant. The evolution and use of needs assessment will become influenced by these pressures and the political process in which rehabilitation planning takes place.
- Needs assessment is a formal methodology which follows accepted conventions for accessing, collecting, compiling, and synthesizing information relevant to program decisions. Systematic procedures are adhered to. Each step can be replicated. Results can be verified. Conclusions and recommendations can be logically and empirically related to the assessment results.
- No single set of information, no matter how systematically planned and collected, will be sufficient, in and of itself, to direct all program planning.
- Multiple sources of information (including both informal data and formally obtained assessment data) will be used by planners and administrators in setting priorities for services in a dynamic rehabilitation system.
- Needs assessment can influence decision making only to the extent that it is conceived and conducted to have contextual validity and provides information and options more compelling to decision makers than other sources of information.

- Needs assessment must acquire accurate information on questions and issues relevant in the political decision-making process, must clearly present findings, and must offer recommendations that are compelling to the end-user (i.e. agency using information).

A Conceptual Structure for Rehabilitation Needs Assessments

In Chapter 4 a generalized structure for a needs assessment model and the general components of a cyclic needs assessment integral to program planning and development were suggested. Figure 6 further develops that concept and translates it into state agency planning and development. As was presented in Chapter 2 on the federal perspective towards assessment and planning, the intent in the legislation was not that agencies conduct a single study, but assessment would effectively tie planning, budgeting, program delivery, and program evaluation together. Comprehensiveness, therefore, refers to the idea of "integrated program design and delivery."

Stimulus for Needs Assessment

Different stimuli will prompt initiation of a new planning cycle, which may be for the entire program or for a very small part of the program. In Figure 6, the importance of the Rehabilitation Act to the state rehabilitation program is shown as the initial stimulus for conceiving and developing a state program based on consumer needs: the 1986 requirement "that a comprehensive needs assessment be conducted" and that the "state plan include its response to this needs assessment."

This kind of "mandated" stimulus is the most dramatic and will likely lead many states to conduct a very broad-based assessment of need in the state. The figure also suggests that the Act will be the referent for subsequent reappraisal. The agency will be required to again consider redeveloping the state rehabilitation program as requirements for the state program are altered (e.g., new federal initiatives are pursued), as public expectations change (e.g., by more informed consumers), and as population needs change (e.g., emergence of immigrants).

Stimuli for initiating subsequent planning cycles (and a specific assessment effort) may come from several sources. Among the most likely to cause a major shift in program focus will come about because of technological-scientific progress, socio-economic changes, and public pressure. Technological-scientific progress includes improved methods and technology that make for more persons to overcome impairments resulting from a disability and to benefit from rehabilitation processes (e.g., treatment of head injuries increased the likelihood of post-injury survival). Socio-economic changes include attitudinal or economic changes that affect individuals' potential for access to work opportunities by

persons with disabilities (e.g., labor shortages in entry-level service jobs). Public pressure, above all else, provided in part by advocates and disabled persons themselves, can stimulate change. It can promote evolution of the Act and public policy or direct demands on the state program (e.g., passage of the American's with Disabilities Act).

Other stimuli that can set an assessment-planning cycle in motion include (a) negative findings from a program evaluation, (b) unusual declines in referrals from a target source, (c) internal changes in program staffing that require staff development, (d) budget cuts by the legislature, (e) judicial decisions affecting eligibility and closure criteria, (f) changes in state labor laws, (g) public demands for specific changes, and (h) staff identified issues and proposals.

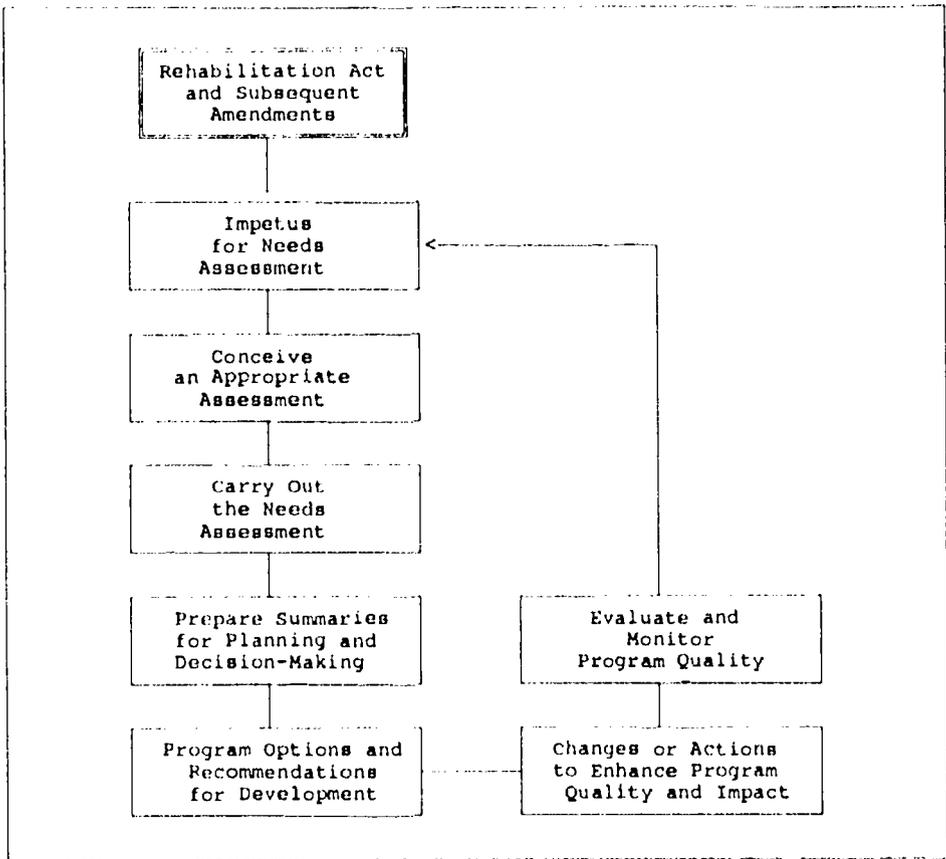


Figure 6. Region V Conceptualization of Rehabilitation Needs Assessment

Conceiving an Appropriate Needs Assessment

Unfortunate though it might be, rehabilitation services are planned on the basis of partial information, a condition that the needs assessment effort should attempt to alleviate. When conceiving the design of the assessment, decision

makers and planners should be involved in (a) deciding the issues that are most important to decision making, (b) exploring how the findings and recommendations from the assessment can be used, and (c) deciding how much of the agency's resources (time and effort) can be invested in acquiring usable needs data and in managing the change process once new needs are identified.

Needs assessment should be designed to provide the information that is most required for agency decision-making and planning. It is more likely that results will be acted upon if their use in program planning is considered well in advance of instrument selection and data collection. There are some necessary conditions in the agency that will increase the likelihood that the needs assessment findings will be applied.

The level of investment in needs assessment (and in planning using it) will vary by agency and the importance of the issues. In general, it is of little benefit to generate more data than the system is able to use or able to plan with. Likewise, it is not worthwhile to generate data about issues that are only incidental to the planning and decision making that will come about. Similarly, the design for the assessment should be in keeping with the agency's resources to acquire, organize, and report needs information **and** the agency's resources to conduct systematic data-based planning (e.g., prepare and act upon program options and recommendations).

Quite similar decisions are made at the federal, state, and local levels. Federal decisions require national data, state decisions require state data, and local decisions require local data. Likewise, subprograms require data for certain subpopulations that may be defined by disability type, age level, expected outcomes of services, and other variables. The general types of decisions that they are each expected to make from the assessment are with respect to the following:

- What specific rehabilitation programs there should be.
- How large the specific program service needs to be.
- What specific services and resources should be provided.
- What resources, skills, and capacities need to be developed to provide the services.
- What additional needs information should be obtained.

In practice, some of the key decisions about the size and types of programs offered are made by federal and state decision makers (e.g., the United States Congress, the Rehabilitation Services Administration, the state legislature).

However, state agencies do have an impact on those decisions, and an assumption of the Study Group is that state agencies expect to take an active role in the overall state-federal program's development.

Federal legislation requires statewide planning for vocational rehabilitation. While the focus is on the vocational rehabilitation program, similar functions are performed for independent living, supported employment, and other designated programs. The primary decisions about the types and sizes of programs are made at the executive level in most state rehabilitation agencies. Decisions about program models and their geographic distribution may be made by program managers. Decisions about local programs and services to individual clients are made by local managers and counselors. While information is needed at all program levels and locations, the level at which planning data are presumably first needed is at the state level, where the most far-reaching agency decisions are made. Federal legislation requires statewide planning.

Selection of specific methods to collect relevant information should follow once consensus is achieved on the issues and focus for the assessment, potential uses of the findings in planning, and the level and types of resources that will be available for conducting and using needs assessment findings. The written assessment design should specify (a) the issues upon which the study will focus; (b) the specific data that will be accessed relative to those issues; (c) the data sources or populations from whom data would be acquired; (d) the method for sampling data or a population (if necessary); (e) the instrumentation and procedures for collecting or recording data; (f) the procedures for validation of data and protection of participants; (g) data processing and analysis methods; (h) the prospective reporting formats and data processing needs; and (h) an operational plan, including major activities, individual responsibilities, timelines, and budget.

Carrying Out the Needs Assessment

The selection of a methodology is guided by issues of data quality, efficiency in the use of agency resources, and agency staff sensitivity to the political context within which information from needs assessment will be used. It is at this point that agency personnel directing the assessment activity must be most rigorous in use of their technical skills. Whether the assessment is conducted internally or under contract, the responsibility for assuring that the approach used to appraise needs is of acceptable professional standards and of practical use must remain in the hands of agency staff responsible for the study.

Plans for how needs assessment information will be used in planning and verification procedures should be developed at the same time the assessment approach is selected and before the method is implemented. Quality control must be introduced, whether the assessment method is a systematic application of a research principle (e.g., by imbedding validating questions in an interview

protocol, by checking sample parameters against the original sample plan) or is a secondary analysis of existing data from reports (e.g., by cross-verifying assumptions for extrapolating estimates, by independently checking coding of content from open-ended questions).

Using Needs Assessment to Influence Program

The needs assessment findings are most useful when they respond concisely to the decision-making issues that were originally identified and when practical interpretations and options relevant to the planning process are presented. No data are inherently worthwhile, useful, or valid in application. Interpretation of the findings prepared jointly by the several interested parties (i.e., decision makers, planners, and the assessment staff) can help assure that the results of the assessment are adequately related to the planning process.

Often the technical assessment process is considered complete when the findings are presented to the administrator. The use of the assessment results, however, is a part of the larger planning process that inherently must consider not only identified needs and resources but also competition for resources. Existing system commitments and the capacity of the system to address any needs place limits on what can and will be implemented.

Need-based planning is, therefore, much more than the application of findings. The values of all persons concerned with the rehabilitation program (advocates, administrators, practitioners, politicians, and the general public) do become involved. Decisions about how to deploy (or re-employ) resources, how to change ways in which services are made available, and how to fit novel approaches into the system are affected by agency staff values and the broader socio-economic-political context of the program. The role of the assessment team at this point in the planning process is to help the agency remain responsive to the significant needs identified in the assessment.

Continuing the Comprehensive Cycle

The process, as described, continues because the fundamental issues continue to reappear and must be re-addressed. Not all significant changes in the program required by federal mandate or identified as an assessed need will occur at once. Needs assessment and planning do not produce a completely formed "new" system. Unmet needs and new stimuli will reinitiate this planning process.

Systems as complex and established as is a state rehabilitation program usually change in incremental steps. As such, the utility of the assessment may not be fully realized in the initial cycle but may become a continuing source of information and guidance to the program planning process. With each cycle, assessment information accumulates and an increasingly complete picture

develops of what is, what is needed, and what can be accomplished with the agency's resources. Program planning is, then, increasingly able to help the agency meet consumer needs as administrators and planners come to differentiate what has been and what has yet to be accomplished.

Qualities of a Useful Rehabilitation Needs Assessment

As depicted in the Region V concept, needs assessment has a central role if the agency's continuing process of redirection, redeployment, or redevelopment of the program is to occur. Such functionally valued guidance results from a well conceived and conducted assessment. The following are the qualities of such an assessment:

- **Consciously designed.** Design of the assessment was conceived around and developed to address the issues most important for planning and management of a responsible rehabilitation program.
- **Contextually relevant.** Designs and procedures were adopted that sensitively anticipate and account for the pressures and influences that can bias the assessment and adversely affect decision making and delivery of a program that meets important rehabilitation needs.
- **Properly conducted.** Appropriate sources of data and techniques to acquire data were used that efficiently provide measurements relevant to the management issues and to subsequent planning and decision making.
- **Meaningfully compiled.** Assessment data were accurately synthesized and the results translated to identify compelling information and specific options and program recommendations.
- **Effectively communicated.** Findings and recommendations were presented to planners and decision makers in formats and in language meaningful to their roles. Options and recommendations were presented accurately, clearly, and concisely, while sensitive to pressures and influences that may constrain implementation of options.

The Needs Assessment Process Steps and Activities

In this section the reader is taken through the practical process of conceiving, of conducting, and of maximizing the use of the needs assessment

findings in planning. As previously stated, the assessment and planning cycle is initiated as a result of some stimulus, and it continues until program redevelopment has been fully planned and the changes in program set in motion. Program monitoring and evaluation picks up from needs assessment at the point when implementation of the modified program has been accomplished. The criteria necessary for monitoring the modified program will have been provided as part of the assessment stage.

Considerable detail is provided in this section in text, in tables, and in figures for the would-be assessment staff. Such detail is provided in order to alert the reader to what a complete assessment and planning cycle will look like. This micro-level presentation parallels the more global presentation in Figure 6 and the discussion that accompanied that figure in this chapter.

The detailed steps will not be as obvious in practice as presented here. Quite likely, the steps presented here will blend together and be abbreviated. In regular practice, too, because these systematic procedures are followed, the depth adhered to in some steps will be less than described in our "ideal." The reader is encouraged to consider these as guidelines against which to check agency efforts, no matter how complex or elementary the agency's needs assessment activity.

Conceiving the Needs Assessment

The purpose of this set of activities is to establish a design that incorporates change as a planned outcome of the assessment. While the six major steps are presented linearly in Figure 7, the reader will quickly see that the first three can occur quite interactively. The first three steps are intended to achieve stakeholder involvement at the onset in order to develop their commitment to the needs issues. Each stakeholder should be provided the opportunity to acquire as complete a sense as possible of (a) why, how, by whom, and what must be accomplished in the particular needs assessment and (b) what might be involved if necessary program change were accepted. Perhaps, among the most important outcomes of these steps is that these prospects are written down in the form of a design and technical plan.

Stakeholder Involvement and Taskforce. Stakeholders are people and organizations likely to be affected by or affect any potential change. They include proponents and opponents to change. They have vested interests in what the agency does or can do and are found both inside and outside the agency. Stakeholders can be a vital resource at all points in the assessment and planning: for ideas about how and where to get data, in instrumentation development, in collecting data, and in interpreting and developing implementable changes.

Early involvement of stakeholders and keeping them continuously informed (or actively involved) can do as much for impacting on programming as any other effort. Many stakeholders will represent several interests and different areas of expertise. As with every consideration in the assessment, the size and scope of concerns represented on the task force must be in keeping with the potential importance of the initiative. At a minimum, the key decision maker who will have responsibility for the agency's acting on the assessment; the points of view of consumers, program planning, program delivery; and technical expertise must be represented on a basic task force if it is to be effective. Their interests and expertise should be the foundation of the assessment taskforce. Guidelines for identifying, setting up, and using a stakeholder task force are provided in Table 2.

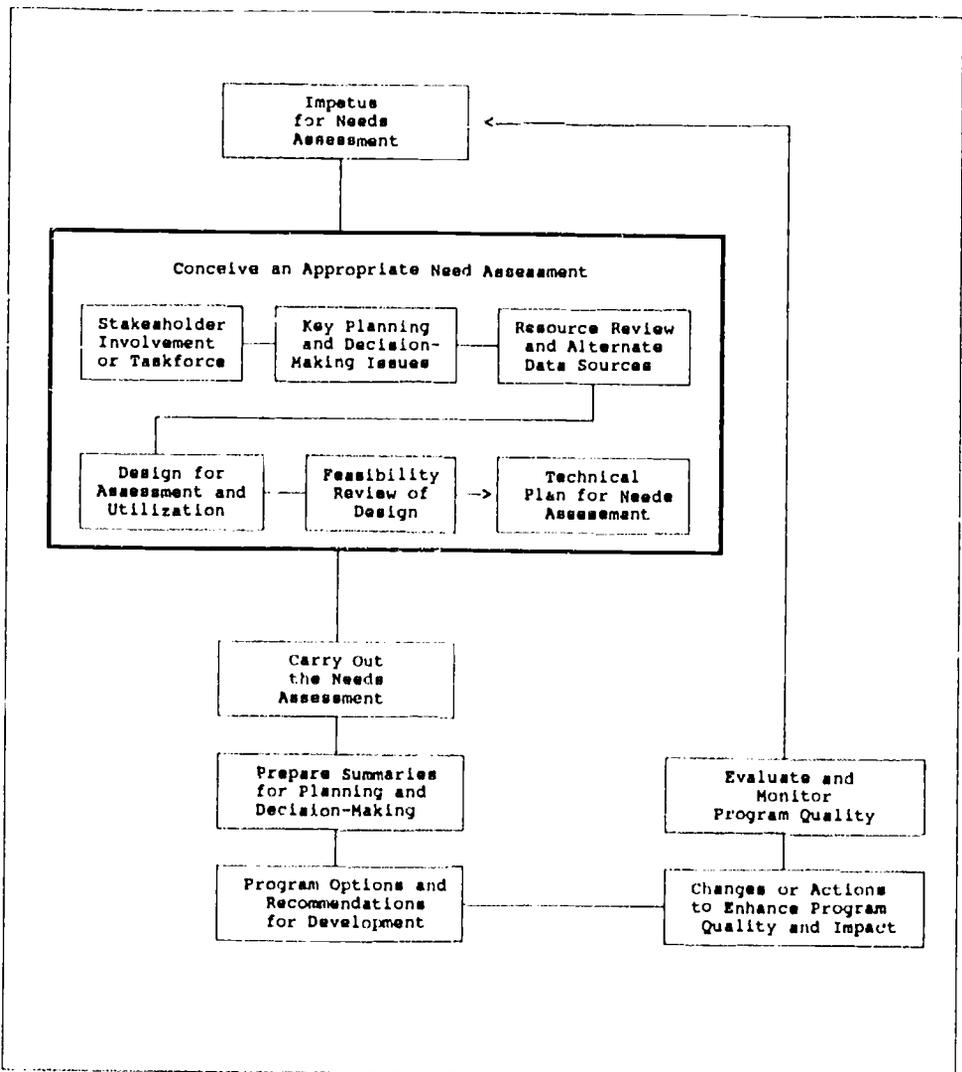


Figure 7. Conceiving an Appropriate Needs Assessment

Table 2. Stakeholder Involvement and Task Force Guidelines

Identify Relevant Stakeholders. They include groups and persons who ...

Set agency policy and administer agency programs and operations.

Represent consumer and constituent concerns such as advocacy groups, certifying agencies, and personnel training organizations.

Will be impacted upon (positively and negatively) should needs be identified (e.g., persons with disabilities, employers, and members of the general public).

Will likely have to do something or change as a result of needs being identified (e.g., rehabilitation counselors, service managers, and community rehabilitation facilities).

Might bear partial costs or be involved in other ways to carry out change (e.g., community services, education programs, health agencies, department of transportation, and housing).

Identify Needed Technical Resources. Resources needed to carry out the assessment would include persons, units, or organizations with ...

Expertise in research and evaluation, needs assessment, program planning, and public policy development.

Expertise and agency responsibilities in such areas as program financing, management, operations, development, and implementation.

Authority to plan and coordinate the overall needs assessment.

Establish Task Force. Established to provide input to the assessment and to identify program and planning implications from findings.

Membership would include the key stakeholders and those with needed technical expertise.

Leadership for the task force could be a key stakeholder (e.g., agency manager responsible for program operations) or an individual with technical expertise in needs assessment (e.g., agency's program evaluator).

Member roles would be to materially aid the assessment and planning staff to devise, conduct, and translate needs assessment findings into responsive programming.

Table 2. Stakeholder Involvement and Task Force Guidelines (Cont.)

Convene Task Force. Task force should be convened to advise the project before the assessment is initially formulated. They would ...

Represent their special concerns and issues.

Identify problems that might be encountered in acquiring needs information and in implementation of change.

Identify specific need areas that potential consumer groups might have.

Suggest sources of data that may provide evidence of need.

Identify units within the agency and organizations outside the agency that could conduct parts or all of the needs assessment.

Advise on how evidence of need might be represented or estimated from existing and new needs information.

Advise on specific program changes and how such changes can be accomplished from their perspective when there is evidence of need.

Assist staff in review of the requirements for needs assessment relative to federal and state mandates, current program, societal or economic conditions, and the original charge or impetus for the needs assessment.

Key Planning and Decision Making Issues. The conceptualization of an assessment that can have impact really begins with this step. Table 3 outlines the steps for identifying key issues. It is essential that all key players (i.e., key agency decision makers, stakeholders on the task force) have a clear sense of the management and planning issues involved and a general consensus as to what the assessment will accomplish. An appreciation of the consequences and potential impacts of the assessment can prepare these key players to be able to facilitate subsequent changes in the program.

Whenever possible, a written statement that clearly states the impetus for assessment, the administrative purposes, and anticipated consequences of the assessment and program development should be obtained from the responsible agency administrator. A variety of techniques can then be used to acquire the broader understanding of the assessment purposes, including small group brainstorming, nominal groups, or delphi analyses. Where a clear statement of

Table 3. Identifying Key Planning and Decision Making Issues

Obtain clarification of impetus and purpose from management. The manager requesting the assessment may have been stimulated by any of the following:

New initiatives and priorities resulting from technological advances, political or social pressures, or changes in state's economic environment.

Changes in mission or in agency management that may require changes in how the program is planned, how resources are allocated, and how the program serves clients.

Program evaluation results that reveal changes in service effectiveness among program constituents and potential changes in need.

Legislation that changed priorities for the rehabilitation program in terms of targeted populations or service delivery methods.

Program service or population problems indicated by one or more stakeholders in the rehabilitation process (e.g., identified by consumers, by practitioners, or by employers in the private sector).

Clarify how the needs assessment effort fits into the agency's broader strategic planning efforts and relates to the mission of the state rehabilitation program. This is also likely to help clarify how any evidenced changes might affect the larger program's operations.

Identify the broad range of possible goals and objectives that might be pursued through the planned needs assessment and program development activities.

Prioritize a reasonable set of objectives for the needs assessment in terms of: needs that may have the highest importance, ways or program areas where change is most likely to result, and likely administrative consequences of those changes.

Clarify or phrase primary management and planning questions, priorities, and constraints.

Obtain consensus from task force and appropriate administrative levels on the issues, assessment priorities, and potential constraints to be embraced in assessment and utilization design.

Identify unit and individual in agency to have coordinating responsibilities for designing and carrying out the assessment.

intent has not been obtained, these same techniques can be useful when the initiating administrator is on the task force. On some occasions, the task force may be helped in its search for meaning by using an independent facilitator, particularly in broadening the task force's understanding and in obtaining consensus on direction for the effort.

At the conclusion of this step three things should result. First, there should be consensus among the task force on administrative reasons, issues, priorities, and objectives for the needs assessment activity. Second, there should be a written statement of these that is shared with all members of the task force. Third, a unit and individual in the agency should be charged with authority to design and conduct a needs assessment that is appropriate to agreed upon objectives.

Resource Review and Alternate Data Sources. This step will likely be conducted by the assessment staff member and perhaps one or two other persons. The task is to find out what is already known about the needs which the assessment is expected to reveal and the potential usefulness of existing sources of information about need. This is intended to help guide selection of the most credible and efficient data sources for the assessment. The second volume in this guide will help the would-be assessment staff. It (a) provides details on the federal requirements for needs assessment and evaluation, (b) identifies and discusses resources available for disability targeted and rehabilitation programs identified in the Rehabilitation Act, (c) lists primary sources of data, and (d) includes technical references for specific methodologies.

Relevant data are typically available from divisions of the state's departments of education, health, transportation, economic, welfare, housing, and tourism-recreation and state legislative audit bureaus. Every state, and many urban centers as well, maintains significant collections of research journals, reports, and summary data relevant to an assessment. Some of these collections are available in public or university libraries while others are maintained in the originating state or community agency. Privately maintained sources are also sometimes found in state-level insurance boards, business and trade organizations, chambers of commerce, hospital associations, accrediting and certifying organizations, and consumer and advocacy organizations. Many university and public libraries will house current state and national epidemiological, census, labor, and economic data.

It would seem that finding out what the agency already knows about the need should go without saying. Sometimes library searches are conducted, some instruments and tests reviewed, and a few phone calls made to universities before the assessment design is devised. Oddly enough, however, the native knowledge base available within the agency is often overlooked or underplayed. As well as seeking out the other existing hard data sources, the assessment staff

is strongly encouraged to interview agency program specialists, facility specialists, and rehabilitation counselors with relevant caseloads. The Study Group members found this to be extremely revealing when they separately interviewed their agency program specialists in each area identified under the Rehabilitation Act. Variations on the probes used by the Study Group in their interviews (or survey) are summarized in Table 4.

Table 4. Probes Used by Region V Study Group to Interview Agency Program Specialists

What specific issues do you find are important when you try to identify or understand the rehabilitation-related needs of people in this target population?

What special characteristics or problems are they likely to present (or have to face) in their rehabilitation?

Where would you look for useful information on the effects of their disabilities and their needs for special rehabilitation service?

Where (or how) might you find persons with these disabilities, particularly those who could represent the population and its needs for rehabilitation? Or, who might be able to provide information on their needs, if they are unable to represent themselves?

What should we be sensitive to when gathering information from (or about) individuals in this populations?

Are there special considerations we should be aware of as we assess needs or make plans to serve them? Cultural mores? Differences based on where they live? Social conventions? Economic or social differences? Values or language differences?

Which organizations, groups, or associations are likely to have specific concerns or act as advocates for these individuals?

Are there unusual or particular program characteristics that we should expect when serving these individuals?

Design for Assessment and Utilization. The design describes the method by which the assessment of need will be conducted and how the results of the assessment would be related to program development. There are two interrelated parts to the design. Together they provide a written reference point

for the agency to anticipate some degree of change. Where parts of the assessment activity are to be contracted, the design helps coordinating agency staff to insure that these parts of the effort contribute to the overall planning effort. Table 5 outlines the content that should be included in this design.

Table 5. Content of the Assessment and Utilization Design

Needs Assessment Procedures

Objectives for the needs assessment. Direct statements as to what is to be accomplished, when the assessment will be completed, and who will be accountable for the assessment.

Assessment questions. Specific questions to be answered in the needs assessment activities (e.g., priority service needs among selected disability populations, how relative priority needs are regionally distributed).

Needs data. Existing data sources (e.g., 1980 Census data for needs data from the National Center on Disease Control) and new data sources (e.g., replication of the Harris Poll, special survey of facility resources) to be used to estimate need.

Instrumentation used to collect or code data. Instruments and recording devices for both existing and new data would include specification for instrument design, timeline to develop and validate instrument, administration procedures, and rules or conventions for recording or coding data.

Population and sampling procedures. If appropriate, rationale for population, sources and how they can be found, how sampling method will insure representativeness (e.g., of underserved groups), and how sampling would insure appropriate extrapolation of findings to questions driving the assessment.

Data analysis and quality control strategies. Procedures to insure reliable coding, data entry, analysis, synthesis, and reporting of needs data (whether data comes from existing and new sources) and to insure humane respect for disability, cultural, and individual values.

Distribution of responsibility. Parts of the needs assessment which are to be conducted in research and evaluation unit, in other agency units, and by outside contractor.

Table 5. Content of the Assessment and Utilization Design (Cont.)

Utilization Plan

Principal planning and management issues.

Economic, political, and social constraints affecting feasibility of agency acting on identified needs.

Key stakeholders in planning and agency decision-making.

Potential decisions or program options.

Potential obstacles likely to impede change.

Organizational and interagency coordination and related changes likely to be required.

Broad strokes for planned changes.

Resource Needs and Budget

Time commitments of agency personnel.

Non-agency personnel to be hired or used.

Travel, communications, materials, supplies, and other agency resources to be consumed during project.

Contractual services for data collection, data processing, analysis, reporting, consulting, and other needed resources.

Total budget including estimates for agency and non-agency resources.

The part of the design describing the assessment method can be very detailed, describing how relevant information and data would be acquired and how such information would be collated to project need. The design should concisely identify specific data sources that would be accessed, how such data would be reliably obtained, how any instrument would be developed, the technical and human safeguards to insure data quality and confidentiality, analytic methods and rules by which data would be aggregated to estimate need, and resources needed to achieve the proposed effort. The resource estimate should include timelines, identify staffing and other resources, and contain a budget that reflects all costs for assessment and utilization that would be borne

by the agency. Costs for reassignment of staff to assessment and planning and any resources that would have to be acquired should be part of the budget. This part of the design would be prepared by staff with responsibility for conducting the assessment.

The utilization part of the design can be prepared jointly by research and planning staff. This part is guided by the agency mission, underlying management issues, the purposes, anticipated change, and their understanding of the political-socio-economic pressures on the agency. It is expected that the designers of this part would make assumptions about what constitutes realistic options and about the types of information likely to influence decision making and planning after the assessment.

The utilization is part of the document can explore a variety of issues that are likely to be important if reasonable changes are to be anticipated and accommodated in program development: (a) Explore potential organizational obstacles to change (e.g., staff resistance to change, staffing and management patterns); (b) explore how one or more important contextual pressures might facilitate change (e.g., economic outlook by the time the assessment is completed); (c) document how a limited resource is presently being used (e.g., provide a desk audit of referral procedures to supported employment); (d) suggest new capacities that might have to be developed (e.g., estimate number of counseling staff who would have to have new skills); (e) suggest how key stakeholders might be involved in achieving change; and (f) suggest options and accompanying scenarios for achieving change.

Feasibility Review of Design. A feasibility review provides important checks for consistency between intended and actual method for assessment, for efficiency in resource use, and for considering the likelihood of success. The task force can be a valuable resource for conducting this feasibility review. The review should concentrate on the technical merits of the assessment methodology and the sensitivity and practicality of the total assessment and utilization design:

- Technical merits of the assessment methodology. How adequately the method addresses the objectives and issues, how credible and compelling the sources of data are for estimating need, how likely that unbiased evidence of need will be provided, and how adequate safeguards are to assure timely and accurate completion of the assessment effort.
- Sensitivity of the design. How well it considers the underlying management issues, how it accounts for likely contextual pressures for program change, how well the design anticipates program development, and how likely the design will yield meaningful and implementable options.

- **Practicality of the design.** How adequately it anticipates resource needs, how reasonable and complete are its budget and timelines, how feasible is its overall design, and how likely the overall effort will be supported by the agency.

Technical Plan for Needs Assessment. The technical plan is a working outline of what is to be accomplished and the resources that will be used to complete the assessment. It is important to construct even if the total assessment is being done by one individual. If an agency task force is involved or the assessment is done under an outside contract, it is absolutely essential.

A useful technical plan should never be more than two to five pages. Table 6 suggests a format for the technical plan. In the simplest form it is a list of the key steps, timelines, responsibilities, and resources. Brief, descriptive narrative is best used to supplement table presentations. Where necessary, references to back-up documentation may be included.

Table 6. Technical Plan Format

Project Identification

Title of project.

Individual and unit responsible for coordinating effort.

Unit or individual initiating assessment request.

Objectives of the assessment.

Needs Assessment and Planning Context

Principal planning and management issues.

Potential decisions or program options (if known).

Economic, political, and social constraints affecting feasibility of agency acting on identified needs.

Key stakeholders in planning and agency decision-making.

Sources of Data or Information on Need

Primary information to be obtained.

Likely populations and sources for needs related information.

Table 6. Technical Plan Format (Cont.)

Sources of Data or Information on Need (Cont.)

- Prospective instrumentation or data collating methods.
- Prospective procedure for acquiring or collecting needs data.
- Quality control strategies to protect data integrity and data sources.

Operational Chart for Key Assessment Activities

- Project start and end dates.
- Major project steps or activities.
- Interim reporting requirements.
- Persons with responsibility and expected completion dates for tasks.

Resource Needs and Budget

- Time commitments of agency personnel.
- Non-agency personnel to be hired or used.
- Travel, communications, materials, supplies, and other agency resources to be consumed during project.
- Contractual services for data collection, data processing, analysis, reporting, consulting, and other needed resources.
- Total budget, including estimates for agency and non-agency resources.

Request for Proposals. If external source to be used to conduct assessment or portions of the assessment.

- Scope of responsibilities.
 - Timelines.
 - Level of funding available for activities.
 - Examples of organizations with requisite capability.
 - Procurement processes.
-

Carrying Out the Needs Assessment

This is the stage where staff (or the contractor) translate their ideas about where and how to get and use data into real actions. The design and plans now become technically operationalized tasks and activities that are rigorously monitored to insure data integrity and representativeness of real needs.

The first two activities in Figure 8 are direct technical extensions of the above design and would occur pretty much together. Collecting data comprises the large part of this stage and requires considerable monitoring to insure that any changes to the plan do not compromise the validity of data. By the end of the processing and analysis steps, an accurate picture of need and answers to the primary assessment questions should be provided. The major findings from the effort should be in documented form along with very basic recommendations for program planning.

Instruments and Quality Control Procedures. These activities help to insure that need is accurately and equitably represented from the data source(s) agreed upon in the design. Whether the source for data is census records, client case files, community opinion, or a telephone survey of individuals with disabilities, some form of an instrument is necessary to record and code data obtained on need. While the instruments will be different for each of the above examples, a "recording form" must be devised that will insure that comparable information is collected from one subject or source to another.

All instruments require "piloting" before they are used for two important reasons. First, piloting insures inclusiveness of the recording and coding of information. Wording and meaning of items or alternatives can be clarified. Codes or alternatives can be checked for ambiguity and whether they are mutually exclusive. Questions can be checked for appropriate ordering and redundancy. Administration procedures can be adapted to time, skills, and any limitations that language, culture, or impairments may present.

Second, piloting also helps insure that the instruments reliably acquire important data on real needs. When the instrument is a test or survey, there are well established psychometric procedures for establishing the instrument's reliability and validity. Likewise, when case files and other similarly loosely organized data from open-ended questions are the primary source, similar psychometric techniques are applicable to establishing inter-rater reliability of subsequently coded data.

Quality control is an intention when an instrument is piloted, but it only provides a static benchmark. Ongoing procedures need to be in place in order to check on the veracity of data once data are being collected and scored or coded. These procedures must account for the sensitivity of needs information

for the individuals involved and the consistency of information recording and coding.

Human protection procedures must be in place and monitored throughout in keeping with the intent of civil protective law and in keeping with general humane concerns. Privacy, participation, safety, and anonymity rights of individuals should be the basis for humane recording, analysis, and reporting of needs. Recording and coding of existing data, file data, structured interview responses, and indirect sources of need also must be formally documented and monitored throughout data collection.

These procedures should insure that the "rules" do not change as a result of fatigue, human error, differences in interpretation, or changes in data recorders. The procedures for checking may be as simple as including items asking the same question in different ways. Both human protection and data quality procedures should be monitored throughout data collection. As much as possible, they should anticipate how similar errors might be avoided in later data processes and analysis steps.

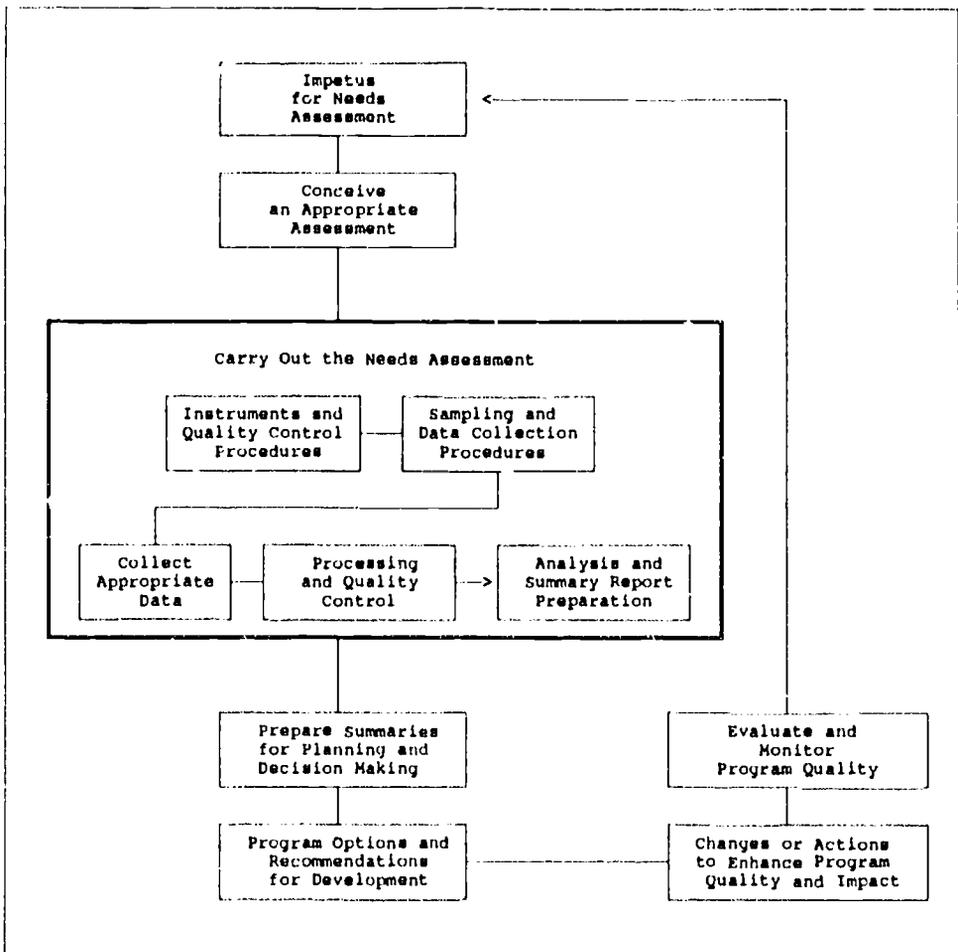


Figure 8. Carrying Out the Needs Assessment

Sampling and Data Collection Procedures. With few exceptions, not every source or person representative of the population in need will be accessed in the assessment. Usually, and particularly when data is to be collected from individuals in the general population, a sample of the population (and, likewise, a sample of the universe of their needs for that matter) is relied upon.

Two important aspects are considered when sampling from a known population: (a) Select a sample that is able to address the primary questions for the assessment and (b) determine whether the final set of data reflects known parameters for the population. If the assessment is intended to answer questions about needs of an underserved population or needs in different regions of the state, there must be enough subjects in each subsample to provide a stable estimate of needs. Data codes or items on demographics are typically included that allow comparison of the final sample to both the original sample and to the state's population.

Data collection procedures outline the exact steps by which the necessary information is obtained. Regardless of data format, these include starting and ending dates for collecting data and points where verification and monitoring will occur. For surveys and interviews, these procedures include alternate ways of providing responses (e.g., using an 800 number) and follow-up of nonrespondents and verification of selected returns.

Collecting Appropriate Data. This step is the culmination of careful technical planning in the needs assessment. At this time, only those directly involved in data collection will spend much thought on the needs assessment efforts. Three specific actions can be taken to help assure quality and impact of the assessment.

First, adhere to and monitor the implementation of the data collection procedures. Minimize any adjustments to the procedures unless they will increase the reliability and accuracy of the assessment data (and then document those changes). Second, apply the quality control checks in the data collection procedures and rectify any variations or deviations as completely and as soon as detected.

Finally, take advantage of formal and informal publicity channels in the agency to keep the assessment alive in the minds of significant constituencies in the agency. These may be in the form of relating interesting anecdotes from the collection reporting, on how the assessment is actually going, or, when appropriate, sharing selective findings. In particular, keeping the task force and key stakeholders aware of progress helps continue their readiness to respond to assessment findings.

Processing and Quality Control. In many organizations, significant parts

of the data processing of needs assessment will be conducted by another unit. Never make the assumptions that because the data you collected is accurate that the results will necessarily be accurate.

Where at all possible, retain control over the qualitative aspects of data entry, processing, and analysis. These may be by direct or indirect means. Direct means will include how clear instructions on data are coded for keying; the preparation of detailed code books for the data set; and the precision of instructions for analyses, cross-breaks, and subgrouping of data. Including items or codes in the data having known distributions, having subsamples of data entries verified, and having comparable analyses independently computed are indirect methods to control quality.

Analysis and Summary Report Preparation. Next to accurately collecting needs information, analysis and preparation of the summary report is the second most important technical task of the assessment staff. Considerable craftsmanship is required in order to prepare a concise and clear report of what was found, what those findings indicate, and what specific options and recommendations are warranted. This craftsmanship requires sensitivity to the quality and limitations of the needs assessment data, to the driving questions for the assessment, and to what will affect what is and is not possible in the agency. It also requires well developed technical skills in analysis and report writing. Guidelines for analysis and reporting are suggested in Table 7.

The decisions about how to organize and analyze the needs data should not be left to data processing staff. Considerable guidance and understanding of how to analyze needs information is necessary, on both parties' parts. The data processing group should clearly understand the assessment analysis goals and be able to explain the options available to achieve those results. The assessment taskforce should be able to understand how selected analytic procedures can answer the principal assessment questions and not be any more uncomfortable in their sense of the appropriateness of these methods than of any other phase of the assessment.

As the term "summary" states, this report follows careful verification, analysis, interpretation, and validation of interpretations. All of the quality checks required in any research or evaluation project apply before the report is written. Accepted standards (e.g., conventions on how many observations constitutes an adequate subsample) and techniques (e.g., statistical tools) are, of course, applied to achieve as high a degree of accuracy as possible. The reams of numbers and tables that may be produced during analysis are intermediate and supplemental documentation to the summary report. Table 8 suggests a format for the summary report.

Table 7. Guidelines for Analysis and Reporting**Managing Quality Control in Processing and Analysis of Data**

Build in and check on accuracy of data recording, entry, scoring, and coding of procedures used to compile, summarize, and identify key results and findings. All conventions used to check and insure quality of data and appropriateness and accuracy of data analysis should be documented.

Clarify purposes and needs for summaries, analyses, and reporting (including graphics) of results with data processing unit.

Specific Analyses That Should be Performed to Verify Findings

Representativeness of final sample (compared to original sample specifications) and adequacy of subsamples size and attributes for which interpretations are intended.

Descriptions of the basic characteristics of the final needs data (e.g., basic personal demographics of a client sample, extent and quality of census data on statewide distribution of disability).

Answers to the specific questions posed for the needs assessment.

Alternate presentations of the assessment findings.

Guidelines for Analysis and Synthesis

Analysis priorities. Address the specific assessment questions and objectives as soon as the quality of data has been established.

Rules of judgement. Establish reasonable "rules of judgement" for synthesizing, compiling, and interpreting data and apply them consistently. Such rules may be based on statistical principles (e.g., obtaining a statistical value significant beyond some level of chance), based on a predetermined criteria or norms (e.g., a need is important if 65% or more agree that it is), or based on some general convention (e.g., extreme comments are not included, advocates or consumer opinions are most important).

Use of statistics. Higher order statistics (e.g., multivariate) may be appropriate for arriving at an understanding of such issues as relative needs, but simple statistics and graphics are more likely to convey the meaning of those findings to the user.

Table 7. Guidelines for Analysis and Reporting (Cont.)

Assessment taskforce. The taskforce expertise should become involved once the preliminary analyses of the assessment data have been completed. This should significantly aid the assessment staff in developing a summary report with considerably greater likelihood of impact than would one written only by staff. The combined knowledge and sensitivity of the taskforce should prompt the development of reasonable initial recommendations.

Guidelines for the Summary and Presentation

Length and level of detail. Accuracy, clarity, and conciseness are the primary concerns in the summary. Short declarative statements of findings or interpretation are preferred. Emphasis should be on responding to the initial assessment questions and objectives. The level of detail will be based on potential for misinterpretation due to ambiguity in the findings.

Tables, graphics, and text. Minimize all three. Tables and graphs present only that information pertinent to the summary. Tables are also used to convey greater detail and provide information the reader needs in order to verify conclusions. Figures are also more effective in conveying, simply, complex relationships or general findings. Text is used to directly convey the essential findings and to provide interpretations.

Audience and format. Present technical information at the level of knowledge of the typical user of the report. Packaging for usability is highly recommended. The conventions for scientific reporting (e.g., the format described by the American Psychological Association) require objectivity and rigor in reporting, not academic pretensions.

Report or interpret. No group of individuals (if the taskforce is involved) is in a better position to provide concrete interpretations than is the assessment staff. When at all possible, the report should not simply be a documentation of findings, but translate findings and objectively identify relevant actions for the agency. The degree to which the analyst (or the taskforce) is expected to provide interpretation and specific recommendations in this summary report will vary from agency to agency.

Table 8. Format for the Assessment Report

Executive Summary. Brief overview of the study. In a very few pages (e.g., two pages) the objectives, findings, implications for agency policy and program development, and the specific recommendations are summarized.

Description of Study. Direct statements of purposes for the study, its objectives or assessment questions, and the context in which the study was conceived, designed, and conducted.

Methodology. Outline of significant data sources (instrumentation, samples), how representative needs data were identified and collected, the extent and quality of the data used in the assessment, and the general precautions and procedures used to synthesize the data and address the questions and objectives of the study.

Results and Findings. Declarative presentation of answers to the questions and objectives of the assessment. Included as supplemental to which finds are any limitations imposed by quality of the data and the representativeness of samples and subsamples. Tabular and graphic presentations should be used to enhance the understandability of the results.

Implications and Recommendations. Direct extrapolations of meaning from the results and findings. Implications should translate findings about need into potential effects on or changes in legislation, policy, administrative actions, program, and resource allocations. Recommendations should suggest options and actions which the agency should and can pursue to meet the identified needs.

Appendices. Appendices should be included with caution. They should include a list of staff and non-agency stakeholders on the assessment taskforce, a list of supplemental reports or summaries available on the assessment, and, if necessary, a minimum of supportive information and reference.

The goal of this analysis and summary stage is to reduce assessment findings to a thorough and concise reporting of essential information on which decision making and planning are to be based. Thoroughness should never be mistaken for report length, large numbers of tables, use of elaborate statistical techniques, the author's credentials, ambiguity, the quality of the report's printing, or the superficial simplicity with which the results may be rendered. The summary document is to be the basis for more specific user-oriented interpretations and recommendations. It is to be the critical document that will be used to promote change by planners and administrators.

Using Needs Assessment to Influence Program Development

The basic groundwork and information will have been laid for impacting program development by the time the assessment summary has been completed. In each previous stage, necessary steps were taken to insure, as reasonably as possible, that the information produced by the assessment was applicable to agency decision making. The technology and expertise of assessment are now supplemental to the expertise of the agency's strategic planning.

Technical, analytic resources may be applied to the now static assessment information to clarify or obtain a more understandable picture of needs. Interpretation is the substance of the several steps presented in Figure 9 for this stage. The planning functions have a higher profile than the assessment functions in interpretation, translations, and prioritizing of any options that may be available to management. The role and importance of stakeholders and planning personnel become more pronounced. The assessment staff provides a resource in insuring that interpretation and direction continue to be valid extrapolations of the findings on needs.

The goal in this stage is to implement those actions that can optimize the extent to which the identified needs are met. Practicality (e.g., competition for agency resources), long-term program goals (e.g., the extent of authority allowed in the Rehabilitation Act), the values of the state's citizens and specific stakeholders (e.g., priorities for state revenues), and the various political-socio-economic issues all come together along with the assessment findings and recommendations. Only a limited number of options will be reasonably pursued by the agency. Consensus, or priority among the set of options that will be planned for and pursued, must be achieved.

Compromises, coalitions, and creative thought are required to achieve any meaningful impact on identified need. Plans may include strategies to achieve changes in how the agency selects and distributes its resources to individuals. Other strategies may include ways to achieve greater inter-agency coordination between rehabilitation and welfare services. Other strategies may require developing specific plans on how to improve support for change within agency management, for achieving acceptance of the proposed changes among advocates, for support among practitioners to obtain new skills to comply with the changes, or for changing attitudes of the general population toward people with the identified needs.

The steps in the center of Figure 9 represent two major types of efforts: The first three steps intend to achieve meaningful consensus on what should be done. The last three steps intend setting in motion a reasonable plan to meet the identified needs. Both the stakeholders and the planning and assessment staff must be involved in the two efforts.

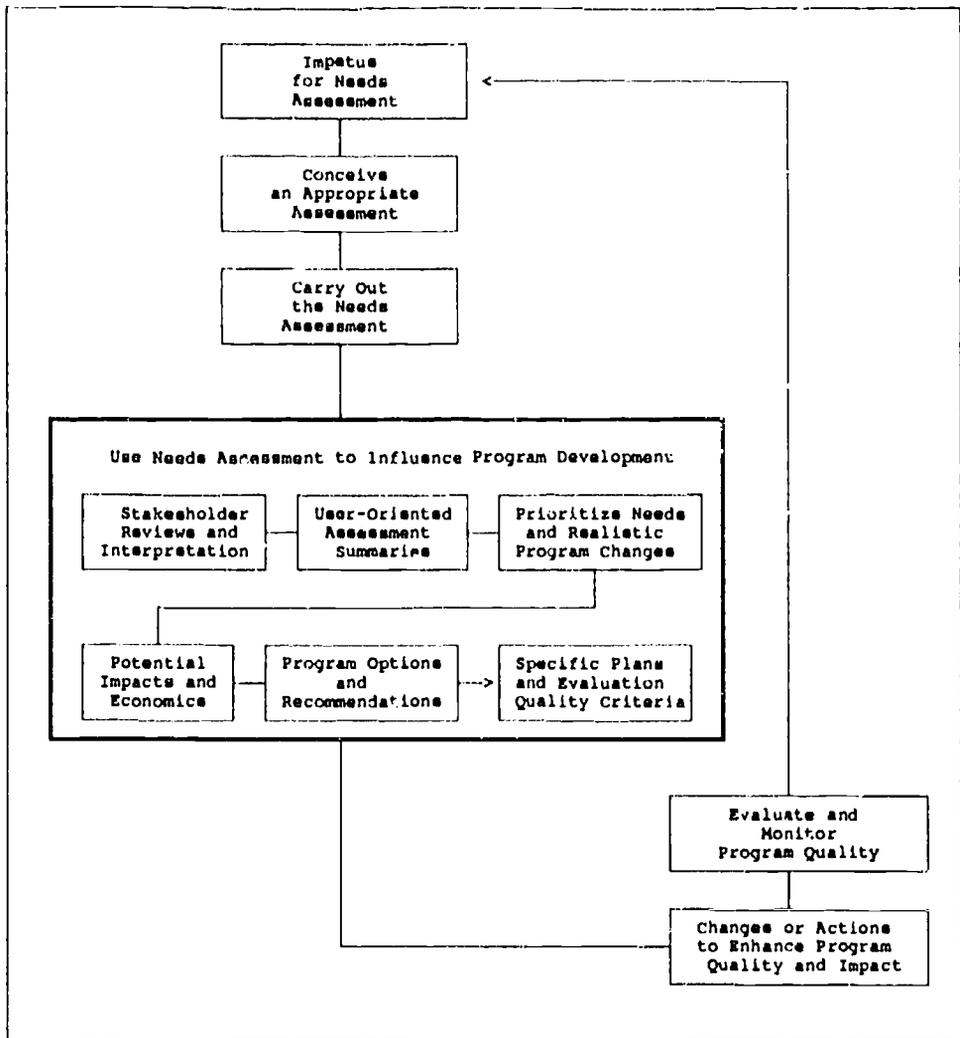


Figure 9. Using Needs Assessment to Influence Program Development

Stakeholder Reviews and Interpretation. When the assessment and utilization plan was developed, the assessment task force provided critical review for its sensitivity to the issues and potential applicability. The summary report prepared by the assessment staff should be similarly reviewed. Some agencies may find that a broadening of the group of stakeholders may provide more insight to the recommendations. A number of structured forums could be convened to achieve public and constituent reactions to the proposals offered in the assessment report.

This critical review should provide at least two specific levels of review: One level of review would look at how relevant the implications and recommendations of the report are to the interests represented by the

stakeholder (i.e., the validity of the recommendations). A second level would look to how fully the recommendations are appropriate to potential consumers and resources and capabilities of the system to make adjustments to meet need (i.e., the feasibility of the recommendations). The guidelines previously suggested above for reviewing the assessment and utilization design can be paralleled here as guidelines for review. These reviews can be expected to provide the agency planning group with either a sense of which of the recommendations should be pursued or help to identify additional options which might require further substantiation by the assessment staff.

User-Oriented Assessment Summaries. This step and the above review process would likely occur in a symbiotic fashion. Stakeholders will have different technical backgrounds and knowledge of the rehabilitation program. The results and recommendations should be prepared in different formats if valuable critique and input are to be obtained from these different groups.

Informal information on competing needs may seem more compelling than the needs assessment findings if those findings are presented in only one format. Information on need and rationale for any given option can be packaged so that the time and energy of these stakeholders are spent constructively. Packaging (as was the case in developing the basic summary) should emphasize "the message." The reactors should not have to spend their time figuring out a difficult presentation.

Where alternate options are suggested by reactors, the assessment data may have to be re-examined and repackaged. It is the planning and assessment staff who have the responsibility for clearly demonstrating whether these alternate options are or are not justifiable given the assessment findings.

Prioritize Needs and Realistic Program Changes. Action in planning and informed decision making must eventually occur, regardless of how much review and re-examination of the findings takes place. The reviews and critiques and phrasing of recommendations by stakeholders will not have been done out of context. Most of these reviewers will have intentionally taken into account the technical merits and implications of the options, the sensitivity of each alternative to the contextual pressures surrounding decision making and implementation, and the practicality of the options in terms of resource use and feasibility for timely implementation and impact on needs.

Clear recommendations of which options are most appropriate for the agency should, at this point, be forwarded to the administrative level initiating the request for assessment. The planning staff should do so with full expectation that specific strategies can now be planned and put into place to pursue these options with highest priority, once these are selected or confirmed by agency management.

Potential Impacts and Economics. The last stages in planning begin with identification of potential impacts and costs of a proposed change in program delivery by the planning team. The staff have carefully considered and estimated how each option will affect (a) eligibility decision making and changes in who is served, (b) deployment of fiscal and human resources and what will not be provided under the revised program, (c) requirements for professional skills and support staff, (d) needs for new facility or community-based service resources, (e) the estimated total adjusted cost for the state rehabilitation program, (f) how effective the program might remain in relation to current standards for the program, (g) how management of the program would need to change, and (h) how these changes will measurably impact on consumer needs.

Program Options and Recommendations. Once the potential impacts and economic considerations have been estimated and endorsement is provided by management for one (or more) of the options, the specific options that the agency intends to implement can be made public. Serious planning of strategies to implement the specific options should begin only after such feasibility has been considered.

Key stakeholders and the planning and assessment staff should now jointly proceed to identify the exact strategies by which the recommendations will be achieved. At this point their basic support (if not consensus) for these new goals is critical. Key stakeholders are an important resource for identifying impediments and ways to overcome significant political and organizational opposition to proposed changes. Also, keeping them involved through this developmental stage is likely to continue to minimize serious disruption resulting from opposition to change once implementation starts.

Specific Plans and Quality Criteria for Evaluation. The development of an effective plan to follow through on the findings of the assessment requires a similar level of concerns as when the assessment and utilization design was developed. Sensitive input and substantial leadership are necessary. The plan should provide sufficient guidelines and criteria to enable achievement of desired impacts on identified needs. Once direction has been selected and the plans devised, appropriate changes in the agency's State Plan should be made and filed with the Rehabilitation Services Administration. An outline for some of the key elements in a planned change strategy are included in Table 9.

Table 9. Plan for a Change Strategy**Scope and intent of the change**

Declaration of the goals and objectives of the proposed changes.

Specific program and operational objectives.

Basic rationale for proposed change derived from the needs assessment and related to the agency's mission and rehabilitation goals.

Anticipated timelines for starting, implementing, and achieving full-scale changes, including milestones for monitoring implementation and providing for administrative intervention.

Specific performance criteria for use in evaluating the impact on identified needs, costs to achieve implementation, and residual impacts on related programs and agency operations.

Management staff and unit assigned authority to initiate and follow through to completion the identified plan and lines of responsibility within the agency's management structure.

Estimated annual budgets to implement changes and to stabilize changes in program operations.

Specific modifications in agency rehabilitation programming and operations that will need to be developed

New initiatives in program, operations, and policy that will have to be developed to achieve changes.

Programs and operations that will be significantly affected by change.

Primary strategic steps and assignment of responsibility for achieving the new program or program modifications.

Related impacts and accommodations that can be expected to occur throughout the program

Client populations whose services or where access to program will change and the expected extent of such changes in access.

Staffing changes and requirements for staff development, reassignment, and recruitment.

Stakeholder responses to proposed changes and their support and changes in their relationship to the state program.

Redeployment of both personnel and other agency resources, including changes in levels and quality of resources available for current programs and operations.

Table 9. Plan for a Change Strategy (Cont.)**Related impacts and accommodations (Cont.)**

Interagency relationships and working agreements and relationships with rehabilitation facilities and other community resources.

Revisions and modifications to agency mission, goals, objectives, and performance standards.

Amendments to State Plan during initial implementation and full scale operationalization of changes.

Organization and management of the overall agency and reorganization of existing program management to accommodate identified changes.

Strategic plan for changes

Profile resource needs and how necessary resources can be procured or redeployed.

Establish plans for achieving awareness, input, and development of specific strategies.

Identify needs, plans, and resources for staff redevelopment.

Develop plans to market changed program and recruit consumers.

Formulate specific goals and objectives for program, staff, and program implementation.

Establish and monitor progress against criteria and timelines.

Operationalize the redeveloped or the new program initiative

Stabilize processes and resource allocations.

Reassign, retrain, and recruit staff.

Equip, house, and manage the new initiative.

Set performance expectations and criteria for monitoring and program evaluation.

Recruit and serve new consumers.

Monitor and evaluate impact and cost.

Significant input should be sought from those who are, again, likely to be involved or impacted upon by the changes. Further, ownership of the prospective changes (i.e., at least the goals, if not the processes) by stakeholders is highly desirable. Leadership authority (and responsibility) for

synthesizing and carrying through the plans must be clearly defined early in development of this plan. Identification and implementation of specific (operational level) strategies to achieve change should be decentralized, as much as possible, to that level where responsibility for success will be housed.

In what person or unit leadership will be vested will depend on the nature of the changes being made (e.g., redirecting case management to increase access by minorities might require leadership at the client program level). Because the plan can be only a framework for achieving change, such leaders will need to be carefully selected for several attributes. First, the person (or persons) must comprehend the basis for the identified needs and the context in which those needs arise if they are to be able to relate them to the agency's program. Second, vision of how the rehabilitation program can improve as a result of the changes is needed if the plan is to adapt in a progressive fashion as problems, variances, or obstacles are encountered. And third, the management level for the leader should be such that there is confidence among practitioners, administration, and consumers that the leader has the knowledge and experience to manage change and so that desired impacts on need are likely to be achieved.

Toward Developing State Specific Comprehensive Needs Assessment Models

Continuing sensitivity to current needs for rehabilitation services and resources of the state's population of persons with disabilities is at the very heart of an agency's continuing program planning process. State vocational rehabilitation agencies must develop comprehensive needs assessment approaches that provide the fundamental information the agency requires in program development and decision making. No single needs methodology can provide information of sufficient breadth and value for all planning and decision-making activities. Alternative methodologies that access different sources of information, at different times, and are prompted by any number of different planning concerns for needs information are required.

One method will suggest the patterning and distribution of potential needs (e.g., prevalence studies). Another method will provide quite specific information on the actual services and resources that would be called upon should the program serve a particular emerging group. Both methodologies are appropriate and are equal parts of a comprehensive needs assessment. Each methodology has different costs and uses quite different sources of needs information. Both have high utilization value in program redevelopment. While the former may serve to frame an overall planning effort, the later example is critical to transforming program delivery and rationally reallocating the agency's limited resources.

Comprehensiveness is not to be confused with either a single methodology with the completeness of data acquired at a single point in time.

Comprehensiveness, as used here, means continuous improvement and increasing responsiveness of the state's rehabilitation endeavors (i.e., program development). Therefore, **comprehensive needs assessments provides answers and direction to today's planning and allocation issues and provides guidance in planning for the future structure and resource requirements of the state's rehabilitation program.** The state's comprehensive model should be developed within the context of that state's service delivery and should be incorporated into the agency's mission, values, and objectives.

This volume reviewed the federal requirements for assessment, summarized contemporary assessment practices, provided an analysis of contextually important planning and assessment issues, and constructed a concept and general methodology for comprehensive needs assessment. By sharing such thoughts and advice, the Study Group intended that this volume would help agency staff envision how their agency can conceive its own approach to comprehensive assessment and planning. The companion volume identifies specific techniques and resources. That volume is intended to provide "tools" the rehabilitation agency can use in conceiving and conducting rehabilitation needs assessment.

References

- American Psychological Association. (1973). Ethical principles in the conduct of research with human participants. Washington, DC: Author.
- Anderson, S. B., & Ball, S. (1975). Professional issues in the evaluation of education/training programs (Report No. TR-3). Princeton, NJ: Educational Testing Service.
- Auvenshine, C. D., & Mason, E. J. (1982). Needs assessment in planning rehabilitation services. Journal of Rehabilitation Administration, 6(2), 56-62.
- Beauchamp, T. L., & Childress, J. F. (1983). Principles of biomedical ethics (2nd ed.). New York: Oxford University Press.
- Berkowitz, M. (Ed.). (1967). Estimating rehabilitation needs: A conference on planning for vocational rehabilitation.
- Commission on Rehabilitation Counselor Certification. (1988). Code of professional ethics for rehabilitation counselors. Rolling Meadows, IL: Author.
- Eastmond, J., Nicholls, Jr., et al. (1986). Limiting the scope of needs assessment studies or (How We Learned to Set Limits - and Feel No Guilt). Paper presented at the Annual Meeting of the American Evaluation Association in Kansas City, MO on October 29 - November 1, 1986).
- Fitting, M. D. (1986). Ethical dilemmas in counseling elderly adults. Journal of Counseling and Development, 64, 325-327.
- Haber, L. D. (1985). Trends and demographic studies on programs for disabled persons. In L. G. Perlman & G. F. Austin. (Eds.), A report of the ninth Mary E. Switzer Memorial Seminar, National Rehabilitation Association, Alexandria, VA.
- Haber, L. D. (1987). State disability prevalence rates: An ecological analysis of social and economic influences on disability. Washington, DC: National Institute on Disability and Rehabilitation Research.
- Herron, D. B. (1978). Developing a marketing audit for social service organizations. In C. H. Lovelock and C. B. Weinberg (Eds.). Readings in Public and Non-Profit Marketing (pp. 267-271). Columbus, OH: Scientific Press.
- Kotler, P. (1982). Marketing for non-profit organizations (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

- McKillip, J. (1987). Need analysis: Tools for the human services and education. Newbury Park, CA: Sage.
- Miller, J. V., & Wargel, J. F. (1979). Developing state agency facility plans: A guide to planning and implementation. Ann Arbor: The University of Michigan Rehabilitation Research Institute, School of Education.
- Moore, C. M. (1987). Group techniques to generate, develop, and select ideas. Newbury Park, CA: Sage.
- Ohio Department of Mental Health. (1983). The mental health needs assessment puzzle: Guide to a planful approach. Columbus, OH: Author.
- Pride, W. M., & Ferrell, O. C. (1984). Marketing: Basic concepts and decisions. Boston: Houghton Mifflin.
- Public Management Institute (1980). Needs assessment handbook, pp. 31-34. San Francisco: Author.
- Rubin, S. E., Garcia, J., Millard, R. P., & Wong, H. D. (1988). Preparing rehabilitation counselors to deal with ethical dilemmas: A major challenge for rehabilitation education. In S. E. Rubin and N. M. Rubin (Eds.), Contemporary challenges to the rehabilitation profession. Baltimore: Paul Brookes.
- Schwitzgebel, R. L., & Schwitzgebel, R. K. (1980). Law and psychological practice. New York: John Wiley & Sons.
- Smith, J. R. (1985). Marketer: A simulation. Boston: Houghton Mifflin.
- Struthers, R. D. (1986). Methods to obtain and use information about the number of people needing rehabilitation services and the services needed. Lansing: Michigan Rehabilitation Services Division.
- Turnbull, H. R. (1977). Consent handbook. Washington, DC: American Association on Mental Deficiency.
- Wisconsin Division of Community Services (1981). Needs Assessment for County Human Service Programs. Madison: WI.
- Witkin, B. R. (1977). Needs assessment kits, models, and tools. Evaluation Technology, 17, 5-18.

The Region V Study Group 1988-1990:

**Duane Sermon, Minnesota General, Chair
Michael Murphy, Illinois General
Barney Bruzetti, Illinois General
Richard Schrempf, Illinois Blind
Leland Moon, Indiana General
Robert Struthers, Michigan General
William Leavell, Michigan General
Kenneth Ziegler, Michigan Blind
Karl Nitardy, Minnesota Blind
Greg Shaw, Ohio General
Rick Hall, Wisconsin General**

Regional Ex Officio Resources:

**George McCrowey, RSA, Chicago
Fredrick Menz, RTC, Wisconsin
Daniel McAlees, RTC, Wisconsin
Henry Wong, RCEP, Illinois**