Recommendations for action in serving the hearing impaired mentally retarded (HIMR) are presented by a committee composed of representatives from the American Speech and Hearing Association, the Conference of Executives of American Schools for the Deaf, and the American Association on Mental Deficiency. The population is defined to include those individuals who have hearing impairment, subaverage general intellectual functioning and deficits in adaptive behavior. Reviewed are the constitutional and legal rights of handicapped persons, and outlined are significant federal funding provisions affecting services to the HIMR. Problems within the existing system of services are summarized, and suggestions for program coordination (such as development of comprehensive data systems and establishment of a national information center) are made. Prevention services and early identification are described among the aspects of a continuum of services for the HIMR. Considered in a discussion of personnel availability and utilization are the use of interdisciplinary personnel and training programs for professionals and paraprofessionals. Listed are the committee's issues and recommendations for such areas as legislation, financing, administrative and organizational structure, and teaching, management and supervision. Included in four appendixes is a list of professional and governmental resources. (CL)
Recommendations for Action

the hearing impaired mentally retarded
THE HEARING-IMPAIRED MENTALLY RETARDED:
Recommendations for Action
1975

WILLIAM G. HEALEY, PH.D.
Project Director

DOREEN S. KARP-NORTMAN, M.S.
Project Manager

KENNETH O. JOHNSON
Executive Secretary

ALFRED K. KAWANA
Manager, Publications Department

Publication of this document was funded by the Department of Health, Education, and Welfare, Social and Rehabilitation Service, Rehabilitation Services Administration, Division of Developmental Disabilities, Grant No. 56-P-71011/5-01; P.L. 66-236; Jowawa Leggett, project officer.
Acknowledgment

Several individuals merit special recognition for their contributions to the production of this document. We especially wish to acknowledge the dedication and professional assistance of the Steering Committee for this project on the Rehabilitation and Management of the Hearing-Impaired Mentally Retarded.

Steering Committee

Thomas Behrens, Ph.D.
U.S. Office of Education
Bureau of Education for the Handicapped

Shirley Berger, M.A.
Director, Clinical Speech Services
Parsons State Hospital and Training Center

William Castle, Ph.D.
Dean of Instruction
National Technical Institute for the Deaf
Rochester Institute of Technology

William Darnell, Ph.D.
Director, Student Planning and Evaluation
National Technical Institute for the Deaf
Rochester Institute of Technology

Aaron Favors, Ph.D.
Director, Howard University Center for the Study of Handicapped Children and Youth

William C. Healey, Ph.D.
Associate Secretary for School Affairs
American Speech and Hearing Association

Alfred Hirshoren, Ph.D.
Division of Exceptional Children
University of Georgia

Doreen S. Karp-Nortman, M.S.
Project Manager
Office of School Affairs
American Speech and Hearing Association

Jowava Leggett, M.A.
Special Assistant to the Director
Office for Handicapped Individuals
Department of Health, Education, and Welfare

Lyle Lloyd, Ph.D.
Executive Secretary
Mental Retardation Research and Training Committee
National Institute of Child Health and Human Development
National Institutes of Health

John C. Nace, Ed.D.
Special Projects
Formerly of Margaret S. Sterch School for the Hearing Impaired

Paul Rittmanic, Ph.D.
Program Policy Advisor
Speech Pathology-Audiology
Illinois Department of Mental Health

Frank Withrow, Ph.D.
Executive Secretary
National Advisory Committee on the Handicapped and Education of the Deaf
Bureau of Education for the Handicapped

David Yoder, Ph.D.
Chairman and Professor
Department of Communicative Disorders
University of Wisconsin

We extend special thanks to the participants of the Airlie House and Hunt Valley Conferences for their recommendations and professional expertise.

We gratefully acknowledge Robert L. Burgdorf, Jr., field attorney for the National Center for Law and the Handicapped, Inc., who generously provided the information used in the chapter on legal rights.

Appreciation is extended to Jowava Leggett, project officer, Office for Handicapped Individuals (HEW), for her support and assistance throughout the project. Frances X. Lynch, director of Developmental Disabilities, Rehabilitation Services Administration, Wallace K. Babington, director, Office for Handicapped Individuals, and Patricia G. Forsy the, professional staff—U.S. Senate Subcommittee on the Handicapped—are also recognized for their continuing support of our efforts to assist this population with developmental disabilities.

Gerald J. Bensberg, director, Research and Training Center in Mental Retardation, Texas Tech University, Peter Ries and Raymond I. Trybus, Office of Demographic Studies, Gallaudet College, and William N. Craig, superintendent, Western Pennsylvania School for the Deaf gave much assistance and time to this project. We are grateful to them for the increased data they provided on this target population.

We are indebted to William C. Healey, who designed and directed the project; Lyle L. Lloyd and David E. Yoder for their contributions in preparation of the grant proposal, Barbara Sonies for her assistance during the first year of the project, and Nancy Baxter for her valuable editorial support.

Doreen S. Karp-Nortman, project manager, deserves special recognition. She coordinated all project activity, wrote draft editions of this document, and prepared the final publication with William C. Healey.

We also wish to thank Gerald Clark, director of the Elwyn Institute, Elwyn, Pennsylvania, the Easter Seal Treatment Center in Rockville, Maryland, and Gallaudet College, Washington, D.C., for contributing the photographs used in this document.

Finally, we wish to thank the many persons in the professional and lay community who have created programs and actively pursued equal rights for all handicapped persons.

—Kenneth O. Johnson, Ph.D.
Executive Secretary
Special Note

Use of the Initials HIMR

In various sections of this document, the initials HIMR designating the hearing-impaired mentally retarded population are used only for the purpose of brevity and to expedite reading. IT IS NOT INTENDED THAT THESE INITIALS BECOME A NEW LABEL FOR THIS SPECIAL POPULATION.
Foreword

The "social ethic" in the United States calls for public and nonpublic agencies to interpret and represent the social norms and intents of the society at large, especially as these are expressed in law.

Many societal services, once considered unobtainable or utopian, have become rightful. Universal public education, social security, national health coverage, and mandatory services for the handicapped all represent social policies underlying basic attempts within the society to meet its citizens' needs through the provision of human management services at public expense.

At present, human management agencies find it increasingly difficult to function effectively. The culture grows more complex in its laws, regulations, record and data system requirements, and resources. As needs and service costs increase, the necessity of establishing service priorities within a complex social organization too often results in the failure to establish other needed services. Further, legislation or regulations interpreting certain social service policies tend to stereotype the categories of service that can be provided by each agency. Consequently, few if any social service organizations become totally responsible for comprehensive management of a citizen with special needs. As a result, denial of service or the abdication of responsibility is often sanctioned by the very statutes that permitted the social policy to become operational, and the basic rationale for the policy is lost.

The service needs of the severely handicapped tend to be broad and continuous. Service provisions for this population, unfortunately, are too frequently narrow and fragmented. Uncoordinated, narrow, and fragmented are adjectives that aptly apply to services currently available to most persons who have the debilitating conditions of severe hearing impairment combined with generally depressed intellectual ability. At present, residential institutions for the mentally retarded tend to be the only social agencies partially but seldom adequately designed to provide some level of continuous lifetime care for the person with a dual handicap of severe hearing impairment and mental retardation. Persons who have these combined impairments and do not require institutionalization are at the mercy of multiple agencies as their service needs change and as they emerge from the preschool years to adulthood. In both instances, many of these persons have been denied the comprehensive services that rightfully should be provided under a federal constitution that intends maximum development through the guaranteed right to equal opportunity.

Historically, too few incentives have existed for human service agencies to establish comprehensive special programs for persons with severe hearing loss and mental retardation. They represent a very low incidence population needing multifaceted services; program costs are high because large interdisciplinary staff-to-patient ratios are required, services must be intensive and often long term, and proper equipment and facilities are expensive to purchase and maintain.

State funding formulas too often have failed to consider each component of actual program maintenance costs. As a result, school districts, health center programs, and many state-operated facilities have tended to establish placement criteria that resulted in the rejection of persons with severe multiple handicaps. For example, until recently many state schools for the deaf have refused to accept candidates who showed evidence of significant mental retardation as a concomitant of hearing loss (Anderson, Stoddard, and Stuckless, 1966). Often, they rightfully argued that no special services were available to meet the needs of this population and no funds existed to support the type of program required.

The basic purpose of this document is to realert policymakers and the public to the needs of this special population and to offer some guidance for meeting those needs.

When any severely handicapped citizens are denied comprehensive services, not only are they denied a constitutional right, but their guarantee truly becomes one of unequal opportunity.

—William C. Healey, Ph.D.
Associate Secretary for
School Affairs
# Table of Contents

Acknowledgment ................................................................................................................ ii
Special Note .......................................................................................................................... iii
Foreword .............................................................................................................................. iv
Chapter 1. Introduction and Background ............................................................................. 1
Chapter 2. The Target Population ......................................................................................... 6
Chapter 3. Legal Rights: Constitutional and Statutory ......................................................... 10
Chapter 4. Federal Legislation and Finance ....................................................................... 16
Chapter 5. Program Coordination ....................................................................................... 19
  Problems within the Existing System ............................................................................... 19
  Coordinating Governmental Agencies and Professional Organizations ......................... 21
  • Comprehensive Data Systems .................................................................................... 23
  • National Technical Assistance Center ...................................................................... 25
  • Regional Demonstration Centers ............................................................................. 25
  • Single-Source Service Centers ................................................................................ 26
  • Advisory Committees ............................................................................................... 27
  • National Information Center ..................................................................................... 28
  • Volunteer Action Groups ........................................................................................... 29
Chapter 6. A Continuum of Services ..................................................................................... 30
  • Prevention Services ................................................................................................. 31
  • Early Identification ................................................................................................ 32
  • Diagnostic Assessment Services ............................................................................. 34
  • Instructional and Habilitation Services .................................................................. 37
  • Vocational and Employment Services .................................................................. 45
  • Family and Housing Services ................................................................................ 54
  • Recreational Services ............................................................................................. 58
  • Transportation Services ........................................................................................... 59
  • Research .................................................................................................................... 60
Chapter 7. Personnel Availability and Utilization ................................................................. 61
Chapter 8. Issues and Recommendations ............................................................................ 65
References ............................................................................................................................. 83
Appendixes
  Appendix A. Arlie House Conference Report ................................................................... 87
  Appendix B. Hunt Valley Conference Resolutions.......................................................... 97
  Appendix C. Professional Resources and Governmental Resources .............................. 129
  Appendix D. Bibliography ............................................................................................ 131
Chapter 1: Introduction and Background

THE PROBLEM: AN OVERVIEW

Severe hearing impairment in combination with mental retardation presents unique and complex problems for society and its citizens. The burden placed on families of persons with a dual handicap can be devastating and immeasurable. Lack of comprehensive, quality services has often resulted in educational, vocational, and social disabilities of catastrophic proportions for the severely hearing-impaired mentally retarded population.

Currently, nine of every ten such persons are confined to public institutions for the mentally retarded. Few receive services through community integrated programs or in residential schools for the deaf (Task Force Report on the Mentally Retarded/Deaf, 1973).

PREVALENCE OF PERSONS WITH HEARING LOSS AND MENTAL RETARDATION

Presently, the precise number of persons with severe hearing loss and mental retardation in the United States is unknown and will remain so until additional formal studies and more appropriate services become available. However, current prevalence studies do reveal that several thousand persons have been diagnosed as having the combined impairments. The American Annals of the Deaf (“Directory of Programs and Services,” 1973) reports that 17% of the children in the schools for the deaf are mentally retarded, and Lloyd and Cox (1972) cite 15% of children in schools for the mentally retarded as hearing impaired. Johnson and Farrell (1954), Kodman (1958); Siegenthaler (1959), Rittmanic (1959), Lloyd and Reid (1967), Nober (1968), and Fulton and Lloyd (1968), among others, report that the incidence of hearing loss ranging from mild to profound is significantly higher among persons with mental retardation than within the normal population. In a recent study by Bensberg (1974), officials in state residential institutions for the mentally retarded (children and adults) reported hearing loss for 10% of the population. Since some institutions do not have audiology services available, it is axiomatic that hearing loss in many patients often is undetected. A 10% prevalence of hearing loss among the nearly 300,000 persons with mental retardation in public institutions alone yields a conservative figure of 30,000. Data from the 1972-1973 Annual Survey of Hearing Impaired Children and Youth, Office of Demographic Studies, appear in Table I and show the prevalence of mental retardation in programs for the hearing impaired to exceed 7%. Data on hearing loss from day schools and private institutions for the mentally retarded are not available. However, data from state education agencies show that approximately 1,300,000 children are mildly to profoundly retarded (Weintraub, Abeson, and Braddock, 1971, p. 22). If a 10% estimate of hearing loss (per Bensberg’s data) is applied to this population and combined with the estimates of mentally retarded adults who have significant hearing loss, the number of HI/MR persons increases drastically to at least 165,000. These estimated data are debatable. However, the need for comprehensive programs and services that include more precise data collection and reporting is uncontestable.

A NEED FOR COMPREHENSIVE SERVICES

This dual-handicapped population requires national attention. Historically, many of these persons either have been denied services or, too often, have been inappropriately placed in additional programs for the deaf or the mentally retarded that are unequipped to cope with their instructional and other service needs. Weintraub et al.’s data (1971) indicated that nearly 900,000 children classified as hearing impaired, mentally retarded, and multiply handicapped were not receiving special services or instruction. If at least 10% of these children are assumed to have some degree of combined hearing loss and mental retardation as suggested by previous studies (Lloyd and Moore, 1972; Bensberg, 1974), the number of unassisted children with these dual disabilities might be estimated conservatively as exceeding 90,000.

Few comprehensive programs have been established. National and state provisions for such individuals are subsumed most commonly under the general classifications of “multiply handicapped” or “developmentally disabled.” Since the more severely disabled persons are generally assessed as needing intensive, long-term care and since they represent a low-incidence population, residential facilities for the deaf or the mentally retarded have become primary placement sources.

Current medical advances in prenatal and perinatal care and important achievements in audiological technology have created a more positive outlook for earlier, more accurate
Identification of this population. In addition, progress in special education involving individualized instruction, behavior modification, and improved media and technology have sparked efforts to meet the needs of multiply handicapped populations. However, a broader, better-coordinated continuum of services is still needed to adequately meet the diverse needs of persons diagnosed as both hearing impaired and mentally retarded. Although comprehensive program development is an arduous task, knowledge gained from existing programs for the mentally retarded, deaf, and deaf-blind can provide an excellent foundation for establishing a comprehensive network of services. It is imperative that new systems be implemented to include prevention services, early identification programs, comprehensive interdisciplinary diagnostic assessments, effective instructional and habilitative programming, vocational services, and recreation. Each individual must be afforded the opportunity to develop maximum capabilities, thus minimizing the effects of combined hearing loss and depressed intellectual functioning.

A NEED FOR ACTION

The American Speech and Hearing Association (ASHA) in cooperation with the Conference of Executives of American Schools for the Deaf (CEASD) and the American Association on Mental Deficiency (AAMD) has recognized the need for governmental agencies and professional organizations to take positive steps to upgrade services for the multiply handicapped hearing-impaired population. With support from the Rehabilitation Services Administration, Division of Developmental Disabilities, a special project was initiated in 1973 entitled “Rehabilitation and Management of the Hearing Impaired Mentally Retarded.” Objectives of this project were to (1) review the research literature concerning the dual handicap of hearing impairment and mental retardation, (2) obtain information on existing training and service programs, (3) publish a public information brochure about hearing loss and mental retardation, and (4) develop recommendations for comprehensive services.

---

**TABLE 1** Number and percentage distribution of hearing-impaired students reported as mentally retarded in special educational programs participating in the Annual Survey of Hearing Impaired Children and Youth, by age and type of program: United States, 1972-1973.

<table>
<thead>
<tr>
<th>Type of Program</th>
<th>All Ages</th>
<th>Under 5 Years</th>
<th>6-11 Years</th>
<th>12-16 Years</th>
<th>17 Years and Over</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td><strong>All programs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported mental retardation</td>
<td>3,273</td>
<td>7.7</td>
<td>1,187</td>
<td>3.9</td>
<td>1,209</td>
<td>6.0</td>
</tr>
<tr>
<td>Total students</td>
<td>43,946</td>
<td>100.0</td>
<td>4,821</td>
<td>100.0</td>
<td>20,184</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Residential schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported mental retardation</td>
<td>1,171</td>
<td>6.0</td>
<td>311</td>
<td>3.7</td>
<td>343</td>
<td>4.9</td>
</tr>
<tr>
<td>Total students</td>
<td>18,515</td>
<td>100.0</td>
<td>836</td>
<td>100.0</td>
<td>6,960</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Day schools</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported mental retardation</td>
<td>238</td>
<td>4.8</td>
<td>44</td>
<td>1.8</td>
<td>117</td>
<td>4.0</td>
</tr>
<tr>
<td>Total students</td>
<td>4,965</td>
<td>100.0</td>
<td>795</td>
<td>100.0</td>
<td>2,903</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Full-time classes—</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hearing impaired</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported mental retardation</td>
<td>760</td>
<td>6.7</td>
<td>61</td>
<td>3.1</td>
<td>356</td>
<td>5.5</td>
</tr>
<tr>
<td>Total students</td>
<td>11,368</td>
<td>100.0</td>
<td>1,928</td>
<td>100.0</td>
<td>6,480</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Part-time classes—</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hearing impaired</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported mental retardation</td>
<td>375</td>
<td>6.2</td>
<td>18</td>
<td>4.0</td>
<td>128</td>
<td>4.7</td>
</tr>
<tr>
<td>Total students</td>
<td>6,012</td>
<td>100.0</td>
<td>451</td>
<td>100.0</td>
<td>2,749</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Speech and hearing clinics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported mental retardation</td>
<td>69</td>
<td>7.1</td>
<td>27</td>
<td>4.8</td>
<td>21</td>
<td>8.4</td>
</tr>
<tr>
<td>Total students</td>
<td>973</td>
<td>100.0</td>
<td>561</td>
<td>100.0</td>
<td>249</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported mental retardation</td>
<td>.81</td>
<td>38.5</td>
<td>.36</td>
<td>14.6</td>
<td>.24</td>
<td>29</td>
</tr>
<tr>
<td>Total students</td>
<td>2,113</td>
<td>100.0</td>
<td>250</td>
<td>100.0</td>
<td>843</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Includes students who were classified as being in full-time classes, resource rooms, and parent programs.

Includes students who were classified as being in part-time classes, resource rooms, and parent programs.
Project Planning and Organization

A. Appointment of the Steering Committee

A Steering Committee composed of professionals with expertise in the areas of deafness, mental retardation, and related fields was selected to participate in and assist with the planning and initiating of grant activities. The nature of the project required an interdisciplinary, cooperative effort, which was accomplished by selecting Steering Committee representatives recommended by ASHA, AAMD, and CEASD. In addition, various professionals in the field including members of the ASHA Committee on Mental Retardation, the ASHA-CEASD Joint Committee on Audiology and Education of the Deaf, and the AAMD-CEASD Joint Committee on the Deaf Mentally Retarded, served to recommend members for the Steering Committee.

To expedite planning, ensure interorganizational liaison, and conserve project costs, the ASHA Project Staff appointed the chairmen for the ASHA-MR, ASHA-CEASD, and AAMD-CEASD committees as key representatives on the Steering Committee. They were David Yoder (University of Wisconsin), Thomas Behrens (formerly of Kendall School, Gallaudet College), and Lyle L. Lloyd (National Institute of Child Health and Human Development), respectively. In addition, 11 other persons were selected for the Committee (see Acknowledgment).

Steering Committee members played a major role in the selection of conferees for two conferences. They not only provided considerable input to both meetings, but also assisted with the drafting of the present document on recommendations for comprehensive services.

Steering Committee meetings were held on January 25, 1973; March 26-27, 1973; and July 17-19, 1974. Principal areas of concern at these meetings were to:

1. Develop a useable definition of the population;
2. Determine incidence and prevalence figures on which to base future programming and training of new personnel;
3. Describe programs designed to deal effectively with the diagnostic, educational, or rehabilitative needs of the population including vocational training, living and work arrangements, recreational services, and so on;
4. Analyze present methods of manpower utilization;
5. Study qualification criteria for personnel who are presently employed;
6. Promote the development of more community-based programs, for example, group homes or halfway houses, sheltered living-work environments, work-study programs, and on-the-job training;
7. Study the most promising new methods for teaching speech, language, and communication skills;
8. Evaluate existing plans for coordination of services and investigate regionalization as a possible means of providing quality services;
9. Identify model programs to serve as educational labs for evaluating established instructional methods and developing innovative ones;
10. Recommend procedures for enforcement of mandates for services at the state or local level; and
11. Evaluate needs in research.

B. Airlie House Conferences

The National Advisory Committee on Education of the Deaf, with support and assistance from the Office of Mental Retardation Coordination and the ASHA Project Staff, assembled an interdisciplinary task force of specialists in deaf education, otology, speech pathology, audiology, psychiatry, social work, program planning, and program evaluation. A list of 34 participants including the ASHA Project Staff and the Steering Committee was compiled to represent the professional community serving the deaf and mentally retarded in research, professional preparation, and program administration (see Appendix A). This group was charged with developing a preliminary plan of action to meet the needs of deaf and mentally retarded persons.

This conference was sponsored by the Office of Mental Retardation Coordination. Thus, the focus was on a smaller population, namely the mentally retarded deaf. However, a broader population is discussed in this document and therefore referred to as the hearing-impaired mentally retarded.
The participants convened at the Airlie Foundation on January 25-28, 1973, by invitation from Patricia Reilly-Hitt, then assistant secretary for Community and Field Services, U.S. Department of Health, Education, and Welfare (DHEW). The conference was designed to:

1. Delineate the problems faced by persons with the dual disability of mental retardation and deafness.
2. Develop recommendations for improving services to mentally retarded deaf persons, and
3. Establish links of communication and cooperation among professionals representing the fields of mental retardation and deafness.

A lengthy list of unresolved issues, observations, and recommendations produced from a previous DHEW conference in October 1972 provided a basis for the more critical and targeted group interactions at this conference. Prior to the conference, all conference received a set of materials selected by an Executive Advisory Committee and the ASHA Steering Committee. These resource materials included (1) an extensive bibliography on the subject of hearing impairment and mental retardation containing over 600 references (Hirshoren and Lloyd, 1972); (2) a listing of programs and services available for the deaf mentally retarded as identified by the AAMD-CEASD Joint Committee; (3) a listing of personnel who attended the two AAMD-CEASD Joint Committee forums in 1971 plus a listing of other individuals who identified themselves as professional workers in the field of mental retardation and hearing impairment; and (4) a selected number of article reprints, which served as background material for conference participants.

Each participant was assigned to one of four teams and the teams were asked to use the unedited material from the October meeting as a basis for developing a more elaborate “action document.” Individual team recommendations were delineated and presented to the entire group for reaction. Group consensus on positions was recorded and in turn incorporated into a final document, which was subsequently submitted to the Office of Mental Retardation Coordination to be printed as a task force report (see Appendix A).

The Airlie conference helped the project staff take important initial steps to meet three objectives of the HIMR project, that is, to (1) critically review available literature on the disabilities of hearing impairment and mental retardation, (2) collect data and information on existing and needed research, training, and service programs; and (3) evaluate existing manpower and make recommendations for manpower utilization and training.

C. Hunt Valley Conference

The second conference, held August 25-28, 1974, was designed to determine ways to achieve practical application of the information collected at the Airlie House Conference and to update material collected on the needs of this dually handicapped population. The conference, entitled “Meeting the Needs of Persons with Combined Hearing and Intellectual Impairments,” included an even distribution of representatives from four major areas: (1) legislation, finance, and administration; (2) identification and assessment, (3) teaching, management, and supervision, and (4) professional and paraprofessional training. Sixty persons and four interpreters participated with an average of 15 participants in each of the four groups. Each group identified critical issues applicable to the hearing-impaired mentally retarded population, discussed appropriate actions to be taken, and formulated these actions into resolutions. Each resolution was voted on by all participants to determine total group position. After the conference, a final draft of the resolutions was sent to all participants to serve as a reminder of the vital needs of this population and to assist them with positive action at state and local levels on behalf of all hearing-impaired mentally retarded (HIMR) persons (see Appendix B).

The resolutions have been incorporated in the chapter on recommendations. The results of these conferences can indeed add impetus to the development of comprehensive services for this highly neglected population.

The recommendations from both conferences and the Steering Committee were used to develop this publication, which is designed to accomplish several basic purposes:

1. To establish a conceptual framework for comprehensive programming within which appropriate services can be provided for each individual.

---

"S. M. Hall and L. W. Talkington, unpublished material prepared for the AAMD-CEASD convention (1971)."
2. To summarize relevant litigation and legislation concerning the severely handicapped,
3. To describe a network for improved coordination of new and existing services,
4. To promote effective administrative structures,
5. To stimulate action for basic diagnostic and habilitative programs, and
6. To discuss the need for expanding the training of professional and paraprofessional personnel.

The information and recommendations contained in this document cannot be very definitive since too little research is available on the target population and too few prototype programs exist to delineate specific recommendations. Rather, the recommendations are submitted as a preliminary plan for action, hopefully to serve as a point of departure for those who are committed to the provision of quality programming.
Chapter 2: The Target Population

A review of the literature confirms the generalization that no single definition for the conditions of hearing impairment and mental retardation, either as isolated terms or in combination, would be acceptable to all professions, or to all members within a single profession, or would completely describe the special population under consideration.

Numerous variables must be analyzed when defining or classifying this population. The characteristics that would best define these dually handicapped persons include various parameters within a number of disciplines and make any comprehensive definition cumbersome. In the past, definitions of this population often were formulated to serve specific administrative needs in medicine, law, education, psychology, and audiology. To remedy this situation, it is imperative that a definition be interdisciplinary and nonbinding so that negative stigmata are not permanently engraved on the individuals in this population.

DEFINING THE POPULATION

While we recognize that rigid classification systems and categorical labels have caused extensive and permanent damage to many handicapped individuals, it is apparent also that some flexible classification systems are often imperative before a population with special needs will be recognized and actions taken to facilitate effective programming. Appropriate definitions and organizational schemata can facilitate program planning, encourage formulation of legislation, expedite appropriation of funds, foster the implementation of service programs, and help to determine program effectiveness. The barriers created by classification systems are best conquered by constructing relevant longitudinal profiles and time-based behavioral descriptions for each disabled person. At the same time, a grouping process locks a person into a single service delivery system. Placement of each person must be accompanied by continual reassessment and program evaluation.

Hearing Impairment

Hearing Impairment is a generic term indicating any loss of hearing from mild to profound as indicated otologically, audiometrically, and functionally. The term generally includes the subclassifications of deaf and hard of hearing.

Four basic factors are normally considered when defining hearing impairment. These are:

- Site of lesion (the type of hearing loss: sensorineural, conductive, or central)
- Etiology (cause of hearing loss: hereditary, disease, or trauma)
- Age of onset (effect on language and speech development)
- Degree of hearing impairment (audiometric and behavioral)

Types of Hearing Impairment That May Coexist (Illinois Commission on Children, 1968, pp. 6-7)

A. Conductive Impairment

Conductive impairment is the loss of hearing resulting from dysfunction in the transmission of sound through the outer or middle ear. The primary effect is a loss of loudness. Perception of sounds is generally restored if the loudness of sounds is increased. Loss resulting from impairment of the outer or middle ear may vary from mild to moderate and rarely exceed 60 dB (ASA) or 70 dB (ISO) through the speech frequency range (500 to 3000 Hz). Not only are these lesions often preventable, but a considerable number respond well to medical treatment and surgery when discovered early. The use of a hearing aid, if needed, generally compensates for the loss.

B. Sensorineural Impairment

Sensorineural impairment is the loss of hearing resulting from dysfunction of the inner ear or auditory nerve. The primary effect is a loss of total clarity and loss of loudness of sound. The perception of higher frequencies tends to be affected most. If the loss is severe, both high and low frequencies are involved. When the speech frequencies are affected, the clarity of words can become distorted. Intelligibility and awareness of sound are impaired. Since the sensory and neural mechanisms are involved, the benefits of a hearing aid may be limited if its use only results in increased loudness but limited clarity. Sensorineural losses may vary from mild to profound and medical treatment as yet is limited. Prevention and early education are imperative.
C. Central Impairment

Central impairment is auditory impairment resulting from dysfunction along the pathways (tracts and nuclei) of the brain from the brain stem to and including the cerebral cortex. Too little is known concerning this disorder. Interference with the ability to perceive and interpret sound (particularly speech) is the primary handicap. Loss of loudness is not significant and thus the decibel loss is inadequate for describing this type of impairment. Central deafness apparently results from a neurological disorder. Acuity is not a primary factor. The value of a hearing aid in this type of hearing impairment remains controversial.

Classifications of Hearing Impairment (Illinois Commission on Children, 1968, pp. 7-8)

A. Slight Impairment

A person with a slight impairment may have difficulty hearing speech under less than ideal acoustic conditions, may not be able to hear faint or distant speech clearly, will probably function well auditorily in most situations, and probably will not have defective speech because of the hearing loss.

B. Mild Impairment

A person with a mild impairment will have some difficulty understanding conversational speech at a distance of more than five feet, will probably miss up to 50% of some discussions if voices are faint or if the face is not visible, may have defective speech if loss is in the speech frequencies, and may have depressed vocabulary.

C. Marked Impairment

A person with a marked impairment will have difficulty hearing speech under most conditions, will have considerable difficulty in following discussions, will generally exhibit deviations of articulation and voice, will often misunderstand directions, and will have impaired language understanding and usage.
The Hearing-Impaired Mentally Retarded:Recommendations for Action

D. Severe Impairment

A person with a severe impairment will be unable to hear speech unless it is amplified, will be able to hear environmental sounds such as sirens and airplanes, and will exhibit severely impaired speech and language development.

E. Profound Impairment

A person with a profound impairment will have difficulty hearing and appreciating speech even with amplification of sound. His language will not develop without special techniques for communication development.

Table 2 defines each degree and class of hearing impairment in terms of pure-tone test averages. The numbers represent the average of the hearing threshold levels in decibels at 500, 1000, and 2000 Hz for two existing audiometric standards, the American Standards Association (ASA) recommendations of 1951 and the International Standards Organization (ISO) recommendations of 1964. The ASA standards are presented in this document because some state service programs reported that their audiometers have not been converted to ISO standards. In addition, these programs do not use conversion tables.

<table>
<thead>
<tr>
<th>Degree and Class of Impairment</th>
<th>Hearing Level (dB) 1951 ASA Reference</th>
<th>Hearing Level (dB) 1964 ISO Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>15 or less</td>
<td>26 or less</td>
</tr>
<tr>
<td>Slight</td>
<td>16-29</td>
<td>27-40</td>
</tr>
<tr>
<td>Mild</td>
<td>30-44</td>
<td>41-55</td>
</tr>
<tr>
<td>Marked</td>
<td>45-59</td>
<td>56-70</td>
</tr>
<tr>
<td>Severe</td>
<td>60-79</td>
<td>71-90</td>
</tr>
<tr>
<td>Profound</td>
<td>80 or more</td>
<td>91 or more</td>
</tr>
</tbody>
</table>

This scale represents audiometric loss, only and is used to verify medical diagnoses. Auditory loss alone should not be used to classify persons for educational purposes or for employment without other considerations. Hearing Impairment is a functional disorder. It affects the total person and not just his hearing. Otologic, audiological, psychological, educational, and other services should be used to obtain a comprehensive assessment of the individual's total ability to function with a hearing loss. Determining adaptive behavior is important and will depend on such variables as (1) the age of onset of hearing loss, (2) degree of hearing loss, (3) type of impairment, (4) intelligence, (5) motivation, (6) speechreading ability, (7) physical and emotional health, (8) quality of parental and professional services, (9) timing and management methods used in providing assistance, and (10) attitudes of the family, school, institution, or community.

Mental Retardation

The American Association on Mental Deficiency (AAMD) defines the mentally retarded as those who have

...significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior, and manifested during the developmental period.

(Grossman, 1973, p. 148)

AAMD's manual on terminology and classification (Grossman, 1973) listing of intellectual functioning or measured intelligence is presented in Table 3 for reference only and cannot be used in determining the degree of mental retardation that may be present in persons with hearing loss.

2These standards can be obtained from the American Standards Association, 10 East 40th Street, New York, New York 10016.
AAMD defines adaptive behavior as

- the effectiveness or degree with which the individual meets the standards of personal independence and social responsibility expected of his age and cultural group. Three aspects of this behavior are: (1) maturation, (2) learning; and/or (3) social adjustment. These three aspects of adaptation are of different importance as qualifying conditions of mental retardation for different age groups. (Grossman, 1973, p. 122)

Extensive clinical experience with mental retardation and hearing impairment is vital in accurately determining that a person has both conditions and in establishing an accurate adaptive behavior level. Diagnosticians must display good clinical judgment in order to identify and synthesize the most pertinent test data with significant behavioral observations in identifying and assessing a person as dually handicapped.

Frequently used educational categories for mental retardation include (1) educable (mild) mentally retarded (EMR), (2) trainable (moderate) mentally retarded (TMR), and (3) severely mentally retarded (SMR) or severely/profoundly mentally retarded. Current assessments of intellectual functioning do not imply potential or absolute level of intelligence. Some conditions of mental retardation are no longer viewed as immutable. Instead, they are considered ameliorative.

### TABLE 3. Intellectual functioning or measured intelligence (Grossman, 1973, p. 18).

<table>
<thead>
<tr>
<th>Level of Mental Retardation</th>
<th>Stanford-Binet and Cattell*</th>
<th>Wechsler Scales†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>67-52</td>
<td>69-55</td>
</tr>
<tr>
<td>Moderate</td>
<td>51-36</td>
<td>54-40</td>
</tr>
<tr>
<td>Severe</td>
<td>35-20</td>
<td>39-25‡</td>
</tr>
<tr>
<td>Profound</td>
<td>19 and below</td>
<td>24 and below‡</td>
</tr>
</tbody>
</table>

*Standard deviation = 15.
†Standard deviation = 15.
‡Extrapolated.

**The Hearing-Impaired Mentally Retarded (HIMR)**

To illustrate the need for special program development and to identify this population further, the following description of persons with hearing impairment and mental retardation has been adopted by the Steering Committee for use in this project:

- **Those individuals who have hearing impairment, subaverage general intellectual functioning and deficits in adaptive behavior. The combination of these three factors requires services beyond those traditionally needed by persons with either mental retardation or hearing impairment alone.**

It is important that an individual not be considered hearing impaired and mentally retarded until he or she has had a comprehensive interdisciplinary assessment confirming the presence of problems in hearing, intellectual functioning, and adaptive behavior.

The preceding description is offered to facilitate program planning, development, and management. It should be used as a guide to ensure proper services and to enhance each individual's opportunity for achievement.
Chapter 3: Legal Rights: Constitutional and Statutory

Charity may be the highest of the virtues, but in some situations it may not be as valuable as a court order. Thus, judicial decrees may sometimes get things accomplished when all other appeals to abstract justice and humanitarian impulses prove futile. This section is not concerned with those services or opportunities that would be helpful to persons with hearing impairment and mental retardation or even with those in which such persons may have a moral right as human beings seeking to achieve full potential. Rather, it deals with those areas where these persons may have a legal right that may be enforced in a court of law.

In general, legal rights are drawn from one of two basic sources: (1) constitutional rights—certain principles or fundamental rights that are held to be so important and “inalienable” that they are spelled out in the solemn documents that serve as the foundation of the government of this land, namely, the U.S. Constitution and various state constitutions, and (2) statutory rights—specific provisions of statutes enacted by legislatures. A number of legal rights regarding multiply handicapped persons are outlined under these two categories.

CONSTITUTIONAL RIGHTS

Neither the federal nor state constitutions single out persons with combined hearing loss and mental retardation to afford them any special rights, liabilities, or duties. Consequently, while these individuals may require specialized services and programs designed to meet personalized needs, the constitutional rights of such a person are the same as those of individuals with other handicaps, in fact, they are the same as the constitutional rights of so-called “normal” persons. Above and beyond the Constitution, all persons are created equal.

State constitutions vary greatly. Many provide protection in areas that go far beyond the guarantees of the U.S. Constitution. Indeed, several states are either considering or have already passed constitutional amendments that explicitly outlaw discrimination against handicapped persons. While such provisions are most encouraging and worthy of imitation in all states, the ensuing discussion is limited to rights that are either included in the U.S. Constitution or are widely accepted in the constitutions of the states.

The mere existence of a constitutional right does not guarantee its recognition and it may not have been enforced by court action. Frequently, people are unaware of their rights and afraid or unable to fight for these rights. For these reasons, some of the constitutional rights listed below have not yet been widely recognized and some have not been the subject of definitive judicial rulings. However, all these rights are sound and substantial and will be protected by the courts.

The advocacy movement on behalf of handicapped persons has become increasingly litigious in recent years. As a result, many judicial precedents have been established that recognize the constitutional rights of handicapped individuals. Among the most significant rights of persons with hearing and intellectual impairments are:

A. The Right to Equal Educational Opportunity

Put succinctly, this is the right of every child, including all severely or multiply handicapped children, to have access to an appropriate public education program. The application of this principle condemns as unconstitutional any attempt to exclude any handicapped child or group of such children from the public education system because of their handicaps. Thus, “zero reject” public education is mandated.

Cases concerned with equal educational opportunity and applicable to this population are:


2. Wolf v. Legislature of the State of Utah, Civil No. 182646 (1969). This case dealt with the denial of admission of two so-called “trainable” mentally retarded children to the public school system. Admission was granted.

3. Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania, 334 F. Supp. 1257 (E.D. Pa., 1971) and 343 F. Supp. 279 (E.D. Pa., 1972). The principle of equal educational opportunity was applied to all mentally retarded children in Pennsylvania. The defendant public school officials were ordered to provide all mentally retarded children “access to a free public program of education and training” (343 F. Supp., p. 302). Also, the schools must provide notice to parents or guardians, opportunity for a hearing, and periodic reevaluation.

5. **Reid v. Board of Education**, No. 8742 (New York). This class action suit decided that all students who have been diagnosed as handicapped must be placed immediately in appropriate public school classes or, if the public school classes are not available, in private schools under contract in accordance with the provisions of Paragraph 6 of Subdivision 2 of Section 4404 of the Education Law (Decision, p. 6):

6. **LeBanks v. Spears**, C.A. No. 71-2897, Section E (E.D. La., April 1973). This most recent case in Louisiana declared that every child who is mentally retarded or suspected of being mentally retarded is entitled to "(a) evaluation and development of a special education plan and periodic review, and (b) provision of a free public program of education and training appropriate to his age and mental status" (Order, p. 3), all of which is to be performed in accordance with specified, comprehensive procedural safeguards. Compensatory education was ordered for those persons, now adults, who had been without education as children.

The PARC, Mills, Wolf, and several New York cases have spawned a great number of similar actions across the nation. Indeed, the rights of handicapped persons to equality in educational opportunity have been unanimously recognized.

**B. The Right to Have Community and Residential Services Provided in a Humane and Minimally Restrictive Environment**

This right has two components:

1. When a state decides to provide a service for its citizens it must do so under conditions that are as minimally restrictive to personal liberty as possible. In legal terminology, this is the concept of the "least restrictive alternative," meaning the state and its officials must examine all possible alternatives for providing services and choose the one that is as unrestrictive as possible. This right to the least restrictive alternative was outlined in cases dealing with mental hospitals in 1967, **Covington v. Harris**, 419 F.2d. 617, 623 (D.D.C., 1967) and in 1972, and **Lessard v. Schmidt**, 349 F. Supp. 1078, 1096 (E.D. Wis., 1972) in 1971. The principle that the state is required to investigate the alternatives and select the one that is least restrictive was applied to a residential institution for mentally retarded persons in **Wyatt v. Stickney**, 344 F. Supp. 373, 386 (M.D. Ala., 1971). Most recently, in **Welsch v. Likins**, No. 4-72-civ. 451 (D. Minn., 1974) the court stated that the residents at the Minnesota State Hospital for mentally retarded persons were entitled to the "least restrictive practicable alternatives."

2. The courts have ruled that when the state restricts a person's liberty for the declared purpose of providing a service, then constitutionally it is required to actually provide that service. This concept has been specifically recognized in the area of mental hospitals and residential institutions for mentally retarded persons (**Wyatt v. Stickney**). The most recent case dealing with this issue is **Welsch v. Likins**. This case stated that when a citizen is deprived of some right supposedly in return for the benefit of receiving a service (treatment) the state is mandated by the Due Process Clause to make sure that the service is actually provided. In addition, the Court declared that "inadequate resources can never be an adequate justification for the state's depriving any person of his constitutional rights."

These two principles can be summarized very simply. (1) a person should be required to give up as little freedom as possible to obtain a service from the state, and (2) where a person does bargain away some of his liberty to obtain a service, he is certainly entitled to receive that service. The federal and state constitutions assure that these two principles, amounting to elementary fairness, must be followed.

**C. The Right to Equal Employment Opportunities**

No constitutional right guarantees a person a job. However, the total elimination of handicapped persons from consideration for a job may be constitutionally prohibited.
While a person may not be absolutely entitled to employment, he cannot be arbitrarily and unfairly discriminated against. Statistics from the President's Committee on Employment of the Handicapped demonstrate that handicapped persons are dependable workers. Handicapped individuals are entitled to equal opportunities to qualify for, and to be promoted in, employment. Denial of this right to equal employment opportunities may violate state and federal constitutional guarantees of equal treatment.

In *Truax v. Reich*, 239 U.S. 33, 41 (1915), the U.S. Supreme Court declared that "the right-to-work-for-a-living-in-the-community-occupations-of-the-community-is-of-the-very-essence-of-the-personal-freedom-and-opportunity-that-it-was-the-purpose-of-the-Fourteenth-Amendment-to-secure."

D. The Right to Just Payment for Labor

The right of handicapped persons to be free from discriminatory practices concerning hiring, firing, and promotions (the Right to Equal Employment Opportunity) is closely related to the right to just compensation for labor. In the past, many residential institutions for handicapped people have required the residents to perform strenuous physical labor for no pay, under the guise of "work therapy." This slave labor, termed "peonage," has been challenged in the courts.

In the landmark decision *Souder v. Brennan*, C.A. No. 482-73 (D.D.C., November 14, 1973), the U.S. District Court for the District of Columbia ruled that residents of such institutions are covered by minimum wage and overtime compensation provisions. Henceforth, if residents are required to work, they will be guaranteed a wage.

E. The Right to Vote

A long line of U.S. Supreme Court cases makes it clear that the right to cast one's ballot is a constitutionally protected right. Increasingly, it is becoming apparent that constitutionally, persons with physical or mental handicaps may not be automatically deprived of their rightful vote. Although it may be legitimate to limit the franchise to those who understand its meaning and effect, there can be no blanket presumption that persons with any particular handicap are incapable of such understanding. Reports from Michigan tell of a 1972 opinion of the attorney general stating that residents of an institution for the mentally retarded cannot be denied the right to vote in local or national elections simply by virtue of their residence in the facility, so long as they meet other requirements for voting.

In Massachusetts, the case of *Pickett v. Peterson* (D. Mass., 1973) has been filed and an injunction is being sought to protect the right of residents of Belchertown State School for the Retarded to cast their ballots. The Board of Registrars of Voters was refusing to allow residents of this state school to register to vote. This practice is unconstitutional. The right to vote is a primary ingredient of citizenship. This fundamental right may not be taken away arbitrarily from handicapped individuals.

F. The Right to Meaningful and Fair Access to the Courts

"Due process of law" is one of the most basic guarantees of our American governmental system. Most people take it for granted that they have the right to sue or be sued, to invoke ordinary legal processes. Sometimes, however, handicapped persons have been denied this right. Persons who have been labeled "mentally incompetent" are often not permitted to sue or be sued. The lack of proper entranceways, ramps, and elevators may make it impossible for physically handicapped persons, especially those in wheelchairs, to enter courtrooms. Persons in residential institutions may be prevented from corresponding with an attorney or the courts, and thereby blocked from pursuing any judicial action.

Yet, the constitutional mandate and the more modern trend is concerned with protecting the right of access to the judicial system. This right serves as a primary enforcing mechanism in that it allows an individual to exercise other constitutional and statutory rights. However, mere access to the courts is of little value unless judicial proceedings are both meaningful and fair. For example, a court appearance of a deaf person who can communicate only with manual signs is useless unless an interpreter is provided. Understanding along with participation is needed. In the event that a mentally retarded person is involved in a court proceeding and is unable to represent himself, a guardian may be appointed to protect his or her interests.

In addition, the courts should be reasonable and fair in their dealings with handicapped parties. A good example of this is noted in the case of *Jackson v. Indiana*, 406 U.S.
715 (1972), where a hearing-impaired mentally retarded boy was charged with stealing nine dollars. Due to his condition, he was found incompetent to stand trial and was sentenced to a state mental institution until he "recovered." Since he would not recover from his condition of mental retardation, the court's decision amounted to a life sentence. However, if he had been convicted of the crime for which he was charged, he would have been liable only for a brief term of incarceration. Fortunately, attorneys engaged on the boy's behalf pressed the case to the U.S. Supreme Court. The higher court held that if an accused person would not recover from his incompetency to stand trial, the state could not incarcerate him pending such recovery. Thus, the decision to commit the boy indefinitely to the institution was reversed.

G. The Right to Marry, Procreate; and Raise Children

These rights have all been declared by the U.S. Supreme Court to be fundamental rights protected under the U.S. Constitution. Unfortunately, these rights have frequently been denied to handicapped persons. Marriages have been prohibited or declared invalid, involuntary sterilizations have been performed, and children have been removed from homes simply because the person involved happened to have a handicapping condition.

The blanket denial to hearing-impaired mentally retarded persons of the right to marry, procreate, and raise children is a "permanent irrebuttable presumption" that has been condemned by the U.S. Supreme Court. The trend of litigation will be to seek protection for these basic and fundamental rights.

An example of this right can be found in the case of Wade v. Bethesda, 237 F. Supp. 671 (S.D. Ohio, 1971). Several parties in Ohio, including a judge who ordered sterilization performed on a mentally retarded girl, the doctor who performed the operation, the hospital where it was performed, and the social and welfare workers who suggested the surgery, were sued for three million dollars on the basis that their action had deprived the girl of her constitutional rights. The U.S. District Court found that the judge was totally without authority to order the operation and the defendants agreed to settle the case voluntarily for a substantial sum of money.

It is clear that the rights of handicapped persons to marry and to bear and raise offspring may no longer be taken away with impunity.

H. The Right to Be Free Unless Proven Dangerous

A very basic right is simply the right to be free, to go where one wants to go, to do whatever one wishes to do. This concept was included in the Declaration of Independence and the U.S. Constitution as the concept of "liberty." The only reasonable limitation on this right of physical freedom is in situations where persons become a danger to society.

This right to be free from any type of physical restraint unless it is proven dangerous belongs to handicapped persons as well. Freedom of movement and association are rights of constitutional dimensions. This right was contested in the Wisconsin case of Lessard v. Schmidt, 349 F. Supp. 1078 (D. Wis., 1972), where the court ruled that a person may not be incarcerated unless it is proven beyond a reasonable doubt that the person has committed an overt act of violence. The asserted "good" motives of the state were held to be insufficient to justify locking up a person solely because of a mental handicap.

I. The Right to Contract and the Right to Own and Dispose of Property

These are rights most Americans take for granted. If we wish to purchase a television set or an automobile, we do so. If we do not wish to pay cash, we simply sign a contract in which we promise to pay interest in return for the delay of our payments. Frequently, handicapped persons have been denied the right to acquire, use, and dispose of property, as well as denied the right to enter into contractual arrangements.

There are two conflicting policy considerations at work here. On one hand, a handicapped person should be allowed to be an owner of property like any other person. Permission should be granted to make contracts, to allow persons with dual impairments the opportunity to take advantage of the numerous devices and procedures for obtaining services and goods that are made available by modern commerce. On the other hand, it is unfair to see a developmentally disabled person bound by the terms of some onerous contract, which was signed only because he or she was unable to understand the terminology and conditions included. Furthermore, it would be counterproductive for a disabled person to have a type of property that he or she was not capable of controlling or managing.

These considerations would seem to indicate that mentally handicapped hearing-
Impaired people might be competent in one context to understand a contract or to own a particular type of property, while in another context they might not have the requisite competence and, therefore, need judicial protection. A person might be fully capable of owning a bicycle or furniture but not understand the intricacies of managing a large estate or buying and selling securities.

Unfortunately, in the past, guardianship laws tended to require that a person be declared either totally competent or totally incompetent. A person who was unable to manage his estate and was therefore judicially declared to be incompetent lost all his contractual and ownership rights. Unless another judicial determination occurred that declared the person competent, the guardian was the sole person who could make contracts or exercise ownership.

The modern trend, and one that appears more in line with constitutional guarantees, is toward a system known as "limited guardianship." The concept of limited guardianship permits a court to declare a particular person incompetent for a specific purpose and a guardian to be appointed to act to protect his interests. The person is incompetent only with regard to the particular matters involved in the determination of incompetence. Thus, he or she retains the right to contract and to own and dispose of property in all other areas.

The Right to Fair and Equal Treatment by Public Agencies

A generalization that can be drawn from the previously mentioned rights is that handicapped persons are entitled to be treated in a fair and equal manner by public agencies and officials. Indeed, a simplistic summary of the Fourteenth Amendment is that it guarantees equal protection and due process of law. This in turn is applicable to public agencies in that it requires these agencies to treat all people with equality and fairness. Stated conversely, invidious discriminations or unfair actions by public bodies or officials are forbidden by the Fourteenth Amendment to the U.S. Constitution.

The right to fair and equal treatment by public agencies is a primary way in which the legal propriety of almost any type of program for the multiply handicapped can be measured. Indeed, this right serves as an umbrella in that it shields and encompasses all of the previously mentioned rights as well as several additional ones.

Additional Rights

Several other constitutional rights regarding handicapped persons do exist. A brief sampling of additional rights possessed by this population will include but not be limited to:

1. The right of equal access to medical services;
2. The right to send and receive mail;
3. The right to privacy, especially concerning one's intimate bodily functions;
4. The right to choose and practice a religion;
5. The right to have relationships with one's peers, including members of the opposite sex;
6. The right to equal access to welfare, social security, and other social service programs;
7. The right to freely express oneself whether it be through the choice of one's hair length, clothing styles, music, or otherwise;
8. The right to be free from culturally biased and other improper testing and classification procedures;
9. The right to equal opportunities for housing and freedom from discriminatory zoning ordinances;
10. The right to nondiscriminatory treatment by policemen and firemen;
11. The right to be free from medical experimentation;
12. The right to travel and to free access to buildings and transportation facilities, and
13. The right to be free from governmental encroachment on a normal life-style and life cycle.

The list need not become endless. All rights may be capsulized under the concept of fair and equal treatment by public agencies and officials. Such are the requirements of state and federal constitutions.
STATUTORY RIGHTS

Some legal rights have been created by legislation rather than by constitution. Legislation is by its very nature much more detailed than constitutional provisions. As a result, the discussion of the fine points of all the sections and subsections of relevant statutes would be a mammoth undertaking. Thus, the intent here is to use a broad brush in painting an outline of legislation that has major ramifications for persons with combined hearing and intellectual impairments.

A number of states have particularized statutes that authorize special facilities or services unique to that state. It is not possible to examine particular characteristics and idiosyncrasies of all state provisions in this document. However, some frequent errors or inadequacies in state statutes or regulations can be noted:

- State statutes often fail to require comprehensive planning across state agencies.
- State regulations may mandate services for the “multiply handicapped,” but enforcement of this mandate may not ensure quality services for a specific population such as persons with severe hearing loss and mental retardation.
- Regulatory procedures for identification, assessment, and placement are vague or nonexistent.
- Services to preschool multiply handicapped children are permissive rather than mandatory.
- Provisions are not made for the employment or certification of audiologists and other needed specialists.
- Some state laws or regulations also contain “waiver provisions” to permit uncertificated personnel employment.
- Certification requirements for professionals to work with the multiply handicapped have not been determined or appear less than adequate to ensure quality instruction and services.
- Requirements for minimum program size may be unrealistic in view of these persons’ needs for individualized instruction and services.
- There may be no provisions for employment of paraprofessionals to assist professional staff.
- There may be no provisions for reimbursement of expenditures for facility or curriculum modification and specialized equipment. This would discourage and even preclude integration of hearing-impaired mentally retarded persons into a regular school or community setting.
- Limited or no provisions exist to support research or program evaluation.

Rather than erecting more barriers by singling out a class of handicapped people for differential treatment, efforts should be made to channel handicapped persons into the mainstream of American life. In this vein, state statutory provisions and regulations governing services to the severely and multiply handicapped must be reviewed to ensure the inclusion of this special population. Federal legislation with significant impact on these persons is outlined in the next chapter. Many relevant bills have been enacted and others are being considered by Congress. The laws must be strengthened and enforced to ensure comprehensive services for all handicapped persons.

For additional information on the legal rights of the handicapped contact:
National Center for Law and the Handicapped, Inc.
1235 No. Eddy Street
South Bend, Indiana 46617
(219) 288-4751
Although federal legislation includes provisions for all handicapped persons to receive services, federal funding has been inadequate to finance the implementation of comprehensive programs to meet the needs of every handicapped child and adult. Funds appropriated through federal legislation have been made available to support catalytic efforts, demonstration programs, research, professional training, and, at times, facility construction. Generally, funds are appropriated to complement state and local efforts to provide quality services for the handicapped. Legislative and funding policies at the state level vary with each state and with each agency within the state. The Council for Exceptional Children's State/Federal Clearinghouse maintains a digest of legislative and funding provisions for the education of handicapped children and youth in each state. A similar digest is needed to identify legislation and funds covering services to the handicapped through health and welfare agencies in each state.

Federal legislation and funding formulas tend to be modified at least every three years. However, the most significant federal provisions affecting services to the handicapped population are outlined below. Further details may be obtained from the administrative agency charged with implementation of the acts and disbursement of the funds.

**Education of the Handicapped Act**

This act involves federal underwriting of projects and pilot programs with the goal of assisting the states to establish successful programs of education for handicapped children. The major agency charged with the responsibility of administering programs under this act is the Bureau of Education for the Handicapped (BEH), Office of Education, Department of Health, Education, and Welfare (DHEW). A number of the provisions of the act should be noted:

A. **Preschool and School Programs**

Under Title VI B of this act, funds are made available to assist states with the improvement and expansion of educational and related services for handicapped children. This includes preschool, grade school, and high school level educational programs.

B. **Regional Centers**

Part C of this act authorizes the establishment of regional centers designed to provide technical assistance, advice, and other information concerning appropriate educational services for handicapped persons. Section 622 of Part C provides grants for the states to establish regional centers specifically geared to the needs of deaf-blind children.

C. **Manpower Needs**

Part D of this act authorizes the awarding of grants to states for the purpose of training teachers, clinicians, and other personnel necessary for quality special education programs.

D. **Information**

Part F of this act provides funds for research contracts aimed at determining ways in which films and other media may be used to enhance the education of handicapped children. Money is provided for producing and distributing such educational films, and specifically for captioned films for deaf persons. Grants are also provided under Section 633 of Part D to improve the dissemination of information concerning educational opportunities for handicapped children.

E. **Early Education**

Grants are authorized under Part C, Section 623, to support model preschool projects for handicapped youngsters.

F. **Research**

Substantial amounts of funds are made available for research and demonstration grants aimed at improving the education afforded handicapped children.

**The Rehabilitation Act of 1973**

The third version of the Rehabilitation Act was signed into law in September 1973. Its purpose is to foster comprehensive rehabilitation services for handicapped individuals to
such a degree that persons may increase their skills and improve their ability to live with greater independence and self-sufficiency. Some of the act's more notable provisions are:

A. Title I—Vocational Rehabilitation Services

Grants are provided to states for the purpose of increasing the employability of handicapped individuals. States desiring to participate in such programs are required to submit to the Secretary of the Department of Health, Education, and Welfare a state plan for rehabilitation services. An individualized written rehabilitation program developed for each eligible handicapped individual is required. Priority in state vocational rehabilitation services is to be given to severely handicapped persons. The term severe handicap refers to a disability which requires multiple services over an extended period of time and results from amputation, blindness, cancer, cerebral palsy, cystic fibrosis, deafness, heart disease, hemiplegia, mental retardation, mental illness, multiple sclerosis, muscular dystrophy, neurological disorders (including stroke and epilepsy), paraplegia, quadriplegia and other spinal cord conditions, renal failure, respiratory or pulmonary dysfunction, and any other disability specified by the Secretary in regulations he shall prescribe.

B. Title II—Research and Training

Funds for grants and contracts are provided to conduct research and demonstrations concerning the rehabilitation of handicapped individuals, and to increase the number of trained rehabilitation personnel.

C. Title III—Special Federal Responsibilities

Under this section, grants are authorized for construction of rehabilitation facilities, vocational training services for handicapped individuals, mortgage insurance for rehabilitation facilities, and other special projects and demonstration centers. For example, a National Center for Deaf-Blind Youth and Adults has been established.

D. Title V—Miscellaneous

This section establishes (1) an Interagency Committee on Handicapped Employees to guard against employment discrimination toward handicapped individuals and (2) an Architectural and Transportation Barriers Compliance Board to insure compliance with standards prohibiting architectural, transportation, and attitudinal barriers directed toward handicapped persons. Discrimination against handicapped individuals in employment under federal contracts is forbidden in Section 503. Section 504 provides that no qualified handicapped individual shall, solely by reason of his handicap, be subjected to discrimination under any program or activity receiving federal financial assistance.

E. Rehabilitation Services Administration

Section 2 of this act sets up a Rehabilitation Services Administration (RSA) in the Department of Health, Education, and Welfare. RSA is designated the principal agency for carrying out the purposes of the Rehabilitation Act.

Social Security Act

Title XVI of this act establishes the Supplemental Security Income (SSI) Program, under which Social Security payments may be made to eligible disabled persons and parents of disabled children. A person is considered to be disabled “if he is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to last for a continuous period of not less than twelve months.”

Initial payments under the program began on January 1, 1974, at $140 per month for individuals and $210 per month for couples. A payment increase to $146 for individuals and $219 for couples was scheduled for July 1, 1974. For newly eligible persons to receive such payments on account of disability, their yearly income may not exceed $1560 if their spouse is not an eligible recipient or $2340 if both are eligible.

Parents are considered financially liable for disabled children only until the child becomes 21 years of age. On reaching his twenty-first birthday, a disabled child will be considered for SSI eligibility on the basis of his own earnings.

Developmental Disabilities Services and Facilities Construction Act (DDA)

Funds are provided to the states to assist in the planning and implementation of comprehensive programs of services for the developmentally disabled. The term developmentally disabled includes mentally retarded persons as well as victims of cerebral palsy, epilepsy, and
similar disabilities attributable to neurological impairments. Formula grants are provided to state DDA agencies. Thus, planning and advisory councils are enabled to devise and commence implementation of services to persons with substantial handicaps.

In addition to funds provided directly to the states, funding is provided for certain projects of national significance. Among these projects are the following:

A. Legal Advocacy

The Division of Developmental Disabilities (DDD) in conjunction with the Bureau of Education for the Handicapped (BEH) is funding a legal advocacy program with a nationwide scope entitled the National Center for Law and the Handicapped (NCILA) in South Bend, Indiana. Cosponsors of the agency are the American Bar Association, Family Law Section, the University of Notre Dame Law School; the Council for the Retarded of St. Joseph, County, Indiana; and the National Association for Retarded Citizens. The goal of this agency is to protect and assert the legal rights of handicapped persons.

B. Technical Assistance

Funds are provided to sponsor the Developmental Disabilities Technical Assistance Development System (DITADS) at the University of North Carolina in Chapel Hill, North Carolina. DITADS provides not only information and technical assistance but also advice to state developmental disabilities councils.

C. Child Advocacy

Funds from DDD are mingled with moneys from the Bureau of Education for the Handicapped and the National Institute of Mental Health (NIMH) to fund 11 child advocacy projects.

D. National Information and Data

Funds are being provided to a national information center and individualized data base at Pacific State Hospital in California, in conjunction with the University of California at Los Angeles.

E. Deinstitutionalization

Several demonstration projects are funded to explore alternatives to residential institutions for developmentally disabled persons in addition to examining and developing community alternatives.

Additional Laws

The four preceding federal acts constitute the major legislation affecting persons with dual disabilities, however, other statutes also apply. Two such laws worthy of mention are.

A. The Wagner-O'Day Act (1938, PL 75-739)

This sanctions a committee to purchase products and services for the blind and other severely handicapped. The aim of the Wagner-O'Day program is to increase employment opportunities for blind and severely handicapped persons by permitting them to sell their products to the federal government. Consequently, a preference is extended in bidding on government contracts to qualified sheltered workshops for severely handicapped individuals. In fiscal year 1969, 78 workshops for the blind in 35 states sold approximately $23 million worth of goods to the federal government, providing employment to some 5,000 blind individuals. This act would indeed be applicable to hearing-impaired mentally retarded persons. Thus, appropriate action should be taken to either reinterpret or amend this act so that it specifically includes this population.

B. Economic Opportunity Amendments of 1972 (PL 92-424)

These amendments aim to insure that a minimum of 10% of Project Head Start enrollments throughout the nation are available for handicapped children. Funds are administered through the Office of Child Development, DHEW.

For additional information, contact the Committee on Purchases of Blind-made Products, 1511 K Street, N.W., Washington, D.C. 20005.
Chapter 5: Program Coordination

Coordination is the process of bringing together all necessary resources in the appropriate sequence in order to accomplish a given objective. Coordination involves initiating, sustaining, and interrelating the various parts of the service delivery system. (Joint Commission on Accreditation of Hospitals, 1973, p. 73)

The complexity of problems faced by persons with hearing impairment and mental retardation requires a diversified, specialized, coordinated network of programs. Presently no single agency or discipline can appropriately serve the total needs of this population. Thus, each program should not only provide a unique resource to the client, but must also take necessary steps to establish itself as one contributing link in a chain of coordinated services.

The lack of an integrated network of planning, programming, and evaluation for the multiply handicapped often stifles the evolution of services from conceptualization through implementation and operation. For example, the creation of a single-source center with a well-conceptualized program of prevention, assessment, management, and evaluation would be difficult without the quantitative data provided by a demographic center. Thus, compilation of data from a well-operated center could facilitate implementation of a network of single-source centers. This in turn could permit appropriate identification of needs and foster proper placement based on interdisciplinary assessments and availability of services. Closer interrelation among parts of the service delivery system is imperative at all levels of the social system. However, the mere existence of appropriate services is not the answer unless these services are available and convenient to all people requiring such specialized assistance.

PROBLEMS WITHIN THE EXISTING SYSTEM

Despite a general increase in funding for the handicapped by both government and the private sector, no state has implemented comprehensive services that fulfill the full range of needs of the HIMR population.

State officials contacted during this project cited inadequacy of funds and insufficient resources as the major problems. A closer study of the problems, however, reveals much more. Categorically, the problems include:

- Lack of information
- Lack of coordinated planning, management, and program evaluation (especially among state and local agencies of health, education, and welfare)
- Lack of sufficient resources

Lack of Information

On the state level, agencies concerned with HIMR persons have insufficient data to define and implement needed programs and services. It is difficult to find any agency using an operational definition to identify and routinely collect data on children or adults with the specific combination of hearing loss and mental retardation. Presently, no agencies have "output" data on the effectiveness of services provided to the HIMR population. Likewise, comprehensive data concerning both available manpower and those in training are insufficient.

Another problem is the lack of consensus on curricula and practicals for those training to work with this dual handicap. Perhaps this results from a dearth of professional expertise in this multifaceted field. Nearly 80% of all published research on this population involves only the field of audiology. Moreover, systematic studies on special instructional techniques are remarkably limited. It appears that insufficient information exists on the HIMR population because responsibility is not vested in any single federal, state, or local agency. Instead, the service system is fragmented and uncoordinated, functioning as a subsystem within numbers of agencies and institutions dispensing services and funds for the handicapped and disadvantaged. As a result, priority has emerged only recently to accommodate this population.

*Vocational rehabilitation agencies may be possible exceptions, but their data must be extrapolated from basic data on persons who are rehabilitated for mental retardation, deafness, and other developmental disabilities. Even then, the data fall far below the number of known cases eligible for and perhaps receiving rehabilitative services (Division of Monitoring and Program Analysis Statistical Analysis System, Federal-Stat. Vocational Rehabilitation Program, Characteristics of Clients Rehabilitated in Fiscal Years 1968-1972).
Lack of Coordinated Planning, Management, and Evaluation

Legislation in several states now mandates comprehensive planning among agencies of health, education, and welfare, with their local and regional units, to better serve the handicapped. However, some current state plans contain no provisions that would support efforts to prevent hearing loss, develop interagency referral systems, implement interagency data systems, coordinate state-operated programs for the HIMR, or establish "single-source centers" where parents or guardians of children and adults could obtain information on comprehensive services.

A 1973 review of all state education department statutes and regulations affecting the hearing impaired showed marked inequality among the states in the types of services that would be supported by the state for severely hearing handicapped children and youth. Preschool HIMR children receive no special education services in at least 20 states even though the legislation in some of the states would permit such services for children who are at least three years old. HIMR children under age three are eligible for educational services in approximately 18 states but officials report that many school districts presently do not make services available for the birth to age three severely handicapped population (Jones and Healey, 1973).

It is also important to note that many states reduce the amount of reimbursement provided to school districts serving the preschool handicapped. Generally this practice has developed because the funding policy assumes shorter periods of instruction for the preschool child. The policies do not appear to have been established on the basis of actual program costs for providing interdisciplinary services to the multiply handicapped preschool population.

Differences can be found from state to state in programs whose functions appear similar. For example, vocational rehabilitation agencies in some states served 45 times the number of hearing handicapped per capita as other states. The 1972 data from the Bureau of Education for the Handicapped indicate that the percentage of handicapped children served throughout the states varies by more than 50% per capita. Likewise, great inequities in expenditures for service exist. Some states have no special programs for the HIMR. Many institutions for the mentally retarded that also have patients with hearing loss indicate they have no services available from qualified audiologists, speech pathologists, or teachers of the hearing impaired. Institutions for the hearing impaired that were visited or contacted during this project reported that too few teachers, psychologists, social workers, rehabilitation counselors, or physicians expressed any desire or special expertise in working with persons who are severely hearing impaired and mentally retarded. Previous reports such as those by Anderson et al. (1966) and Lloyd (1970) tend to corroborate this finding.

Only a few states, such as New York, have attempted to develop a comprehensive plan for the HIMR. Some states have selected certain institutions to implement comprehensive services within a single program such as the Austin State School Program (Texas) and the Lamphere State Home and Training School (Michigan).

The Project Staff was unable to identify a single comprehensive state plan for serving adults with hearing impairment and mental retardation. It was hoped that model programs might be cited in this document as one method of assisting others in their desire to expand services for the HIMR. However, few models appear ready for emulation. For example, the Vaughn House in Austin, Texas, is the only independent living facility for severely handicapped HIMR persons identified in the project. Perhaps others, exist. The statewide work-study programs between the State Departments of Special Education and Vocational Rehabilitation in Texas and Missouri certainly hold promise for meeting the needs of the HIMR population. In addition, the state-supported sheltered workshops in Pennsylvania and Missouri can serve as examples for other states along with promising practices that are cited in later sections.

Lack of Sufficient Resources

The absence of comprehensive plans for serving the HIMR population helps to perpetuate the lack of sufficient resources. Conversely, the lack of some resources results in the inability of states and many service institutions to develop and implement comprehensive plans and programs.

*Further data on exceptional children are available from the Bureau of Education for the Handicapped (see Appendix C).*

*For detailed information, refer to New York State Temporary Commission (1971).*
Since so little is generally known about the special needs of this population, it is rather easy to understand why inadequate resources (personnel, facilities, and funding) remain a major problem.

Personnel, especially teachers prepared to serve different age groups (preschool, school age, adolescent, and adults), are in short supply. We mention each age group because their needs vary significantly. Adults are included because it is apparent that instructional services should be extended beyond the arbitrary legal age limit of 21 in most states. Also, too few audiologists and psychologists are available to serve this population. Few university faculty members appear to have developed special programs for preparing professionals or para-professionals to work in this field.

An organized program of technical assistance utilizing persons with special skills in planning, serving, and evaluating service effectiveness has not been developed but is badly needed.

Additional cost studies must be completed before federal, state, or local agencies can begin to determine the financial resources that are required for comprehensive programming. Unfortunately, many previous cost analyses are based on what exists and not on what should be provided to create full service programs.

Summary of the Present System

The present system for severely handicapped children and adults (especially the subsystem for the HIMR), although described somewhat negatively above, does provide some greatly needed and beneficial services. In addition, dedicated professionals and paraprofessionals are working at all levels within the system to achieve effective organization and meet the needs of all persons involved. Many individuals providing care are quite competent, but resources must be expanded. Coordinated efforts are imperative if the goal of full services for each HIMR person is to be reached in the next decade.

COORDINATING GOVERNMENTAL AGENCIES AND PROFESSIONAL ORGANIZATIONS

Governmental agencies as well as professional organizations can hasten the development of a continuum of services for the handicapped either directly or indirectly by playing a pivotal role in comprehensive programming. They can assist the handicapped population by supporting or conducting significant research in the field, recommending new legislation as well as reinterpreting and amending existing legislation, granting funds to educational programs and community agencies to support ongoing programs and to help establish new programs, publishing literature concerning the handicapped, establishing specific standards for professional certification and program accreditation, and, finally, serving as a liaison and spokesman for various services within a comprehensive delivery system network.

In the past decade, unprecedented concern and active involvement have occurred in the area of mental retardation. This interest served as a catalyst in promoting the establishment of the President's Committee on Mental Retardation (PCMR) in spring 1966. This committee was created to advise the President on current activities regarding the mentally retarded (namely, research, manpower development, prevention, services, and public information), to recommend federal action where needed to prevent and ameliorate the incidence of retardation, to promote coordination and cooperation among public and private agencies, to stimulate individual and group action, and to promote public understanding of the mentally retarded. The committee is chaired by the Secretary of Health, Education, and Welfare. Other members of the committee include the Secretary of Labor and the Director of the Office of Economic Opportunity. PCMR is composed of 21 citizens serving three-year terms.

Two more recent commitments have also influenced the current governmental vigor to serve mentally retarded populations. First, in 1971, the President stated that two major goals of the federal government shall be:

To reduce by half the occurrence of mental retardation in the United States before the end of this century, and
To enable one-third of the more than 250,000 retarded persons in public institutions to return to useful lives in the community. (PCMR)

Second, in 1972, the U.S. Commissioner of Education proposed a goal of full educational opportunity for all handicapped children to be achieved by 1980 (75% by 1977).

The majority of federal government agencies and national committees concerned with
handicapped populations are found within the Department of Health, Education, and Welfare. Some of those specifically equipped to assist the HIMR population are:

- Bureau of Education for the Handicapped (BEH is in the Office of Education);
- Rehabilitation Services Administration (RSA), Division of Developmental Disabilities (DDD) in Social Rehabilitation Services;
- Office of Child Development (OCD);
- Maternal and Child Health;
- National Institute of Child Health and Human Development (in the National Institutes of Health);
- Office for Handicapped Individuals and Office of Mental Retardation Coordination (OMRC);
- President's Committee on Mental Retardation;
- President's Committee on Employment of the Handicapped;
- National Advisory Committee on the Handicapped.

Numerous federal agencies, professional organizations, and private interest groups provide guidance and support for the handicapped. A list of professional organizations and governmental agencies with special interests and activities in areas related to the HIMR are listed in Appendix C.

Presently, no federal agency program or professional organization exists that specifically represents the HIMR population. However, major actions have been taken to begin to eliminate this present void. First, in 1970, the AAMD-CEASD Joint Committee on the Deaf-Retarded was established to address the needs of persons with these two handicaps. This joint committee has been involved in several significant activities:

- In 1971, open membership forums held at the Convention for American Instructors of the Deaf (CAID) and AAMD national meetings addressed one principal issue: professionals involved in educating the deaf need more information about AAMD and mental retardation. Similarly, those who are working in the area of mental retardation need more information to help them understand hearing impairments.
- In 1972, ASHA, in cooperation with the AAMD-CEASD Joint Committee drafted a two-year grant proposal to develop this report (recommendations for comprehensive services for the HIMR).
- The Joint Committee has compiled a bibliography on the dual handicaps of hearing impairment and mental retardation (Hirshoren and Lloyd, 1972) containing more than 600 references (see Appendix D).

In June 1972, an HEW Task Force on the Deaf Mentally Retarded was created through the cooperative efforts of the National Advisory Committee on the Education of the Deaf (NACED)1 and the HEW Office of Mental Retardation Coordination (OMRC).2

In spite of the excellent contributions made by governmental agencies and professional organizations in expanding services to the handicapped, none is presently assuming enough leadership to rapidly influence the development of comprehensive services for the HIMR population. Goal-oriented programs must be expanded to speed the development of full services by 1980.3 Therefore, in organizing a network of full services, the following program components are necessary:

- Comprehensive data systems.
- A national technical assistance center.
- Regional demonstration centers.
- Single-source service centers.

1Now amalgamated into the National Advisory Committee on the Handicapped.
2Now operating within the recently established Office for Handicapped Individuals, Department of Health, Education, and Welfare.
3Goal-oriented programs refer particularly to HEW-administered programs: developmental disabilities (PL 91-517), aid to children in state-supported schools (PL 89-313), educational state grants (PL 91-230), Title I, Title II, and Title III of the Vocational Rehabilitation Act (PL 66-265), ESEA, Titles I and II (PL 89-10), vocational education state grants (PL 90-576), Head Start (PL 92-424), Public Health Service Act, Sec. 314 d, and maternal and child health and crippled children's state grants (Social Security Act, Title V).
Program Coordination

- State and local advisory committees,
- A national information center, and
- Volunteer action groups.

The implementation of these program components will require coordination at the national, state, and local levels. Specific steps must be taken to achieve systematic interagency planning, management, and evaluation utilizing professional expertise. Each of the program components is discussed below.

Comprehensive Data Systems

Demographic data concerning the HIMR population are limited. By surveying the nature and extent of the HIMR population and by using standardized definitions, information needed in comprehensive planning at all governmental levels can be obtained and in turn used to assist program implementation. Moreover, the need for new legislation, increased financial support, and more trained personnel could then be documented.

Many state and local agencies need technical assistance and guidelines for collecting relevant data. Recording necessary data on all members of the HIMR population will be a difficult task. The medical profession, health agencies, school districts, law enforcement agencies, and social welfare agencies must assist in the identification and recording process. Confidentiality must be protected. Special expertise is required and all new data systems should be capable of producing (over time) evaluation data on the appropriateness and effect of services provided.

At present, one Office of Demographic Studies (ODS) exists for the hearing impaired in the United States. This office, located at Gallaudet College in Washington, D.C., appears to be one of the most suitable data centers at the national level to add supplementary data collection procedures for obtaining needed information on the HIMR population and to project national program needs. With increased funding, ODS could provide the technical assistance needed by state and local agencies to implement improved data systems.

State and local agencies presently collect some data on handicapped persons but the data systems vary with each agency. The high-risk registry and central registry represent two data systems that are vital in establishing programs and services for handicapped populations. These data systems, however, should be planned and coordinated across agency lines.

High-Risk Registry

A high-risk registry is a systematic method of recording and maintaining data on (1) newborns who are at risk for developing one or more disabilities and (2) women who have a high probability of giving birth to a disabled child.

A high-risk registry can serve as a useful tool in developing prevention, early identification, and intervention programs. The registry can be incorporated into hospital records (for example, a child born of a rubella pregnancy would be clearly identified) and subsequent appropriate service can be sought. Metabolic defects such as phenylketonuria (PKU) can be detected early. For example, if a “woman-at-risk” becomes pregnant, genetic and metabolic defects can be diagnosed by a study of fluid taken from the mother’s amniotic sac. Termed amniocentesis, the technique can detect a variety of chromosomal and metabolic abnormalities that result in severe mental retardation and other disorders. Parents are then counseled on the risks involved and given appropriate medical treatment. Presently, PKU is estimated to be responsible for 1% of the population in state institutions for the mentally retarded. University medical screening clinics can and have prevented retardation from this inborn error of metabolism (Office of Mental Retardation Coordination, 1972).

In a similar vein, the President’s Committee on Mental Retardation (PCMR) states:

... one percent of births in the country now has a chromosomal abnormality that will result in mental retardation or will have some appreciable effect upon the life cycle. A high risk exists in those parents carrying chromosomal defects themselves, those who have had a previous child with Down’s Syndrome; those exposed to genetically damaging agents such as virus, repeated x-rays or chemical exposure; or those of advanced maternal age. At age 25, a woman has a risk of about one in 1,000 of having a child with Down’s Syndrome. At age 35, the risk is one in 250. At age 40, the risk is one in 100. And at age 45, the chances rise to at least one out of 50 for that chromosomal abnormality alone. These appear to be conservative estimates.

The registry utilizes a checklist of factors that may contribute to the development of auditory impairments and mental retardation. Several criteria can be included in a high-risk
The Hearing Impaired Mentally Retarded: Recommendations for Action

checklist, For example, a Johns Hopkins Collaborative Study lists the following as etiologic factors of communication defects (Mulholland and Fellendorf, 1968).

<table>
<thead>
<tr>
<th>Time of Occurrence</th>
<th>Factor or Insult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preconception</td>
<td>genetic (for example, Down's Syndrome or mongolism)</td>
</tr>
</tbody>
</table>
| Prenatal           | metabolic defects (for example, phenylketonuria or PKU)  
                       maternal-fetal viral infection; drugs taken by mother; fetal hypoxia; prematurity—low birth weight |
| Perinatal          | hypoxia/acidosis; mechanical trauma; hyperbilirubinemia; drugs given to infant; ?? noise |
| Postnatal          | middle ear infections; upper respiratory infections; foreign bodies in ear; drugs; meningitis; encephalitis; mumps, measles, trauma |

**Environmental Influences**
(deprivation—lack of stimulation; emotional problems; mental subnormality)

A more extensive checklist of etiological criteria for early detection of mental retardation and auditory impairments can be established by contacting appropriate sources, such as local medical associations, university medical clinics, and the AAMD's Manual on Terminology and Classification in Mental Retardation (Grossman, 1973).

A high-risk registry will enable medical staff to make appropriate arrangements for each infant identified as at risk. This can be accommodated at the time of discharge from the newborn nursery through (1) screening evaluations of these infants (during the first year of life) at either a single-source service center or medical clinic, (2) referrals for a comprehensive diagnosis, and (3) plans for long-term monitoring or management of the child or both.

**Central Registry**

A central registry is a systematic computerized method of recording data on a specific population. Medical, audiologic, educational, and other evaluations also may be maintained on each person included in the registry.

Compilation of data on the HIMR population in each state is essential to provide (1) effective and continuous services for each HIMR person, (2) information for program planning and evaluations, (3) a uniform means of communication among all agencies and persons contributing to individual program plans, (4) a method for recording the progress of each HIMR person, and (5) data for use in research, education, and rehabilitation. In addition, accurate and uniform records can assist in promoting each HIMR person by accentuating their constitutional and legislative rights.

Although, conceptually, a computerized registry appears sound, the development of such systems could also result in flagrant abuses. To avoid problems inherent in any computer-based informational system, effective controls must be established to prevent its misuse. Thus, a registry system must include:

- Authorization from each parent or guardian to maintain individual case data.
- Provisions for the release of individual case records to parents and guardians upon their request.
- Enforcement of the confidentiality of individual case records. Records shall not be released to any person or agency without consent from the parent, guardian, or another appropriate authority. Identification numbers for each HIMR person may serve as a mechanism for allowing individual records to remain confidential.

Additional experimentation and research are needed to design a system that is both successful and compatible for a broad spectrum of programs.

The Multi-State Information System for Psychiatric Patient Records (MSIS) is a system analogous to the registry described above. New York's State Department of Mental Hygiene, with a National Institute of Mental Health Grant, assisted in its development. Presently, eight states are participating by using a common format for recording individual case histories. In addition, the University of California at Los Angeles (Neuro-Psychiatric Institute) is developing an individualized tracking system in cooperation with Pacific State Hospital. For further information, contact The Research Group at Pacific State Hospital, Pomona, California.
A national technical assistance center could assist with the implementation and general maintenance of quality comprehensive services for the HIMR population. Through consultations, conferences, and training workshops, technical assistance concerned with quality control in the delivery system and evaluations of program effectiveness could be provided. Teams of professionals with expertise in such areas as hearing impairment, mental retardation, and psychology could be organized to transmit valuable information to advisory committees, governmental agencies, and regional and local service programs to assist them with the amelioration of existing services.

A national technical assistance center has been established to aid handicapped children in the early education programs throughout the United States. Known as TADS (Technical Assistance Development Systems), this resource center aids program staff in developing and upgrading any phase of a program for which a local center desires help. TADS provides planning strategies while assisting approximately 100 federally funded preschool programs and advisory committees with all aspects of program development. This technical team also enables demonstration centers in rural areas to have access to new innovations in program design and successful teaching techniques.

Among the services offered by TADS that would be useful in a similar fashion to HIMR programs are:

- Identifying appropriate technical consultants,
- Providing consultants to confer with individual centers and their staff,
- Assisting regional centers in working with state agencies,
- Holding small group in-service and continuing education workshops,
- Collecting and dispensing data concerning technical aspects of the service delivery system,
- Identifying strengths and weaknesses of existing programs, and
- Providing orientation and guidance to service center directors.

The proposed technical assistance center for the HIMR would assume many of the same responsibilities as TADS and would serve as a vehicle for maintaining a central clearinghouse of information on the HIMR. Unlike TADS, however, there does not appear to be a need for the HIMR technical assistance center to maintain a central registry or data bank on the HIMR population. The Office of Demographic Studies could provide this service in cooperation with the national technical assistance center.

Regional Demonstration Centers

Demonstration centers were conceived and have been funded by federal agencies to create exemplary programs and serve as laboratories for experimentation and evaluation. Specifically, the responsibility of existing model centers for handicapped persons is twofold. (1) to implement well-established effective management methods (for example, goal-oriented educational objectives with emphasis on individual behavioral assessment and overall human development) and (2) to develop and field test innovative techniques to better serve handicapped persons.

Presently, it is difficult to delineate principal ingredients of a commendable HIMR program simply because too few programs exist. This difficulty can be overcome partially by synthesizing the best methods available from programs for the deaf, the mentally retarded, and soon. Centers for the severely handicapped HIMR population could be patterned after the present Regional Deaf-Blind Centers (established by PL 90-247) and those developed in the Handicapped Children's Early Education Program (established by PL 90-538).

Provisions should be made to accommodate various age levels, individual abilities, and degrees of disability within a demonstration center framework. Presently, no comprehensive network of demonstration centers exists specifically for the HIMR population. Those accommodating other handicapped populations, however, are funded by two divisions of the Department of Health, Education, and Welfare (HEW): (1) the Bureau of Education for the Handicapped (BEH) and (2) Social and Rehabilitation Services, Rehabilitation Services Administration, Division of Developmental Disabilities. Special model centers for the HIMR

---

10TADS is located in Chapel Hill, North Carolina, and is associated with the University of North Carolina.
represent one way to make services available in some geographic areas and to assemble the interdisciplinary expertise required to address the needs of this population. Regional location of the centers should be determined by an analysis of demographic data, geographic needs, and economic feasibility. Demonstration centers for adults should be established immediately since fewer comprehensive programs exist for adults than for children.

Single-Source Service Centers

In some states, single-source centers function as public-supported diagnostic, counseling, and instructional sources for local communities. They presently operate as fixed points of referral in coordinated programs of lifelong planning and management for the handicapped and their families. These centers engage in systematic follow-up for each client, thus hoping to eliminate the possibility of program or educational drifting. One example of a state-conceptualized system of single-source centers exists in California. The Lanterman Mental Retardation Services Act of 1969 mandated the establishment of regional centers throughout the state to accommodate all mentally retarded residents regardless of age, race, culture, language, or national origin. Other states have established similar centers, such as Missouri's Department of Mental Health, to resolve both economic and geographic service problems while providing a broad spectrum of care.

Some of the basic organizational characteristics of single-source centers are listed below:

- A single-source center operates under contract from a state agency and is governed by a board of directors consisting of parents, professionals, and state agency representatives.
- The state legislature allocates operational funds annually and charges the state agency to set basic standards for personnel, program management, and rates for services.
- Each center maintains a broad professional staff including but not limited to (1) a medical unit (physicians, nurses, and dentists); (2) a case management unit (social workers, psychologists, audiologists, counselors, speech pathologists, special teachers, physical and occupational therapists, and so on; and (3) an administrative unit (administrators, accountants, and secretarial and custodial staffs).
- Each center conducts an investigation of all existing services and determines other possibilities for quality care. Care in facilities outside the region may also be arranged.

In addition, the centers studied perform the following services:

- Diagnostic assessment.
- Counseling on a continuing basis. Counseling includes advice and guidance to the handicapped person and his family to assist them in locating and using suitable facilities, including but not limited to special medical services, nursery and preschool training, public education, recreation, vocational rehabilitation, and suitable private and public residential facilities.
- Provide state funds to vendors of services.
- Maintain a registry and individual case records.
- Conduct a complete systematic follow-up of the person receiving services and courses of action indicated.
- Call public attention to unmet needs in community care and services, define and interpret standards of community care and services as used by the single-source service center, and stimulate the community to develop such services as needed.
- Maintain a staff according to standards set by the agency.
- Report services provided and unmet needs in the region.
- Develop a plan for comprehensive services in the region.

Some centers also use the services of volunteers.11

The concept of state regional or single-source service centers is valid. However, once these centers become operational, experience has shown that all types of handicapped persons are referred for diagnosis and management. Therefore, these centers should not be established to...

---

Program Coordination

meet the needs of a single population (that is, the mentally retarded). They may, however, provide additional and unique services for the multiply handicapped, profoundly retarded, or seriously physically disabled.

Program policies and management practices should not be established by a single state agency. Instead, their standards of operation should be established by interagency representatives and interdisciplinary consultants.

Placement of the centers should be based on geographic needs but consideration must also be given to the difficulties that may be encountered in attracting qualified staff to the area. Care must be taken to prevent the centers from becoming lifetime placement institutions. Thus, patients requiring institutionalization should find only short-term (interim) care at the center until suitable placement can be arranged. It is imperative that all service programs have a clear understanding of the center's role and responsibilities.

Advisory Committees

Numerous advisory committees on the handicapped have been established through legislative mandate at the national, state, and local levels. Although wide variations in their roles and scope of authority exist, these committees are generally composed of various professionals, program administrators, parents, and so forth, who are charged with a basic responsibility to ensure quality programs for the handicapped. Advisory committees tend to be involved with, but are not limited to, the following activities:

- Assessing and projecting needs of the handicapped population,
- Program planning,
- Recommending priorities and program policies,
- Monitoring or conducting due process proceedings,
- Evaluating cost effectiveness analyses, and
- Reviewing and recommending legislative and regulatory provisions.

An analysis of state laws during this project revealed that in more than one-half of the states, provisions are made for state or local advisory committees or both. California, Delaware, Kansas, Louisiana, Minnesota, New Jersey, Texas, Utah, Nebraska, Vermont, and Massachusetts are among the states that have established such committees, councils, or commissions. However, membership on these committees shows great variation throughout the country and selection criteria often do not ensure the interdisciplinary expertise that should be represented by persons or groups most capable to review quality plans and programs. The following examples were selected to show the variability that exists in state laws (State-Federal Information Clearinghouse for Exceptional Children, 1973).

A coordinating council for handicapped children is established to coordinate programs for all handicapped children under age 21. The council is responsible for maintaining a directory of services available for the handicapped in Kansas, distributing information to parents, doctors, and other persons concerning these services; initiating coordinated planning by and between agencies and departments, private associations, organizations, and corporations, and recommending to public and private agencies working with the handicapped need for additional services. The council's membership consists of the director of special education, a representative of the crippled children's commission, the director of the division of maternal and child health of the state department of health, the director of child welfare services of the state department of social welfare, the director of the state division of vocational rehabilitation of the state department of social welfare, the superintendent of the state school for the deaf, the principal of the state school for the visually handicapped, a representative of the Kansas University rehabilitation unit of the medical center, a representative of the Kansas Association for Mental Health, a representative of the Kansas Cerebral Palsy Association, a representative of the Kansas Association for Retarded Children and a representative of the Kansas Council for Children and Youth. By November 30 of each year, the council will submit a written report of its activities, studies and proposals to the governor. Copies of the reports will also be given to all agencies and organizations having membership on the council and the proper committees of the legislature.

—Kan.135
A state advisory commission for special education will be formed consisting of two members elected from each of the regional advisory councils, at least one of whom, will be a parent or guardian of a child receiving special education. The commissioners of the departments of mental health, public health, and public welfare, will each appoint one representative to serve as an ex-officio member of the commission. Members will be reimbursed only for necessary expenses incurred in the performance of their duties. The commission shall submit an annual report to the department evaluating the quality and adequacy of special education programs and recommending any improvement. The department will implement the recommendations of the commission or will state in a written reply why the recommendations cannot or should not be implemented. In these circumstances, the bureau responsible for hearing complaints and conducting investigations in the division of special education will attempt to resolve the disagreement informally; however, if a settlement cannot be reached the state board will conduct public hearings to investigate the basis of the disagreement and resolve any dispute between the commission and the department.—Massachusetts

The commissioner shall appoint biannually an advisory council with the approval of the state board which will consist of between seven and 15 members representative of professional and lay interests. The advisory council shall advise in the promulgation of rules, regulations, and the implementation of this chapter and the establishment of standards and qualifications for the professional personnel. The council shall serve without remuneration.—New Jersey

Presently, a few state advisory councils limit their scope of responsibility to specific handicaps. However, Oregon has a state advisory council for emotionally handicapped children to review all aspects of comprehensive program planning for these children. Texas has utilized two councils, one for children with learning disabilities and one for language-handicapped children. It also has established a state Commission on the Deaf.

With the dearth of current comprehensive services for the HIMR population, advisory committees should assume greater leadership in promoting quality services for this neglected population.

National Information Center

The promotion of public understanding and acceptance of the HIMR population requires the services of an information center. This center could disseminate information on the dual handicap of hearing impairment and mental retardation. Specifically, it would be responsible for informing both the lay public and professionals about (1) current resources available to the HIMR population, (2) literature on the dual handicap (for example, Who are the HIMR?, How many people have this dual disability?, and What is the effect of dual disability? and What are their needs?). In addition, this center could be helpful to programs in institutions for the mentally retarded, residential schools for the deaf, regional centers, and public or private educational systems.

To insure reaching the widest audience, the following variety of media can be utilized:

- Public television and radio programs
  - To sensitize the public to the nature of the dual handicap
  - To provide public service announcements about service availability

- Speaking engagements
  - To inform civic, religious, professional, and student groups about the nature of the dual handicap
  - To encourage volunteer work or charity projects

- Brochures and newsletters
  - To promote volunteer work and charitable contributions
  - To encourage family (foster) care
  - To alert the public to the nature of the dual disability and services available

A public education and information center can receive broad input from the professional organizations and programs that are concerned with hearing impairment and mental retardation. Such a center will not only make the public more cognizant of the nature and needs of persons with the dual handicap, but it can help assist in the removal of social barriers and encourage acceptance of disabled persons by employers and the community.

The National Education Information Center for the Handicapped is, most likely, the proper center to develop information on the dual handicap of hearing loss in combination
Program Coordination

with mental retardation. Such information could also be disseminated under the auspices of the Educational Resources Information Center (ERIC), the Clearinghouse for Exceptional Children Information Center, or a professional organization funded for this purpose.

Volunteer Action Groups

Volunteer service programs can provide support to paid staff in meeting the responsibilities for quality care. They may offer a broad range of services that include but are not limited to:

- Teacher or classroom assistance (that is, supervised help with behavior modification, programmed instruction, and other activities);
- Assistance with physical and occupational therapy;
- Assistance with music, arts and crafts, and storytelling activities;
- Transportation and escort assistance;
- Participation in recreation and leisure time activities including visits, vacations, and trips (that is, weekly bowling, swim programs, and trips to the circus, zoo, restaurants, and so on).

In addition, indirect services may include clerical and lab assistance, gift shop and canteen operations, and public relations and community education.

A coordinator of volunteer services should be appointed and given responsibilities for the following activities: recruitment of volunteers; training and supervision of volunteers; placement of volunteers in positions helpful to the program and personnel and most meaningful to the volunteer; maintenance of complete schedules and accurate records including hours and types of volunteer service, administering an operational budget for volunteers; and publicly recognizing volunteers through provisions established to acknowledge their assistance.

Volunteer services aid in (1) ameliorating the quality of services and programs and (2) creating positive relationships between the facility and the surrounding community. Promotion of community understanding of specific disabilities is carried out through encouragement of local youth and senior citizens to volunteer their services. Two such examples are:

- Junior and senior high school students volunteering service as part of their educational program or organizational group activities
- Senior citizens forming "foster grandparent" programs, which involve the assigning of one senior citizen to approximately one to four handicapped persons. These programs are designed to enrich the social environment of institutionalized children and adults. Such basic human needs for attention, guidance, love, and understanding are promoted through meaningful activities with individuals on a one-to-one basis (senior citizens and the handicapped). Senior citizens become an integral part of many facilities in addition to establishing feelings of self-worth. Depending on the individual facility and its budget, provisions can be made for minimal reimbursement for time and expenses (for example, transportation and meals).

Volunteers should be given special in-service training related to specific population needs and must be presented with program goals and standards. Some of the standards applicable to volunteer services include the following. (1) volunteer participation shall comply with state laws, such as those relating to labor, insurance, and health examinations; (2) volunteer participation shall be open to persons of both sexes, and of all ages, races, creeds, and national origins, and (3) volunteer services shall be available to all residents, regardless of age, ability, or handicaps.


12The "foster grandparent" program was developed in 1965 by HEW's Administration on Aging and funded by OEO. The funding and administration was transferred to HEW in an amendment to the Older Americans Act in 1969.
Chapter 6: A Continuum of Services

A comprehensive service program for children and adults with hearing impairment and mental retardation should be designed to account for the infinite diversity of individual needs and abilities in this population.

Figure 1 presents conceptually the continuum of services and program models that should be implemented for these dually handicapped persons.

FIGURE 1. The Continuum of Services for Children and Adults with Hearing Impairment and Mental Retardation

<table>
<thead>
<tr>
<th>CONTINUUM COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Served: Persons with severe hearing impairment and mental retardation (HIMR)</td>
</tr>
<tr>
<td>1. Provide prevention programs</td>
</tr>
<tr>
<td>2. Provide direct intensive individualized and group lifetime services when necessary to effect maximum development</td>
</tr>
<tr>
<td>3. Provide information and assistance to all program participants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identification</td>
</tr>
<tr>
<td>2. Comprehensive interdisciplinary assessment (diagnostic evaluation)</td>
</tr>
<tr>
<td>3. Referral (for additional services)</td>
</tr>
<tr>
<td>4. Parent or guardian counseling and instruction</td>
</tr>
<tr>
<td>5. Client counseling and placement</td>
</tr>
<tr>
<td>6. Staff counseling and in-service orientation/instruction</td>
</tr>
<tr>
<td>7. Direct management (medical, educational, vocational, social, recreational)</td>
</tr>
<tr>
<td>8. Program evaluation</td>
</tr>
<tr>
<td>9. Individual reassessment</td>
</tr>
<tr>
<td>10. Dismissal and follow-up</td>
</tr>
<tr>
<td>11. Research</td>
</tr>
<tr>
<td>12. Record and data maintenance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Services Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diagnostic center placement</td>
</tr>
<tr>
<td>2. Special-class educational placement</td>
</tr>
<tr>
<td>3. Vocational placement</td>
</tr>
<tr>
<td>a. Prevocational services</td>
</tr>
<tr>
<td>b. Work-study program (emphasis on individual work skills and attitudes)</td>
</tr>
<tr>
<td>c. Sheltered workshops</td>
</tr>
<tr>
<td>d. Activity centers</td>
</tr>
<tr>
<td>e. Community employment</td>
</tr>
<tr>
<td>4. Home or hospital services</td>
</tr>
<tr>
<td>5. Parent/infant instruction</td>
</tr>
<tr>
<td>6. Community and residential placement</td>
</tr>
<tr>
<td>7. Organized recreation</td>
</tr>
<tr>
<td>8. Special living arrangements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Types and Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diagnostic center placement</td>
</tr>
<tr>
<td>2. Special-class educational placement</td>
</tr>
<tr>
<td>3. Vocational placement</td>
</tr>
<tr>
<td>a. Prevocational services</td>
</tr>
<tr>
<td>b. Work-study program (emphasis on individual work skills and attitudes)</td>
</tr>
<tr>
<td>c. Sheltered workshops</td>
</tr>
<tr>
<td>d. Activity centers</td>
</tr>
<tr>
<td>e. Community employment</td>
</tr>
<tr>
<td>4. Home or hospital services</td>
</tr>
<tr>
<td>5. Parent/infant instruction</td>
</tr>
<tr>
<td>6. Community and residential placement</td>
</tr>
<tr>
<td>7. Organized recreation</td>
</tr>
<tr>
<td>8. Special living arrangements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>(most common)</td>
</tr>
<tr>
<td>Parents, teachers, administrators, aides, rehabilitation counselors, psychologists, physicians, psychiatrists, social workers, nurses, occupational therapists, physical therapists, dentists, audiologists, speech pathologists, recreational specialists, employers</td>
</tr>
</tbody>
</table>

*Transportation purchased services may be required to facilitate provision of a service continuum.
PREVENTION SERVICES

Prevention is the process of arranging forces in the society to mitigate or eliminate those factors in life of which mental retardation or other developmental disabilities may be a consequence. (Joint Commission on Accreditation of Hospitals, 1973)

Multiple etiologies of mental retardation and hearing impairment command the establishment of broad ranged prevention programs designed to reduce the incidence of these handicaps. Environmental, biomedical, and special services such as genetic screening, analysis, and counseling all play a principal role in satisfying prevention needs. Currently, it is technologically possible to reduce the incidence of mental retardation and hearing impairment through ongoing prevention programs and maintenance of high-risk registries. Genetic counseling, now available in many major university medical centers, is a prime example of a prevention tactic. Prospective parents can be screened for genetic defects before conception and subsequently counseled on the risks involved. This along with other prevention techniques could reduce the incidence of developmental disabilities and, perhaps, reduce the growing need for several specialized services.¹⁴

The special services of prevention programs include but are not limited to:

- Genetic screening and counseling of parents from high-risk populations,
- Prenatal health care for prospective high-risk mothers (for example, maternity and infant care projects) including the following biomedical preventive activities:
  - Immunization programs (for example, for rubella);
  - Screening programs for detection of infections and endocrine and metabolic disorders; and
  - Comprehensive prenatal, natal, and neonatal care; and
- Programs that include:
  - Nutrition education;
  - Detection of blood group incompatibilities and placenta abnormalities;
  - Precautions to reduce complications as caused by radiation, medication, and drug abuse;
  - Early identification of developmentally disabled infants;
  - Accident prevention;
  - Instruction on daily safety practices; and
  - Dissemination of information delineating preventive measures.

To facilitate the implementation of prevention programs, the Community Mental Health Centers Construction Act of 1963 (PL 88-164) was amended in 1965, 1968, and 1970 to authorize federal grants to establish programs stressing prevention, early identification, and intervention for mental health disorders (see Figure 2).

The Health Services and Mental Health Administration administers major prevention programs. For more detailed information, these agencies should be contacted at their respective addresses in Washington, D.C. (see Appendix C).

¹⁴For more detailed information regarding components of prevention programs, contact your local pediatrics society.
The Hearing-Impaired Mentally Retarded: Recommendations for Action

FIGURE 2. Flow Chart: Identification, Assessment, and Direction

Preliminary (Mass) Screening

<table>
<thead>
<tr>
<th>Follow-Up Audiologic Services Including:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hearing Aid Evaluations</td>
</tr>
<tr>
<td>2. Aural Rehabilitation</td>
</tr>
</tbody>
</table>

Audilogic Assessment

<table>
<thead>
<tr>
<th>Management Services Including:*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Educational and Psychological (Re)Assessment</td>
</tr>
<tr>
<td>2. Special Education</td>
</tr>
<tr>
<td>3. Vocational Education and Vocational Rehabilitation</td>
</tr>
<tr>
<td>4. Health and Social Services</td>
</tr>
</tbody>
</table>

Medical Services: Assessment, Diagnosis, Treatment

*Single-source service centers can either provide these management services or contract for such services with those outside agencies through which they coordinate lifelong planning.

In addition, community mental health centers have been establishing some major programs as alternatives to state institutions for the mentally ill and mentally retarded so that many clients can be cared for on either an outpatient or short-term intensive (up to 30 days) inpatient basis. They also function as a referral center for local schools or regional community programs when continuing therapeutic or educational intervention is indicated.

Community mental health centers must assume a major role in the comprehensive continuum of services for the HIMR. In this role it will be necessary for these centers to perform counseling and initial diagnostic evaluations (psychological, speech, and hearing evaluations, and so on). However, the primary responsibility for diagnosis and evaluation will still rest with primary care centers. Day treatment, short-term hospitalization, crises intervention, and individual and group counseling and therapy tend to be the major concerns of mental health centers. Family therapy and intense psychological workups can also be included. In addition, vocational rehabilitation and work evaluation programs may be a major component of a mental health program. However, presently not all programs include this service.


These locally based publicly and privately funded services now exist in all 50 states and Puerto Rico. More specifically, approximately five such programs exist solely for the hearing-impaired population. Resthaven Community Mental Health Center, Los Angeles, California, is one of these programs that maintains a staff primarily composed of clinically oriented personnel including interpreters for the deaf. Their program serves an age span ranging from six year olds through geriatric patients.

Current trends emphasizing accountability and deinstitutionalization with special stress on "normalization" have created a strong movement toward the establishment of community-based service programs and have added to the role and responsibilities of mental health centers.

EARY IDENTIFICATION

Early identification of infants diagnosed as having both auditory impairment and any degree of mental retardation will facilitate early intervention in habilitation programs. Auditory screening (Rapen, Ruben, and Little, 1970) and a high-risk registry can be used for detecting and tracking such disabilities in neonates and infants. In the event that a child is diagnosed as mentally retarded, definitive hearing tests should be given. Studies have established a higher incidence of hearing impairment among retarded persons than among the nonretarded population (Lloyd, 1970, Rittmanic, 1959). Without an accurate audiologic

*G. Kimberlin, Resthaven Community Mental Health Center, Los Angeles, California, personal communication (1973).

**This seems to be a successful method for evaluating degree of auditory impairment among MR infants.
assessment and proper treatment of hearing loss in mentally retarded persons, habilitation programming becomes ineffectual and unproductive. Comprehensive audiologic services are essential and should be "available to all persons in need in order to maximize their communication skills as well as provide for the evaluation, counseling, treatment, and rehabilitation of those persons with speech, hearing and/or language handicaps" (Joint Commission on Accreditation of Hospitals, 1971). This service should consist of the following components.

REFERRAL—Referrals for hearing screening should be made when behavioral changes occur among children and when they do not respond appropriately to auditory stimuli.

AUDIOMETRIC SCREENING—All individuals entering a program for the mentally retarded should be audiometrically screened prior to the development and implementation of an individual program plan. In addition, periodic rescreening must be conducted. Routine rescreening can become less frequent with older populations. Screening audiometry can be performed by an audiologist, a speech pathologist, or trained supportive personnel under the supervision of the audiologist.

AUDIOMETRIC ASSESSMENT—On the basis of screening results, individuals may be referred for a comprehensive audiologic assessment. This may involve a variety of procedures to assess central and peripheral auditory functioning. Due to the widespread use of unstandardized symbol systems in audiometric assessment, the American Speech and Hearing Association's Committee on Audiometric Evaluation developed a set of "Guidelines for Audiometric Symbols" (Asha, May 1974, pp. 260-264). Standardization of audiometric symbols should decrease the possibility of misinterpretation of data when records are exchanged among various agencies, and in turn facilitate appropriate placement of the HMIR person. Accurate interpretation of the audiologic assessment also can facilitate the "plan of action" for subsequent habilitative programming.

OTOLOGIC EXAMINATION/HABILITATION—Prior to audiologic habilitation, all hearing-impaired persons should have an otologic examination to determine if (1) the impairment can be ameliorated through medical habilitation; (2) there are specific medical contraindications to the use of amplification; and (3) there are other medical implications that the audiologist should consider in audiologic habilitation programming.

11For more detailed information, consult Lloyd and Cox (1972) in its entirety.

12For detailed information on standard audimetric symbols for graphically recording the results of pure-tone audiometry, consult the guidelines in their entirety.
AUDILOGIC HABILITATION—This aspect of audiologic programming is concerned with a broad range of activities regarding the HIMR population and accommodates both direct and indirect communication needs. Areas covered in a comprehensive audiologic habilitation plan to meet the specific needs of individuals could include auditory training, speech and language development, speech or lipreading, hearing aid evaluations, and counseling.

These five areas of service are central to adequate audiologic programming. In addition, behavioral audiometry serves as the major clinical tool for audiologic assessment of retarded individuals. In this regard, auditory acuity is tested by observing an infant's conditioned response to sounds. Play audiometry commonly used with infants is a common technique used in this type of testing. The application of behavior modification principles in behavioral audiometry has been quite successful with severely and profoundly retarded individuals (Lloyd and Moore, 1972, pp. 143-144).

Sensory and cognitive deficits among mentally retarded persons can create problems in audiological assessment. In the absence of sophisticated audiometric procedures, many children can be misdiagnosed and subsequently receive inappropriate placement. Sophisticated audiologic methods do exist, and such errors can be avoided when adequate audiologic services are available. Qualified audiologists should be employed to offer comprehensive services to the mentally retarded population. In addition, appropriate facilities and equipment are prerequisites for all audiologic procedures.

Early detection of hearing loss in an infant will permit a more encouraging prognosis for future language and verbal ability. Moreover, a hearing aid can be fitted immediately permitting an infant to make the most of his or her residual hearing. In contrast, a delayed diagnosis of a hearing loss could cause sensory deprivation and retardation in language and speech skills.

Early identification can also assist in decreasing the amount of emotional stress experienced by the family of a developmentally disabled child. Through immediate counseling and education, parents can acquire skills needed in the management of their child, can gain realistic expectations of their child's abilities and future role in society, and hopefully avoid extensive deterioration of the entire family unit.

Diagnostic Assessment Services

Diagnostic assessments for HIMR persons should include, but are not limited to the educational, medical, psychological, and the social aspects of the individual that identify the presence of hearing impairment and mental retardation as well as other related conditions. Diagnostic assessments should examine the causes, complications and consequences of the combined problems and enable the development of prescriptive remediation through an individualized program plan. (Grossman, 1973, p. 132)

A comprehensive, interdisciplinary diagnostic assessment serves as the basic criterion for the development of an effective individual program plan. Through interdisciplinary investigation, a team of specialists can administer and interpret appropriate clinical examinations leading to the goal of providing full services. A systematic appraisal with mandatory periodic reassessments should serve as a basis for determining the kind of programming needed for each person. A complete diagnostic assessment would include:

Medical Assessment:
- histories: medical, developmental, and family
- examination: general physical, neurologic, ophthalmologic, and otologic
- laboratory: serologic, urinalysis, hematologic, and others when indicated

Communication Assessment:
- language and speech evaluation: expressive and receptive skills
- audiometric evaluation

Clinical services for mentally retarded children operate in all but three states and include diagnosis, evaluation of a child's aptitude for growth, the development of a treatment and management plan, interpretation of findings, counseling of parents, and follow-up care (Office of Mental Retardation Coordination, 1972, p. 20).
Educational/Psychological Assessment
- Cognitive development, intellectual function (the assessment of present performance and capabilities)
- Sensory-motor skill development
- Preacademic/academic achievement

Social Assessment
- Social history, family and home environment, and cultural/ethnic background
- Parent/guardian skills with client

Adaptive Behavioral Assessment: Level of Functioning
- A profile of combined assessment results considering client's integrated functionability and adaptive skills

The interdisciplinary team of specialists that represents a broad spectrum of professions, disciplines, and services must be cognizant of both the biological function and behavioral needs of each person.

Comprehensive assessment programs should also include provisions for:

1. EARLY IDENTIFICATION PROCEDURES

Three procedures generally are used for the initial identification of handicapped persons—census, screening, and referral. These procedures are required to locate persons in need of comprehensive assessment or other special services.

a. Census: Supported by the state and taken annually in each community. An appropriately conducted census may assist in the early identification of persons with handicapping conditions.

b. Screening. For vision, hearing, or other physical handicaps to be conducted on a regular basis in each community by teams of specialists and supervised paraprofessionals. This procedure can play a principal role in the early detection of infants and others with signs of hearing impairment, mental retardation, or both. However, screening results independent of comprehensive assessment must not be used as the basis for selecting needed services for persons thought to be hearing impaired and mentally retarded.
The Hearing-Impaired Mentally Retarded: Recommendations for Action

1. Referrals. From parents, guardians, teachers, and other personnel are beneficial in early identification. However, information and procedures must be available in each community to permit proper referrals to be made and acted on without undue delay.

2. DIRECTIONAL AND PLACEMENT SERVICES

   The assessment of individual needs should include the subsequent identification of available resources to accommodate intervention needs and the establishment of a locus of responsibility to ensure service provision (with the family involved in all programming decisions and placement).

   Recent legislation and litigation have required an upgrading of assessment procedures for handicapped persons. A broader range of reliable and valid data must be used for decisions concerning service denial or service placement. Thus, state regulations should specify the following (State-Federal Information Clearinghouse for Exceptional Children, 1973):

   a. The personnel involved in assessment,
   b. The development of criteria to be utilized in making placement decisions,
   c. The placement process, and
   d. Placement review procedures (due process).\[^2^]{46}

   Synthesis, interpretation, and utilization of overall assessment results should be presented to the appropriate personnel charged with case management responsibilities and used by them for appropriate program direction. Directional services include an individual program plan based on:

   a. The nature and extent of the developmental disorder (including symptomatology and etiologies),
   b. Specialized treatment needed for cognitive and sensory deficits, and
   c. Assessment of the overall needs unique to each HIMR person (emotional, educational, and motor).

3. REASSESSMENTS

   Mandatory periodic reassessments of each HIMR person should be provided, espe-

\[^2^]{46}\text{Almost 60\% of the states have placement committees that assist in determining the placement of each child (State-Federal Information Clearinghouse for Exceptional Children, 1973).}
ationally at significant maturational, educational, or vocational stages, to ensure appropriate programming.21

The efficacy of diagnostic assessment services depends largely on several significant variables that often have been neglected:

- Behavioral descriptions of the persons' deficiencies, skills, and needs;
- Emphasis on individual needs in determining program type and staff, not administrative convenience; and
- Continual interdisciplinary assessments to monitor cognitive and sensory performance.

This section presents only an overview of the comprehensive diagnostic assessment services required to ensure effective programming for HIMR persons. Appropriate behavioral, medical, social, communicative, educational, or psychological assessments could not be discussed in adequate detail as they apply to this special population. However, the in-depth procedures that should be used by qualified and experienced personnel do appear in the literature (see Appendix D).

**INSTRUCTIONAL AND HABILITATION SERVICES**

In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms. (U.S. Supreme Court case: *Brown v. Board of Education*, 347 U.S. 438, 1954)

Educational programs for years have been charged with the responsibility of preparing the entire population for a useful and meaningful life in society. Therefore, these programs must be both broad in curriculum and flexible in design in order to provide an efficient and effective learning environment. Furthermore, educational clichés call for opportunities to be provided for each individual to discover and grow at his or her own pace. However, until recently many children with severe hearing impairment and mental retardation have been rejected at will by public school districts.

---

21 Reassessment is presently mandatory in 30% of the states. Efforts must be made to increase this requirement (State-Federal Information Clearinghouse for Exceptional Children, 1973).
The current wave of popularity for such terms as accountability, performance contracting, and competency-based assessment and evaluation techniques has increased the realization that education must accommodate the needs of a broader range of children. The HIMR population must be included in this quest for quality instruction, regardless of their degree of disability. Data compiled in 1970 revealed that only 33% of school-age HIMR children identified were provided for in a public education or training program (extrapolated from Weintraub et al., 1971, p. 87). Furthermore, state and local administrators interviewed during this project reported that many of these children presently enrolled in special education programs are receiving inappropriate instruction. More detailed data regarding existing or needed instructional services for the HIMR population will not become apparent until definitive measures for developing and implementing appropriate services are finally mobilized. However, in conceptualizing the general framework of comprehensive instructional services for this dual-handicapped population, three principal goals become apparent:

- All instructional programs must strive to unlock the potentials of each HIMR person and permit self-actualization to whatever degree his or her condition will allow.
- Fundamental instructional techniques and objectives relevant to the dual handicap of hearing impairment and mental retardation must be formulated and then adapted to meet individual needs.
- All educational programs should strive to develop maximum independence for each HIMR person; instruction within an open social setting (a communitylike atmosphere with major emphasis on community involvement, for example, sheltered workshops) rather than a closed and limiting environment is advisable.

A general continuum of instructional services is presented. However, specific instructional objectives or curricular material are not discussed in this document since too few comprehensive programs exist, and curriculum guides outlining a full complement of learning activities especially designed for this dually handicapped population are virtually nonexistent. Of 60 programs contacted during the project, three offered curriculum guides and all other respondents requested information on appropriate curriculum design.

Population Eligibility and Placement

All persons with any degree of hearing impairment in combination with mental retardation should be eligible for training and educational programming. Procedures for admission should include the following:

- Medical examination,
- Audiologic examination,
- Communication skill assessment,
- Educational and psychological assessment with emphasis on ascertaining functional levels and adaptability,
- History and information offered by the family, and
- A period of behavioral observation.

Although admission criteria may vary with local program operating policy, diagnostic and placement decisions should be made by an interdisciplinary team of professionals who understand severe hearing loss and mental retardation.

Placement decisions should be based on clinical observation, pertinent test data, and utilization of all available sources of information regarding the person’s daily behavior. In addition, placement teams should maintain evaluations of current available resources and should be prepared to conduct a periodic review of placement alternatives.

Flexibility in admission criteria is recommended and special regard should be given to adaptive behavior (rather than IQ) or level of audiometric functioning as the primary consideration for placement.

Instructional grouping should be based on functional achievement levels, chronological age, social maturity, method of communication, type of instruction required, and mobility of the individual.

Program Structure and Objective

Although no generalized solutions to total programming for the HIMR person can be
A Continuum of Services

formulated at the present time, two principal components are mandatory in laying the groundwork for all effective instructional services:

A. A description of behavioral and educational objectives consistent with a program philosophy and goal should be well defined and should include long-range as well as weekly plans.

B. A curriculum design that delineates specific behavioral criteria to be met should be developed. The level of achievement should be recorded daily as an evaluative process for each HIMR person. The inclusion of such case management or performance-based techniques will assist programs in developing more definitive evaluative measures, improving instruction, and achieving accountability.

Using these two components as general guidelines for an instructional program, several principal instructional objectives can be delineated:

A Begin the learning program at birth and establish appropriate and effective teacher-pupil ratios. The following ratios are offered only as a rule of thumb. For example, with preschool-age children (ages one to three) a maximum ratio of one teacher to two pupils is advisable; with children ages three to six, a maximum ratio of 1:4; ages six to 12 a maximum ratio of 1:6; and above age 12 a maximum ratio of 1:8. No consensus for these ratios presently exists. They were derived after visiting several programs and discussing proper staff-to-pupil ratios with teachers and administrators.

B Provide systematic learning and behavioral objectives based on a thorough diagnostic assessment and period of observation to identify appropriate teaching strategies.

C Stress the basic developmental areas commensurate with the maximum capabilities of each HIMR person. Specifically, highest priority should be given to self-care activities and to the acquisition of proficiency in communication skills. Development of these skills should be related to the capabilities of each HIMR person with selection of the most appropriate method of communication. With the HIMR population, those who have severe learning problems most frequently use a combination of oral and manual communication (commonly called total communication) simultaneously. Variations of the McGonigle method were also observed in some programs.

D. Promote learning through a variety of direct (learn by doing) experiences,

E Provide parental counseling followed by instruction to encourage the use of appropriate home instructional methods to facilitate transfer and reinforcement of learning experiences.

F Use a behavior-oriented prescriptive approach through intensive individualized instruction including both human resources and technological systems such as programmed instruction when possible.

G Use positive reinforcement and structured behavior modification. (The fundamental assumption underlying a behavioral approach is that behavior is acquired, maintained, or eliminated by events or contingencies in the environment.)

H Coordinate learning experiences to promote their carry-over to activities both in living units and the community.

I Use a multisensory approach. Concurrent use of all sensory modalities is essential when critical deficits in auditory input and cognitive development exist.

J Provide activities that encourage the development of independence and safety habits. The spectrum for this objective would include:

1. Complete economic, social, and mental health assimilation into open society;
2. Self-sufficiency in an open society in coordination with case service assistance, and
3. Occupational, social, and mental health adjustment within a closed society (for example, within the confines of an institution).

K Develop occupational skills for job placement.

L Provide activities concerned with health, music, art, and daily recreation that develop skills for life-long participation.

In summary, all instructional programs for the HIMR have principal goals to develop functional communication systems and occupational and recreational skills commensurate with the potential of each person.
In organizing the program framework so that performance-based techniques can be used and accountability augmented, the following format is essential:

A. Develop an individual behavior profile for each HIMR person.
B. Determine initial instructional and service objectives.
C. Delineate a plan of specific procedures and teaching strategies including a formal system for daily evaluation of behavioral changes.
D. Implement the individual program plan with a set of daily behavioral criteria.
E. Evaluate the outcome of the program plan by checking the percentage of criteria met.
F. Determine whether the individual should continue with the program plan or whether the content or criteria should be revised.

Developmental Needs

Individual instructional plans are effective only if they are based on the developmental needs of each HIMR person. For this developmental potential to be realized fully, attention must be given to needs in each of the following areas:

- Independent functioning or self-help skills,
- Sensorimotor development,
- Communication development,
- Cognitive development, and
- Social development.

Effective educational programs function as learning laboratories and create an environment that stimulates and facilitates learning. Instructional services for HIMR persons operate on the basis of several fundamental and essential assumptions;

A Continuum of Services

Instruction must begin as early in life as possible and education shall be a continual dynamic process throughout the entire life span of an HIMR person. The continuum of services will thus include early childhood programs and continue through to include continuing educational, vocational, and recreational activities in adulthood.

Learning should occur in a planned, sequential manner.

Each HIMR person, regardless of degree and nature of handicap, possesses great potential for continuing growth and development and specific opportunities for learning and development must be provided for all HIMR persons regardless of age.

Facilities / Equipment / Materials

Appropriate environmental designs are difficult to discuss in this document. Facilities, furnishings, and equipment depend largely on age group served, specific service objectives, and degrees of disability involved. To fully accommodate the diversity of individual needs of the HIMR population, each service center should obtain architectural consultation, as well as guidance from specific disciplines served.

In any event three major components of program facilities for the HIMR must include: (1) suitable construction, design, and maintenance of the facility to afford efficient services, (2) flexibility in accommodating service activities, and (3) provisions for use of multimedia materials with specific emphasis on auditory and visual equipment.

In addition, educational facilities should have:

- Classrooms or learning modules that are acoustically treated with carpeting and nonechoing wall material to reduce the amount of ambient noise, sufﬁcient ﬂoor space, bathrooms, and lunch facilities, adequate lighting (including special ﬂashing or warning lights); and furnishings that provide for group as well as independent learning activities.
- An instructional media room and staff work areas for preparation of materials.
- Adequate and appropriately designed consultative and treatment space for each discipline providing services, such as sound-treated rooms for audiologic services (for maximum noise levels, see recommendations in ANSI-1960, R-1971) and specially designed rooms for physical and occupational therapy, individual tutoring (for example, for itinerant work), independent study, speech and language pathology, individual counseling; and parent and guardian counseling, instruction, and program observation. Recreational areas are needed to reinforce classroom skills. Suitable ofﬁce areas for program administrators, supervisors, and secretarial staff are essential. Mobile or prefabricated units may be used on a temporary basis in lieu of facilities listed above when approved by the appropriate state agency.
- Architecturally barrier-free environments to facilitate physical mobility or multi-handicapped pupils.

Equipment used in programs for the HIMR should include audiometer(s) (for further information see ANSI-1969) with provisions for ﬁeld audiometry and equipment capable of performing at least the following diagnostic procedures: hearing screening, pure-tone air and bone conduction with contralateral masking, speech discrimination and speech reception audiometry, site-of-lesion battery, nonorganic hearing loss battery, hearing aid evaluations and consultation, and evoked response audiometry.

Adequate maintenance of all audiometric equipment (for example, at least quarterly electroacoustical calibration of audiometers) must be provided. In addition, amplification equipment such as hearing aids, portable auditory training units, and instructional equipment should be available. Overhead projectors, unbreakable mirrors for speech and lipreading activities, record players, film projectors, tape recorders, Polaroid cameras, television sets for receiving programs in classrooms as well as for use with videotaping lessons, apparatus for independent study (for example, computers and self-teaching machines) language masters, and other audiovisual devices should also be included in the educational program.

Materials including both durable items and expendable supplies (for example, paper, workbooks, psychological test forms, and so on) should be available at all times. Specific age levels served, degree of disability, and individual needs require a great variation in the design and objectives of instructional media for the HIMR population. Many of the instructional devices developed for other populations are easily adaptable and can be used with the HIMR population. Regional resource centers and individual school media centers should be respon-
The Bureau of Education for the Handicapped (BEH) is aware of the above needs and has invested time and effort in the organization of a new resource system that includes a National Center on Educational Media and Materials for the Handicapped (NCEMMH), Area Learning Resource Centers (ALRCs), 13 Regional Resource Centers (RRCs), and one Coordinating Office for Regional Resource Centers (CORRC). In view of this, the ALRC/NCEMMH and RRC/CORRC networks serve as the components of this new learning resource system.

Area Learning Resource Centers (ALRCs) are designed to provide diversified educational media and materials for developmentally disabled persons. Their principal concern is to improve educational programs for handicapped children by providing a readily available supply of appropriate instructional materials. This systematic, comprehensive media service replaces both the Special Education Instructional Materials Centers and Regional Media Centers for the Deaf (SEIMC/RMC Materials Network). The ALRCs are designed to work closely with state and local education agencies and are responsible for:

- Acquiring and developing materials specifically geared to the educational needs of the handicapped;
- Distributing information to teachers and parents notifying them of materials available at the resource center;
- Training persons who design, select, or use instructional materials to be competent in "mediated teaching"; and
- Providing materials to teachers or learners through an efficient materials supply and retrieval system.

The ALRCs have access to the National Center on Educational Media and Materials for the Handicapped (NCEMMH), which serves as their national coordinating office. In addition, the ALRC programs are served by three specialized offices concerned with the visually impaired, hearing impaired, and persons with other handicapping conditions. These offices are charged with:

- Locating materials to fill specific needs;
- Field testing newly developed materials for effect or desired educational objectives, and
- Planning for the development of new materials as they become identified through a national needs assessment concerned primarily with the pressing unmet needs for media and materials.

A fourth specialized office serves as a depository for the ALRC/NCEMMH network. Those materials tested and accepted by an ALRC program are entered into this depository and then loaned out to teachers, parents, and learners through the regional centers.

The NCEMMH, located at the Ohio State University, became operational in June 1972 under Public Law 91-61 and is charged with three major tasks:

- To improve the educational status of handicapped children by developing, delivering, and evaluating quality instructional materials/media;
A Continuum of Services

- To provide national leadership and coordination for special education regional and media centers; and
- To support and coordinate research and other projects concerned with educational technology for the handicapped.

Currently, the National Center is developing and operating a nationwide information storage/retrieval system that will serve as a national clearinghouse for special education materials. It also has initiated a national needs assessment of instructional materials to remain in touch with needs in the field and to develop new instructional tools.

Regional Resource Centers (RRCs) and one Coordinating Office for Regional Resource Centers (CORRC) comprise an added component to the learning resource system. Referred to as the RRC/CORRC network, these centers were established to promote program planning, development, and management. The 13 RRCs provide demonstration models of systematic comprehensive appraisal techniques for handicapped children. The educational diagnostic and prescriptive process, which serves as the backbone of the entire educational programming system, includes referral and screening as well as individual assessment, development of individual program plans, placement, and follow-up care. The RRCs, which will remain in contact with the ALRCs and other RRCs, are coordinated by the CORRC. This national office is responsible for developing and coordinating procedures for sharing resources through joint planning and management. The CORRC is also conducting needs appraisals of and training for professionals involved in educational assessment and prescription.

It is intended that this new organizational scheme serve as a catalyst in fostering improved educational opportunities for all handicapped persons.

Program Types

A continuum of program models is required to meet the varying educational needs of persons with different degrees of hearing impairment and mental retardation. They include:

- Diagnostic center placement
- Full-time special classrooms (with opportunities for integration into regular classrooms when the situation permits this transition)
- Resource room instruction
- Regular classrooms with supportive services
  a. Itinerant services
  b. Single building services
- Home/hospital services
- Parent/infant instructional services
- Residential placement (for example, schools, extended care facilities, and so on)

Two major objectives should be considered in implementing the range of program types: the provision of flexible programming, and emphasis on “mainstreaming” or greater integration of handicapped persons into regular educational programs with continuing supportive services.

The following types of programs are needed to meet the multiplicity of needs of the HIMR population:

A. Diagnostic Center Placement. This option is used to provide thorough differential diagnoses as well as periods of observation to formulate appropriate educational plans and teaching strategies for HIMR persons. Services are provided by audiologists, teachers of the hearing impaired, psychologists, speech pathologists, and others in an interdisciplinary team approach. Such centers may operate on a local or regional basis (by cooperative agreements among districts).

B. Full-Time Special Classrooms. Subsequent to a diagnostic assessment in which a pupil is found to have severe hearing loss and mental retardation, placement in a special class may be indicated. The specialized instructional classroom program is designed to serve small groups and emphasize the development of preacademic, academic, social, and emotional growth. As HIMR pupils demonstrate successful performance, integration into regular classes for specific instructional activities can be planned and provided.

C. Resource Room Instruction. This option permits some HIMR pupils to remain in regular classrooms for a major part of the day, but they are scheduled into the resource room for one or more periods of individualized instruction by a specialist in hearing impairment
and mental retardation. The resource room serves as an alternative educational strategy to special classroom placement for pupils with mild to moderate dual disabilities.

D. **Regular Classrooms with Supportive Services.** This option may be used for HIMR pupils with mild developmental disabilities and minimal secondary handicaps. However, supportive services will be needed and should include direct/indirect services for pupils enrolled in regular classes by an HIMR specialist or other team members operating on.

1. Itinerant basis—the specialist provides continuous, ongoing services to pupils in more than one school or center. Scheduling options for this type of service include intermittent sessions on a regular weekly basis or intensive cycling, which provides daily service in a particular school or center for a specific block of time. Flexibility of operation and scheduling is desirable in itinerant programming to provide for the varying needs of HIMR pupils.

2. Single-building basis—the specialist is assigned to one building or center on a full-time basis. Services may be provided by either intermittent or intensive scheduling.

E. **Home and Hospital Services.** This option is used to serve pupils who are confined to their homes or a hospital. The right to education must be accommodated even when a condition precludes a pupil's attendance at school. Length of time of educational instruction will depend on the condition of the patient. Instruction should be provided by a teacher with preparation for working with the hearing-impaired mentally retarded.

F. **Parent/Infant Instructional Services.** This program type provides parents with guidance and instruction in assisting infants and young preschoolers with hearing loss and mental retardation to develop early communicative behavior and other skills. The guidance and instruction provided for parents by HIMR specialists may be given in schools, diagnostic centers, homes, or other approved facilities. This program model is recommended for children determined to be at risk for developmental disabilities. Special assistance in providing for the development of auditory, communicative, and cognitive skills at the earliest age possible is vital.

G. **Residential Placement.** This option should be reserved for pupils with profound disorders who are determined by an interdisciplinary assessment team to be unable to profit from other program models at the time of placement. Obviously, many criteria must be considered in making a residential placement (that is, potential availability of other appropriate placements, family ability to provide care, quality of services in the residential program, and so on). The need for continuing placement in a residential environment (or any other special program model) should be evaluated at least annually. Specialists with the appropriate qualifications to manage pupils with hearing loss and mental retardation should have primary responsibility in the planning and providing of services.
Failing to serve the handicapped population appropriately can effect an economic drain on the society not only because of unnecessary institutionalization but also because, as a group, handicapped persons are too often highly underemployed. Specifically, among more than six million mentally retarded persons in the United States, of whom three and one-half million are adults, approximately 2,000,000 are estimated to be capable of learning to support themselves financially (statement by President’s Committee on Employment of the Handicapped). However, mentally retarded persons are in great need of job training and placement services. With adequate training, many of these people are employable and may even be superior to nonhandicapped workers. Studies indicate that a uniquely high work motivation generally is prevalent among hearing-impaired persons as well as the mentally retarded population. These workers are loyal, their attendance is usually outstanding, they tend not to job-hop, and they can do a job well when assigned work is commensurate with their skills. However, several problems still exist with regard to their employment. Among their immediate needs are:

- More prevocational special education classes, training and vocational rehabilitation programs, sheltered workshops, work-study programs, and so on, to prepare HIMR persons for future job placement;
- More public promotion of their work record to build the acceptance level of employers, and
- More provisions for transportation to and from work.

Various professional organizations and governmental agencies can play a principal role in mobilizing employers to hire HIMR persons. Among those groups whose assistance is essential are:

- President’s Committee on Employment of the Handicapped
- American Association on Mental Deficiency
- American Personnel and Guidance Association
- National Rehabilitation Association
- National Education Association
- American Psychological Association

Several types of training centers in coordination with living arrangements can exist. Specific categories most applicable to the HIMR population are discussed in the following sections. However, various modifications and alternatives may be needed in considering the individualization of programs.

Prevocational Programs

Developmentally disabled persons require special education programs designed to prepare them for useful and meaningful lives in society. Through prevocational programs, handicapped persons at the high-school level (14 to 21 years old) are able to discover and develop their abilities and eventually be placed in an environment where they will function successfully. This training is a prerequisite for any type of meaningful work.

Major objectives of prevocational programs for HIMR persons (including work-study or work-experience programs) are:

- Assessing, evaluating, and developing the vocational potential of each person,
- Developing work habits or general skills for occupational competency, and
- Exploring individual learning problems in a working atmosphere to nurture acceptable social and work behavior to prepare HIMR persons for future vocational or job-training employment.

Specifically, a prevocational (occupational) preparatory or work-experience program can be described as a three-year program usually operating at the high-school level or an equivalent thereof, such programs place emphasis on acquisition of practical occupational skills in coordination with remediation of basic skill weaknesses (that is, communication, reading, arithmetic, social and personal adjustment, industrial arts, homemaking skills, work habits, and job attitudes) and sometimes offer on-the-job training through a cooperative effort with state agencies (for example, State Departments of Special Education and Vocational Rehabilitation).
Variances in the basic components of work experience programs exist. The spectrum of differences includes the age at which a handicapped person becomes involved in such a program, the hours per week that a participant is employed (ranging from 12 to 40 hours per week), pay per week (with considerations for minimum wage), and the type of job. Several possibilities can be listed; for example, Missouri’s Cooperative School-Work Program includes the following jobs:

- Clerical and sales occupations (e.g., store laborer),
- Service occupations (e.g., homemaker, general maintenance person, janitor, delivery person, aide, or helper),
- Farming occupations,
- Processing occupations (e.g., produce worker),
- Machine trade occupations (e.g., machinist, auto body and machinery repair person, or press operator),
- Bench work occupations (e.g., production worker or shoemaker),
- Structural work occupations (e.g., construction worker), and
- Miscellaneous occupations (e.g., car washer or painter).

Prevocational programs can make provisions for job experiences in sheltered workshops as well as in the open community when the situation is appropriate.

A work-study specialist (also referred to as a vocational rehabilitation counselor, guidance counselor, or work adjustment coordinator) can have primary responsibility for occupational education programs. He is directly involved with day-work assignments and on-the-job training of students who are near completion of their educational program and are approaching employment. Although these specialists may occasionally work with pupils throughout their training, they normally assume more direct contact with students during their last two or three years in school.

Primary responsibilities of a work-study specialist are:

- To maintain direct contact with the “world of work” to identify (1) latest trends in the job market, (2) prevailing wage laws, (3) jobs specifically suitable for HIMR persons, (4) hiring policies, and (5) union requirements;
- To keep in close contact with each student, his or her family, and the special teacher; and
- To be familiar with vocational rehabilitation and employment agency operations.

Work-study specialists play a vital role in preparing students for the mainstream of life and work.

A good prevocational program assists in the habilitation of disabled persons while bridging the gap between the classroom and employment. It provides for evaluation of individual vocational needs, counseling, supervision of training, and job placement.

**Vocational Programs**

HIMR persons can be habilitated vocationally through training programs specifically geared toward the development and improvement of job skills, as well as academic and communicative skills. Through counseling, training, and job placement of post-school-age persons, vocational programming plays a basic role in total programming to meet the needs of this dually handicapped population.

The nature and extent of vocational programs vary. The continuum of vocational services for postschool persons should include:

- Occupational training centers or sheltered workshops,
- Activity centers,
- Residential work programs, and
- On-the-job training with eventual permanent job placement.

A continuum within each of the above services is apparent. It is imperative that programming remain flexible to accommodate the following variables. (1) the individual needs of each person (e.g., degree of disability and age), (2) the particular setting (e.g.,...
work-experience programs coordinated with living accommodations), (3) the amount of time spent in the program, and (4) the availability of community resources and the source of services rendered. Among the agencies that may assume responsibility for establishing vocational programs for the developmentally disabled are:

- State employment agencies and other manpower training and job placement centers,
- State vocational rehabilitation agencies, and
- Single-source service centers (for comprehensive planning and directional services).

A. SHELTERED WORKSHOPS

A sheltered workshop provides a structured program of activities involving (1) work evaluation, work adjustment, occupational skill training, and short-term remunerative employment designed to effect placement in the competitive labor market; or (2) extended, long-term remuneration for selected work in a protective environment (Grossman, 1973).

The 1954 Amendments to the Vocational Rehabilitation Act (PL '56) sparked several associations for the mentally retarded to develop and implement sheltered workshop programs. This, along with federally funded research and demonstration projects concerned with rehabilitation, has given rise to over 1000 of these workshops throughout the country (President's Committee on Mental Retardation, 1973a). Variations in size, staffing, and nature of training programs exist among sheltered workshops. However, two principal objectives are common to all of them. The workshops train persons for competitive employment and provide short-term, long-term, or even permanent employment when a person's work skills are not acceptable in competitive industry.

After acquiring work skills through prevocational programs, some severely disabled persons may require placement in an appropriate sheltered workshop. Specific activities can vary with the degree of the individual's disability, living arrangements, and the availability of work resources such as Goodwill Industries.

Sheltered workshops often become a primary consideration in placement decisions for 17- to 20-year-old severely handicapped persons. During this age period, critical decisions occur for families or guardians. With culmination of an educational program, the 17- to 20-year-old and his or her family are frequently left with the question of "What next?" Admission to a workshop may be sought to eliminate the prospect of permanent institutionalization and to create opportunities for an alternate life-style.

Living arrangements in coordination with a sheltered work environment, however, must also be considered. Effective plans for the HIMR population should include work-living resources that can accommodate all degrees of handicap. Among these arrangements are:

- Residential school programs in which older students are transported to local workshops on a regular basis as part of their prevocational program.
Residents of group homes, their own homes, or institutions, who work by day in a sheltered community-based environment and are transported home in the evenings, and

- Residents of institutions or hospitals involved in a sheltered workshop program on the premises (eliminating problems with transportation but often restricting residents from community-based activity).

In many instances, the sheltered workshop has become a major cornerstone in laying the groundwork for both vocational training and vocational rehabilitation programs. HIMR persons are given an opportunity to (1) perform meaningful work, (2) earn remuneration, (3) fill their day with productive activity, and (4) potentially advance to an "open community" job, which allows them more independent life-styles.

Readers may be interested in reviewing provisions for state-supported sheltered workshops in Missouri and Pennsylvania.

B. ACTIVITY CENTERS

Activity center programs also can be designed to meet the needs of handicapped adolescent and adult persons in the community who are too severely disabled for a sheltered workshop.
Activity centers (also called developmental training centers) can function as recreational, vocational centers for HIIMR persons too disabled to progress to sheltered workshops or they may serve as an initial placement for those who ultimately may progress to a sheltered workshop environment.

Activity centers provide programmed learning and work-related care in the following areas: self-care and grooming (personal hygiene), communication (the use of the telephone, speech and language development programs, and group discussion of current events), home skills, community activities (stressing dining out in restaurants, shopping, and community courtesies), academic instruction (making change, telling time, and filling out applications), recreation (dancing, parties, and games), arts and crafts, and remunerative work (contracts involving operations of collating, assembling, and sorting).

The organizational structure for activity centers varies considerably throughout the country. The ratio of instructor to trainee ranges from 1.3 to 1.20. Most commonly, training in service occupations is provided. Among the occupations are messenger, porter, stock clerk, maid, and kitchen helper. These programs are often sponsored or governed by associations for the mentally retarded as nonprofit corporations. Some of the programs are funded by state and county subsidies, public school boards, mental health, rehabilitation agencies, or private donations.

Guidelines and standards for adult activity programs have been established in 23 states. A state agency is normally responsible for these standards. For example, in Minnesota, the Department of Mental Retardation (MR Licensing Law) is responsible, while in Maryland, the Department of Health and Mental Hygiene assumes the responsibility.

Admission criteria generally establish a minimum age of 14 years and specify retardation as the primary condition and physical handicaps as a secondary condition. These criteria vary in each state according to established policies and individual state legislation. In 1972, 422 centers enrolled 13,495 persons with an age range from 14 to over 65 years. The average age was 25 years two months. Also, tested intelligence scores ranged from a low of 12 to a high of 65, with a mean of 36.

Trainees are discharged from activity programs when the staff deems it appropriate to place them in a sheltered workshop or in other forms of employment (more than 1000 persons have advanced in this way according to the President's Committee on Mental Retardation, 1973a, p. 17).

Although activity centers first began in 1952, the movement to establish them in significant numbers did not gain impetus until the early 1960s. Minnesota (which has the greatest number of activity centers and has also established standards for the operation of these programs), New York, Ohio, Indiana, Illinois, Florida, Kentucky, and California are among the states that have a substantial number of activity centers. The Occupation Day Center in New York City (the New York City Bureau for Children with Retarded Mental Development) is one example of a successful activity program. Established in 1959, it has served as a prototype for other activity programs in this country. As a demonstration center, it is concerned with adaptive behavior and the acquisition of functional skills for both moderately and severely retarded persons.

Currently, activity centers have become a part of many regional or single-source center services for the retarded (Missouri's Sikeston-Delmo Project is one example of an activity center program in conjunction with a regional diagnostic center for the retarded). This arrangement can be highly beneficial in that it provides a natural setting for evaluations of retarded adults in daily living activities.

Activity centers have definitive roles in statewide plans for comprehensive services for the adult population. They not only assist in preventing institutionalization but also enhance public school special education programs for severely disabled adolescents and young adults. More precisely, these centers fill the large gap between the termination of school programs and commencement of employment either in sheltered workshops or in the “open community.”

C. RESIDENTIAL WORK

Organized vocational programs should be designed to give meaningful work to HIIMR persons within residential settings. Persons able to acquire work skills and to increase their employment potential on the premises can eventually often find work placement outside of their living facility.

Housekeeping, laundry, ground maintenance, and janitorial services are easily adaptable and the most commonly used areas for vocational instruction of residents. Supervision of their
work is carried out by staff in each specific area (for example, supervisor of ground maintenance). Specific steps must be taken, however, to eliminate communication problems. Since the professional staff has ongoing direct contact with and exposure to the needs of HIMR persons and the residential staff, the program can implement procedures to accommodate the needs of both.

D. ON-THE-JOB TRAINING

Subsequent to work experience acquired through prevocational and vocational education programs, many HIMR persons can be placed in permanent job settings. Unlike prevocational programs, where general activities stress self-help, work habits, social competence, and applied academic skills, on-the-job training involves learning a specific functional job in depth. All skills learned in prevocational or vocational programs or both will hopefully enable the HIMR person to function adequately in a real-world job assignment.

Employers and counselors will increase the probability of positive results if, during the period of on-the-job training, they:

— Break down the job into its basic tasks and teach one task at a time,
— Analyze each task in terms of required performance levels,
— Develop a plan for the teaching methods to be used, and
— Allow time for training and work adjustment.

The HIMR individual should have his or her progress evaluated periodically. Care must be taken to avoid placing the person in frustrating, demanding situations that provide little opportunity for them to function effectively and to feel a sense of achievement.

Vocational Rehabilitation Programs

Vocational rehabilitation services provide those elements of training, counseling, and assistance needed by HIMR persons who have finished or are about to terminate formal schooling. Vocational rehabilitation is greatly needed by HIMR persons at many different stages in life. The ultimate objective is to assist each handicapped person in moving as far as possible along a continuum from acquiring preliminary vocational skills to remunerative employment and, finally, entry into the mainstream of society as an independent citizen and worker. Among the services provided by state vocational rehabilitation agencies are:

- A comprehensive medical evaluation including an assessment of the degree of disability and its effect on employment,
- A vocational evaluation,
• Physical restoration (for example, the fitting of a hearing aid) and counseling,
• Psycho-social evaluation (for example, personal adjustment),
• Prevocational and vocational training;
• Maintenance (for example, living arrangements) and transportation during rehabilitation,
• Suitable job placement, and
• Follow-up services to assist handicapped persons during employment.

With adequate vocational rehabilitation programs, persons should not have to travel a painful trial-and-error route in job hunting once they are past school age. Skillful testing, evaluation, and appropriate training can assist each person in finding and maintaining a satisfying, worthwhile job.

Programs used by vocational rehabilitation vary in size and type of population served (for example, degree of disability, age, and abilities). Specific work-training objectives will be the determining factors for the type of vocational rehabilitation program needed. Primary vocational program objectives and structure include but need not be limited to:

• Activities designed to achieve the optimal development of each HIMR person with special focus on self-help skills, social competence including personal and community adjustment, and development of communication skills, vocational competence (for example, sensorimotor coordination, attitudes, and abilities), and independent living,
• Services provided through individual counseling (individual vocational plans), prevocational programs, vocational programs (including occupational training centers), activity centers, sheltered workshops, on-the-job training, and postplacement follow-up (regular evaluation of the progress and present situation of each person at least every three months);
• Provisions for a designated person (for example, a vocational rehabilitation counselor) to be responsible for carrying out each person's individual vocational rehabilitation program plan effectively;
• Job placement services that assist each person in obtaining appropriate employment, trade training programs, competitive and remunerative employment, homemaking, homebound employment, and sheltered employment; and
• Assistance with off-the-job needs and activities such as living arrangements, social and recreational activities, educational needs, medical services, and transportation.

Vocational rehabilitation counselors involved in the delivery of services to HIMR persons should have special preparation for working with this population. The primary qualifications are (1) a master's degree in rehabilitation counseling or in a related area and (2) knowledge of and experience in dealing with persons who are hearing impaired and mentally retarded. The counselor also should be trained in the use of total communication methods (oral and manual).

The responsibilities of vocational rehabilitation counselors include but are not limited to the following (see Missouri's Vocational Rehabilitation Plan, 1967):

• Appraising and determining eligibility of HIMR persons for necessary rehabilitative services,
• Evaluating each person's abilities and aptitudes during the rehabilitation process and making proper arrangements for suitable work placement,
• Regular evaluations of job placement through postplacement follow-up, and
• Assistance in the coordination of community rehabilitation services.

The lack of appropriate prevocational and vocational training opportunities for the HIMR population has been reported by many program directors interviewed during this project to be one of the most serious omissions in service. These vocational programs are essential to complete the task of vocational rehabilitation. Funds for additional planning and programming are needed from the federal and state agencies to effect more comprehensive services.

State and Federal Agencies

In 1972, the mentally retarded comprised 14% of all disabled persons in vocational rehabilitation who were rehabilitated by state-federal programs. Approximately 43,700 per-
The Hearing Impaired Mentally Retarded: Recommendations for Action

Vocational rehabilitation services at the state and federal levels of government include:

- Assisting in the construction and remodeling of rehabilitation facilities (state agencies);
- Initiating project grants concerned with innovative procedures and expansion of vocational rehabilitation services to improve effectiveness of programs for handicapped populations (state and regional agencies); and
- Administering facility improvement grants designed to upgrade sheltered workshop services, technical consultations, staff development, and so on (Rehabilitation Services Administration).

In addition, a federally supported vocational rehabilitation program administered by the Rehabilitation Services Administration (RSA) of the Social and Rehabilitative Service (SRS) provides matching funds to state rehabilitation agencies. These funds are used solely for services that will assist physically and mentally handicapped individuals obtain or retain employment. Federal grants are made to state vocational rehabilitation agencies on an 80%-20% federal-state matching ratio, up to the limits of federally determined allotments for each state. Funding is dependent upon the approval of state plans which describe the services that will be provided. The RSA has estimated that the total federal and state costs for services to the 292,272 persons rehabilitated in fiscal year 1971 was $631 million, with an average cost per rehabilitant of $2150 (American Hospital Association, 1973, p.64).

Other types of federal support for vocational rehabilitation programs include:

- Purchase of services from state rehabilitation agencies for selected recipients of Social Security benefits with Social Security trust funds;
- Project grants to state rehabilitation agencies for service innovation and other public and nonprofit private organizations for expansion of services;
- Grants to state rehabilitation agencies for service innovation and other public and nonprofit private organizations for expansion of services;
- Grants to state rehabilitation agencies and other public and nonprofit private organizations for special programs to recruit and prepare handicapped persons for careers in public service;
- Contracts with industrial or commercial enterprises, trade associations, or labor or other organizations capable of providing training and other employment programs for the handicapped in realistic work settings; and
- Grants to public and nonprofit private rehabilitation facilities to assist in meeting initial costs of compensating professional and technical staff and in improving professional or business management services or other aspects of their operations.

Employment

Employment is ... productive behavior directed toward the accomplishment of an end that contributes to the development of self-worth and economy of the individual and/or his environment. A “contributor to society” is defined as an individual who is able to perform an act which is necessary and would have to be paid for if done by another individual. In this context, an individual able to care for his own personal needs should be considered employed. (Grossman, 1973)

Persons with combined hearing loss and mental retardation and capable of engaging in productive and meaningful work should be given the opportunity to make an economic contribution to society and to secure a decent living. Empirical evidence suggests that, as adults, more HIMR persons would be capable of sustaining themselves with only minimal assistance if it were available in the community.

Principal concerns of employers of the handicapped include the ability to do the assigned work, get along with others, use public transportation, handle money, and maintain personal hygiene.

The Texas and Missouri work-study programs have reported that unfamiliarity with the needs and abilities of HIMR persons and others with handicapping conditions often makes employers reluctant to hire members of this population. This can be overcome when well-trained counselors meet with employers to determine their needs and to discuss a potential...
employee. The President’s Committee on Employment of the Handicapped (PCHE)26 plays a vital role in publishing literature that helps both the employer and the disabled employee in the work setting. In preventing potential problems, several effective and successful methods have become operational. A publication on the “do’s” (PCHE, 1969) of orienting the employer to a handicapped person are applicable to HIMR persons and are listed as follows (the masculine pronoun is used for brevity):

**DO** talk to him on a person-to-person level, as you would to anyone else. Only try to be more specific, more precise and crystal-clear—as if you were speaking to someone in the upper levels of grade school. Don’t “talk down” to him as though he were a small tot. He’s not.

**DO** speak in concrete terms, not abstractions. If, for example, you want him to put the pail away, show him where “away” is.

**DO** demonstrate what you want him to do; don’t just tell him.

**DO** show him where things are—time clock, lockers, restroom, cafeteria or lunch area, drinking fountain, supply room—same as you would for any new employee. Only **DO** take your time, don’t rush and be sure he understands.

**DO** take extra care to explain about working hours, proper clothes on the job, his work station, to whom he reports, what his pay will be, where the bus or commuter stops. It’s doubly important for him to know these six points.

**DO** ask a question now and then to make sure he’s keeping up with you. “Now show me your work station,” or “Where does the bus stop?” or any kind of question that checks his understanding.

**DO** introduce him to his fellow employees and supervisors. If he seems a bit withdrawn at first, help him to know people and find one coworker at first with whom he can feel free and easy; someone to answer questions and listen to problems.

**DO** let him know he’s one of the work-a-day family. He may learn to mix with others at work, but tend to be by himself after work. After-hours friendships shouldn’t be forced; he may be vocationally ready but not quite socially ready.

**DO** be ready to give him a guiding hand should new situations and new problems arise which he needs help in coping with.

**DO** make a note of his on-the-job strong points. When he turns out to be a good employee, pass the word on to others.

In addition, employers of severely handicapped-HIMR persons should (1) capitalize on tasks requiring nonlanguage visual-motor abilities (keep in mind that although some of these persons may prefer routine, repetitive jobs, other less-involved persons will have special skills that are needed for the production of art, industrial design, and so on), (2) avoid the use of tests as a primary basis for evaluating job ability, and (3) comply with state and federal wage and hour laws while also making provisions for holidays, sick leave, workmen’s compensation, health insurance, retirement, and recognition of outstanding contributions. "Preparing for Work," a pamphlet published by PCHE, lists several types of jobs that could be filled successfully by even the more handicapped HIMR persons when the proper preparation is provided. These include but are not limited to:

- stock clerk
- dishwasher
- vegetable peeler
- landscape laborer
- elevator operator
- concession attendant
- sewing machine operator
- housemaid
- farmhand
- assembly worker
- supermarket bagging clerk
- factory worker
- office cleaner
- mechanic's helper
- brass polisher
- waitress
- food handler
- groundman
- textile machine worker
- fish cleaner
- bookbinding worker
- bottle filler
- parking lot attendant
- messenger, indoor
- saw machine operator
- bootblack
- usher
- animal caretaker
- laborer, crops
- collator
- mangle machine operator
- maid, hotel
- car washer
- ticket taker
- beauty operator assistant
- warehouseman

---

26 The President’s Committee on Employment of the Handicapped, Washington, D.C. 20210, has published a great deal of literature concerning employment for the handicapped and all facets thereof. For additional information, contact this committee at the above address.

---

53
### Recommendations for Action

<table>
<thead>
<tr>
<th>Position</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>kick press operator</td>
<td>office clerk</td>
</tr>
<tr>
<td>truck loader</td>
<td>janitor</td>
</tr>
<tr>
<td>baker's helper</td>
<td>sorter</td>
</tr>
<tr>
<td>playground attendant</td>
<td>garbage collector</td>
</tr>
<tr>
<td>egg collector</td>
<td>carpenter's helper</td>
</tr>
<tr>
<td>freight handler</td>
<td>mailroom assistant</td>
</tr>
<tr>
<td>mimeograph operator</td>
<td>drillpress operator</td>
</tr>
<tr>
<td>mother's helper</td>
<td>wrapper</td>
</tr>
<tr>
<td>painter's helper</td>
<td>messenger, outdoor</td>
</tr>
<tr>
<td>laboratory helper</td>
<td>office boy</td>
</tr>
<tr>
<td>railroad track worker</td>
<td>office girl</td>
</tr>
<tr>
<td>bottle washer</td>
<td>porter</td>
</tr>
<tr>
<td>nurse's aide</td>
<td>packer</td>
</tr>
<tr>
<td>wallpaperer</td>
<td>truck helper</td>
</tr>
<tr>
<td>photocopy machine operator</td>
<td>laundry worker</td>
</tr>
<tr>
<td>housekeeper</td>
<td>gas station attendant</td>
</tr>
<tr>
<td>ward attendant</td>
<td>ironer</td>
</tr>
<tr>
<td>apple picker</td>
<td>kitchen helper</td>
</tr>
<tr>
<td>bus boy</td>
<td>unskilled laborer</td>
</tr>
<tr>
<td>bus girl</td>
<td>candy wrapper</td>
</tr>
<tr>
<td>building maintenance worker</td>
<td>canny worker</td>
</tr>
<tr>
<td>mailbag handler</td>
<td>houseman</td>
</tr>
<tr>
<td>roustaman's helper</td>
<td>gatekeeper</td>
</tr>
<tr>
<td>office machine operator</td>
<td>bag filler</td>
</tr>
<tr>
<td>nurse's aide</td>
<td>bellhop</td>
</tr>
<tr>
<td>painter's helper</td>
<td>shoe repairer</td>
</tr>
<tr>
<td>laboratory helper</td>
<td>floor polisher</td>
</tr>
<tr>
<td>railroad track worker</td>
<td>window washer</td>
</tr>
<tr>
<td>bottle washer</td>
<td>newspaper deliverer</td>
</tr>
<tr>
<td>nurse's aide</td>
<td>dairy hand</td>
</tr>
<tr>
<td>wallpaperer</td>
<td>hand trucker</td>
</tr>
<tr>
<td>photocopy machine operator</td>
<td>locker room attendant</td>
</tr>
<tr>
<td>housekeeper</td>
<td>doorman</td>
</tr>
<tr>
<td>ward attendant</td>
<td>stevedore</td>
</tr>
<tr>
<td>apple picker</td>
<td>watchman</td>
</tr>
<tr>
<td>bus boy</td>
<td>tile setter</td>
</tr>
</tbody>
</table>

The President’s Committee on Employment of the Handicapped has published the following documents applicable to the employment of HIMR persons:

- Employment Assistance for the Handicapped. A Directory of Federal and State Programs to Help the Handicapped to Employment
- Guide to Job Placement of the Mentally Retarded
- Hiring Persons with Hearing Impairment
- How to Get a Job (teacher's manual available)
- Jobs and Mentally Retarded People
- Opening the Doors for the Handicapped
- Work and How to Get It

A limited supply of pamphlets is available from this committee on request. The pamphlets listed above, and similar informational materials, can also be ordered by requesting them under general categories of information rather than by specific titles. These categories are:

- Architectural Barriers
- Employment Assistance
- Awards and Recognition
- Mental Retardation
- Mentally Restored
- Sheltered Workshops
- Insurance
- Recreation
- Management Views
- Labor Views
- Homemaker Rehabilitation
- Youth
- Transportation Barriers
- Veterans
- “Ability Counts” Contest

Films, exhibits, posters, and banners are also available by writing to the President’s Committee on Employment of the Handicapped, Washington, D.C. 20210.

**Conclusion**

One major message remains significant. *the HIMR population can become producers as well as consumers, and, in turn, find human dignity!*

### FAMILY AND HOUSING SERVICES

The presence of a person with both hearing impairment and mental retardation in a home creates a variety of complex problems involving all family members and all facets of family life. To meet the needs of the HIMR population, supportive services must be available to their families. The unavailability of immediate, appropriate resources can destroy the family unit and precipitate many community problems, only some of which are financial. The emotional conflicts caused by the inability of a family to cope with the problems of acceptance, care, and
management of the HIMR person often requires assistance from a constellation of community services. These services are often provided in the home as well as at a community agency.

The scope of family services required will vary as specific needs change. Major areas of family service include parent orientation and counseling, parent education, and training, services performed in the home, and services provided outside the home.

**Parent Orientation and Counseling**

Parents and guardians generally need special assistance in obtaining appropriate services and, perhaps, financial aid. Orientation and counseling services must provide parents and guardians with a meaningful description of the dual handicap, offer a general overview of the educational, social, and vocational needs of the HIMR population, provide specific information about local, state, and federal resources, including information on methods for contacting appropriate sources; discuss the HIMR’s rights as citizens, encourage participation in local parent groups; and assist with the acquisition of literature that might be helpful in understanding the conditions of hearing impairments and mental retardation.

Counseling services must be made available to assist families in need of individual psychological, social, or educational guidance. An effective counseling service provides emotional support and helps parents or guardians interpret and understand diagnostic results, accept the person who is handicapped, and initiate plans for proper care.

Group counseling for families should also be available to encourage parent-to-parent activities, including opportunities to share feelings, to interact, and to identify with those who have similar problems. Families should have access to highly qualified staff. Parents and guardians generally need counseling before they will be ready for a structured program of education and training.

**Education and Training**

The family is one of the major educational institutions. Thus, educational programs for family members will enable them to assist in the overall education and training of the individual with hearing impairment and mental retardation. An education and training program should include:

A Provisions for family education classes on a regularly scheduled basis as well as when specific needs are apparent. (Cultural, educational, and economic attitudes and opportunities characteristic of the families being served will influence the educational techniques to be used.)

1. Information regarding management techniques (for example, behavior modification).
2. Information regarding instructional methods, techniques, and materials. For example, activities at home should maximize carry-over by reinforcing concepts learned in the client’s educational program and by transmitting the HIMR’s experience at home to school staff.
Recommendations for Action

3. General information concerning developmental patterns, hearing impairment, and mental retardation.

B. Opportunities for families to observe the HIMR person in a service setting (for example, visits to the classroom, sheltered workshops, and so on).

C. Planned conferences between staff members and individual family members. These should be held regularly and as needs arise either in a service setting or at home.
   1. Home visits allow professionals (such as social workers and special educators) to visit with the family in familiar surroundings, thereby reducing family anxiety and allowing for a more accurate picture of the existing home environment.
   2. Service centers/educational programs can provide families with an opportunity to suggest specific concepts they would like the HIMR person to learn. In addition, they can provide input regarding those behaviors that require modification.
   3. Regularly scheduled progress reports should be sent home.

D. A planned program that uses parent leadership skills. Good educational and training programs do play a principal role in establishing positive and realistic expectations among families of the HIMR.

Services Performed In the Home

Three major services performed in the home that can be helpful to families of the multiply handicapped include (1) homemaker services, (2) sitter services, and (3) foster home services.

HOMEMAKER SERVICES

This service includes assistance in caring for the family in the home during periods of special need or crisis and can be made available to families with a disabled person at home or to disabled adults living in their own homes. The home training specialist is responsible for the two principal aspects of this service: (1) teaching home management techniques involving good health care, meal planning, budgeting, and housekeeping, and (2) assisting the family of the disabled person to learn effective procedures for coping with problems that arise in the home.

SITTER SERVICES

Sitter services provide in-the-home care for disabled persons (for example, the HIMR) on a temporary or long-term basis. Such a service needs to be available on an hourly or weekly basis, as necessary. Sitters should be specially trained to manage disabled persons (for example, foster 'grandparents who were trained in residential settings) and should be provided by community agencies.

Although few states presently offer this service to the HIMR population, a good example of such assistance can be found in Nevada. Sitters are provided through a program jointly sponsored by the Nevada State Hospital, the Foster Grandparents Program, and the Washoe Association for Retarded Children. Through this relatively new service, temporary relief can be provided that will free parents from a 24-hour caretaking responsibility.

FOSTER HOME SERVICES

Foster home services are operated in many states. Interested adults can file an application with the appropriate agency in their vicinity declaring their desire to house a handicapped person. After a thorough review of the interested party, the agency authorizes the release of the HIMR person from his or her present living arrangement (usually an institution). In some instances, state hospitals have established provisions for the release of a child to the home of an appropriately screened adult. Presently, too few foster homes exist, but community agencies are working to increase their availability. In-service educational and training programs regarding all aspects of the dual handicap of hearing impairment and mental retardation should be offered to all foster parents. The potential outcomes of quality foster care are apparent: the deinstitutionalization process will be expedited, and handicapped persons will experience more normal family and home environments.

Services Provided outside the Home (Housing)

Currently, goals for the handicapped include a national trend toward normal living. This goal reinforces the need for a broad spectrum of housing accommodations. Care of a disabled person can be accommodated successfully outside the home by having agencies provide for...
respite care, or temporary home care as well as more permanent care within residential centers, community mental health centers, hospital centers, and group homes. All these play a vital role in satisfying the total program needs of the HIMR population.

Community-based programs are receiving considerably more attention. Major thrusts are being directed toward the elimination of "custodial care" in isolated, crowded residences. Enriched environments are becoming top-priority objectives for many administrators. In this regard, it is important to note that removal from an institution is not the sole answer to today's programming problems. Rather, the success of an individual is contingent on availability of a variety of community services and provisions for alternatives with regard to housing modalities.

GROUP HOMES

Group homes are full-time family-style homes designed to restore a sense of personalized, normal daily living to the handicapped. These homes provide warm stimulating social settings, devoid of dehumanizing conditions, and facilitate the integration of vocational, social, and recreational activities. People in need of this kind of sheltered living experience require supervision in the acquisition of daily domestic skills (for example, cooking, cleaning, and so on) and in the adaptation to community living. These public and private housing units, which accommodate groups of six to eight persons, can serve as transitions from institutions back into the community and are also referred to as halfway houses. They can house a wide spectrum of age ranges and disabilities.

RESPITE CARE

Respite care programs provide temporary relief for parents of HIMR persons on a weekly or monthly basis. This service can be funded through monies from community organizations and government grants, and by minimal fees charged to parents who are using this service. Respite care should be initiated to relieve families of care to "1) restore their physical and mental well-being, 2) initiate training procedures in and out of the home, 3) meet planned and emergency needs" (Grossman, 1973, p. 157). Wisconsin, California, and Connecticut are among the states that have implemented respite care programs for the mentally retarded. Temporary care for HIMR persons should become a part of existing programs for the mentally retarded.

RESIDENTIAL CARE

Temporary placement in residential facilities for the mentally retarded and the deaf could serve as a possible alternative for families with a disabled member when they must remove the handicapped person from the home. At present, entry requirements into residential settings tend to be rigid and, as a result, promote permanent rather than temporary placement.

NURSING CARE (COMMUNITY MENTAL HEALTH CENTERS)

Community mental health centers are being used to facilitate the deinstitutionalization of handicapped persons. Current trends show that residents are being discharged from state institutions and admitted to short-term (30-day) community mental health center programs as a first step in providing a more homelike atmosphere. Authorities in states where these practices have been initiated suggest that such actions can be temporarily appropriate. However, more group homes and other long-term living accommodations must also be planned and established.

Institutionalized persons can adjust successfully to community living. The reintegration process includes personal, work, and community adaptations. Once successful in these areas, many handicapped people can move out of group homes and into their own rented rooms or apartments. Among those programs using group homes as a transition to independent community living is the Elwyn Institute in Pennsylvania. Similar to a handful of other programs in the United States, it already has been successful in reintegrating some of its residents into the community.

Presently, a few states have established community-based alternatives to public institutions for the mentally retarded. However, with the current goal to move one-third of the retarded population out of public institutions and back into communities, more provisions for the establishment of group homes must be made, along with a system of accreditation and licensure to safeguard against inadequate care.
RECREATIONAL SERVICES

Recreation is the satisfying use of leisure time. Recreation and leisure activities are elements of a person’s daily life in which participation may be planned, requested, or self-initiated to meet a basic need and to provide personal enjoyment. (Joint Commission on Accreditation of Hospitals, 1973)

Recreational services are an essential facet of HIMR programs. These services can provide planned and supervised activities that are uniquely designed to assist the HIMR person in meeting specific needs. The specific needs for self-expression, entertainment, and social interaction can also be accommodated in recreational programs.

The primary goal of recreational activities is to enable HIMR persons to acquire and develop immediate and long-term skills that can be used to fill leisure time in a meaningful way. Specific program objectives are needed for effective recreational programming. One such objective is to integrate HIMR persons into the recreational mainstream of the community by designing facilities that accommodate their disabilities and also encourage their participation. Another objective is to provide both organized and self-directed activities that promote optimal physical and mental health, as well as sensory-motor, cognitive, and social development (including free self-expression and good sportsmanship). In addition, it is imperative that these activities encourage the development of interests (for example, hobbies) while retaining educational and the potential when needed. (The Joint Commission on Accreditation of Hospitals defines therapeutic recreation as purposeful intervention through recreational activities to modify, normalize, or reinforce specific physical, emotional or social behaviors, 1974, p. 92.) Finally, programs should employ qualified physical education, recreational staff, and supportive personnel who have knowledge in as well as experience with HIMR persons.

The Joint Commission on Accreditation of Hospitals (1974) recommends a variety of experiences including excursions, outings, and trips that familiarize HIMR persons with available community resources, as well as spectator activities such as movies, plays, sporting events, and television. Participation in individual, dual, and team sports (for example, bowling, tennis, archery, miniature golf, and team sports) music, drama, and dance can also be organized for a variety of settings. Both the availability of group activities such as day and summer camps and exposure to library services such as reading, library listening to records, and viewing filmstrips or slides are meaningful ways of filling leisure time.
The movement to develop and implement more recreational services for handicapped persons has gained great impetus during the past few years. Among the organizations devoting their energies to the recreational needs of the handicapped are the American Association for Health, Physical Education and Recreation (AAHPER), the President's Committee on Employment of the Handicapped (PCEH), and the National Therapeutic Recreation Society (which was established as a branch of the National Recreation and Park Association in 1965).

The AAHPER has made important strides in promoting the recreational needs of the handicapped. This association was recently awarded a grant to establish an Information and Research Utilization Center in Physical Education and Recreation for the Handicapped to "collect, categorize, evaluate, interpret and to disseminate information about materials, methods, ongoing programs, promising practices, research and demonstration in adapted physical education and in therapeutic recreation" (AAHPER). Numerous bibliographies, books, pamphlets, and films specifically relevant to HIMR persons are available from AAHPER on request.

TRANSPORTATION SERVICES

For programs to function effectively, provisions for transportation must be implemented. Even if a developmentally disabled person is successfully identified, a lack of transportation services might prevent him or her from reaching and receiving appropriate services. The State-Federal Information Clearinghouse for Exceptional Children (SFICEC, 1973) has analyzed the laws and administrative regulations of the states regarding transportation for handicapped persons of school age. This material was subdivided into seven categories. Those most applicable to HIMR persons are (1) eligibility, (2) transportation services, (3) transportation modes, and (4) state aid.

Eligibility

Most states provide transportation. Those handicapped children unable to ride on regular buses, however, may not receive special transportation. Approximately 10% of the states stipulate that a child must be enrolled in a special education program to receive special transportation. A distance requirement may also exist. A review of existing legislation suggests that all school-age HIMR persons are legally eligible for transportation regardless of the type of public educational program in which they are enrolled.

Transportation Services

Most states provide transportation for handicapped children enrolled in special day classes and regular classes within public educational systems. Distance limitations are waived in most states. Only a small percentage of states will fund transportation to programs outside the public school system. However, over 30% of the states will support transportation costs for deaf children to residential programs in in-state and out-of-state schools. Some comprehensive programs offer all HIMR children and youth transportation to services other than public educational programs. Transportation to treatment centers, preschools, and work experience programs should also be provided. (An example of this provision exists in Iowa, where plans are being made to develop a multicity transportation system for developmentally disabled persons so that they can reach treatment facilities and sheltered workshops.)
Transportation Modes

Generally, transportation is provided by public school buses. However, reimbursement for transportation provided by parents or public carriers often can be arranged by approval of the state department of education. In special cases where transportation is not provided, parents and other transporters should be reimbursed by the state for providing transportation.

State Aid

Special transportation is provided for handicapped children with an average of 70-80% of this cost funded by the state. Presently 41 states assist with the funding of transportation services.

Transportation services for handicapped adults vary throughout the states and local communities. Many nonprofit public and private organizations have begun to develop and provide special transportation systems. Mass transit authorities should include such services in their planning and the programs should be subsidized by federal and state grants.

RESEARCH

Basic and applied research is a critical component of a network of services for the hearing impaired mentally retarded (HIMR) population. Both biomedical and behavioral studies are needed to better conceptualize and establish quality treatment programs. Such research should include audiology and medicine (for example, the effectiveness of audiologic measures such as evoked response audiometry, identification and prevention techniques, evaluation of treatment modalities, and so on) instructional techniques including studies of cognition and the learning process, the development of specialized educational approaches, and so forth, organizational service models (for example, research to demonstrate the efficacy of innovative administrative arrangements, coordination of services, preparation of professionals, and so on), and educational diagnoses (for example, valid and reliable methods of assessment, observation of developmental patterns, and so on).

Three levels of research activities, as they apply to HIMR persons, are essential: (1) the acquisition of descriptive data (factual data concerning the magnitude and nature of educational needs collected through formalized surveys and so on) to assist in educational planning, (2) activities requiring actual experimental design, investigation, and in-depth study, and (3) the implementation of empirically developed innovative techniques in demonstration projects to test their effectiveness longitudinally.

Specific areas of needed research could include increased investigation in areas such as the biochemistry of the genetics of deafness, the effect of various modes of habilitation, and the effect of hearing loss on mental retardation.

More definitive measures must be taken to establish ongoing, cooperative research programs. One example is a unique nationwide network of professionals called Research Utilization Specialists (RUS), which was established in 1969. This team is charged with the responsibility of identifying promising research findings and other new information that will assist in improving rehabilitation services. Additional research agencies include the Bureau of Education for the Handicapped (Research and Training Centers Division), which sponsors three mental retardation research and training centers, Maternal and Child Health, U.S. Department of Health Education, and Welfare, which supports research to extend and improve health services to mothers and children (for example, preventive measures, training of personnel, and so on), and the National Institutes of Health (that is, the National Institute of Child Health and Human Development, the National Institute of Neurological Diseases and Stroke, and the National Institute of Mental Health), which also sponsors research relevant to the HIMR population. Addresses for these agencies and the RSA Division of Developmental Disabilities appear in Appendix C.

For additional sources of information, consult Transportation for the Handicapped, Selected References, Washington, D.C. Department of Transportation, Office of Administrative Operations, Library Services (November 1969).

The Office of Demographic Studies, Gallaudet College, Washington, D.C., could be charged with this responsibility.

Presently, there are nine states that have experimental RUS projects attached to their vocational rehabilitation agencies. They are California, Massachusetts, New Jersey, Virginia, Alabama, Wisconsin, Texas, Missouri, and Utah. These experimental demonstrations are funded primarily through SRS, with the states agencies contributing at least 10% of project cost. Initiated in 1969 as six-year grants, they are testing the value and viability of this kind of approach to increasing the use of rehabilitation research (Baker and Glaser, 1973-1974, p. 26).
Chapter 7: Personnel Availability and Utilization

Resources available for this project did not permit the staff to conduct an extensive manpower study in the area of hearing impairment and mental retardation. Such a study would require at least two years as well as funding beyond that which was provided. However, the staff and Steering Committee did take steps to identify trends in manpower training and utilization. More specifically, they determined which practices appeared exemplary and worthy of further study and emulation.

The literature on manpower was studied and data from most of the public day school and residential programs for the deaf and the mentally retarded were reviewed. This information was compared with data from a previous study by Anderson (1966). It still appears that most children with hearing impairment and severe mental retardation attending day schools and residential based programs are taught by teachers who have formal preparation in the field of mental retardation. In contrast, there is a definite trend among programs for the hearing impaired to utilize educators of the deaf to teach the hearing-impaired mentally retarded. Most of these teachers currently use manual or combined communication methods. Our study did suggest, however, that increasing numbers of children with mild to moderate hearing loss and intellectual impairment are now in public day school classrooms using oral methods of communication.

At least 25 teacher training programs for the deaf do provide some course work in mental retardation, as well as practicum experience in centers for the mentally retarded. By the same token, training program directors are quick to point out that they are exposing their students to multiply handicapped children, but not necessarily to children who are specifically diagnosed as hearing-impaired mentally retarded. Similarly, training programs for teachers of the mentally retarded are also emphasizing increased experience with multiply handicapped populations. In contrast, little evidence was found that these training programs expose their teachers of the mentally retarded to course work and practicum experience in management of hearing-impaired persons.

Six state institutions for the mentally retarded and seven state programs for the deaf identified as having exemplary programs for HIMR persons were visited. The staff was able to obtain current information on their populations, services provided, curricula used, and manpower needs. Administrators and teachers in these programs tended to agree that when the primary goal is educational and when the child’s hearing loss is significant (moderate to profound), the teachers should have their primary preparation in the area of deafness, with supplemental training and experience in mental retardation. Professionals working in programs for the HIMR also felt that teachers of the hearing impaired needed more preparation in curricular design, similar to that found in programs preparing teachers of the mentally retarded. They recommended that the National Media and Materials Center for Education of the Handicapped, housed at Ohio State University, work with teachers in centers for the hearing-impaired mentally retarded to assist them in developing more appropriate curricular materials.

Using the most conservative estimates of need, at least 2000 teachers of the hearing-impaired mentally retarded could be employed immediately throughout the United States. Increased federal support for university programs to implement five-year plans for preparation of professionals in this priority area is highly recommended.

Data on overall manpower needs to serve adults with severe hearing impairment and mental retardation are not available. Several variables contribute to the absence of these data. Many institutions for the adult mentally retarded do not have audiological services and cannot report the prevalence of hearing impairment among their populations. None of the agencies contacted could provide data on the prevalence of hearing loss or other communicative disorders in noninstitutionalized mentally retarded adults. There is obvious need for increased numbers of audiologists, speech pathologists, and teachers of the hearing impaired to serve in programs for the mentally retarded. Sampling data indicate that at least 10% of the mentally retarded have significant hearing loss and several studies have shown the prevalence of hearing loss among certain mentally retarded populations to be as high as 25%. Other communicative disorders, depending on the age span of the population, can range from 50 to 90%.

Many institutional programs for mentally retarded adults do not make formal provisions for continuing education beyond age 18. Also, there appears to be a trend for some of the larger institutions to use fewer professionals for direct patient care and recreational activities, instead, large numbers of paraprofessionals are used to work under the direct supervision of
The Hearing-Impaired Mentally Retarded:
Recommendations for Action

limited number of professionals. More in-depth longitudinal evaluation studies of this service delivery arrangement are needed.

Although the new Vocational Rehabilitation Act calls for increased services to severely disabled adults, little evidence currently exists to suggest that, per capita, significant increases are occurring in the number of qualified staff employed or the number of persons served.

Additional research efforts related to personnel training and utilization are needed to assist the advancement of services. Heightened visibility has already begun to foster added interest in the expansion of services for HIMR persons. Additional teacher training programs are considering the prospects of preparing personnel specifically in the area of deafness and mental retardation. The University of Wisconsin is only one of several institutions planning and developing new programs. States such as Oregon and New York have developed plans for comprehensive services for the hearing impaired and specifically designated the HIMR population as a priority.

A major manpower study is essential and would add impetus to the development of quality comprehensive services for the HIMR population. However, manpower needs cannot be realized fully until more service programs become operational. This will eventually allow HIMR persons to have greater access to improved assessment and directional procedures by more qualified personnel.

USE OF INTERDISCIPLINARY PERSONNEL

An interdisciplinary professional team is required to deliver comprehensive services to the HIMR population. The team needs to function within a broad spectrum of services dealing with prevention, identification, assessment, diagnosis, educational programming, reassessment, parental or guardian education and guidance, vocational preparation and placement, social and recreational programming, living accommodations, and longitudinal evaluation. It was not possible in this document to specify new or revised qualifications for all personnel needed to work with the HIMR population. Nor could we, using any research or empirical data, begin to provide specific staff-to-client ratios or quantitate representation from each personnel specialty. Final staffing patterns depend on program facilities and objectives established to meet client needs.

The qualifications and responsibilities recommended for each staff member by the respective professional organizations tend to be greater than those required by most state agencies. For more detailed information concerning such program staff, consult the appropriate professional organizations listed in Appendix C.

PROFESSIONAL AND PARAPROFESSIONAL TRAINING PROGRAMS

Many professionals and paraprofessionals are responsible for the style of life an HIMR person will experience both currently and in the future. To give an overview of professional training needs, this section is divided into two major categories, (1) preservice training and (2) in-service training including continuing education.

Preservice Training

Due to the present lack of substantial services, it is difficult to specify definite sets of criteria for paraprofessional or undergraduate and graduate level professional training programs. Perhaps this circumstance will change rapidly as more definitive measures are taken to establish comprehensive service delivery systems and as these systems identify the continuum of skills needed and tasks to be performed. Some basic principles governing preservice training programs for professionals appear to have consensus among university faculty and program managers contacted during the project:

- A "competency-based" approach for professional preparation is desirable. Scientifically determined competencies should serve as the basic criteria on which to build course work including the presentation of theory and development of skills.
- An interdisciplinary curriculum concerned with human dynamics is needed that will include such areas as child development, general and specific learning disabilities, psychology (for example, principles of behavior modifications), speech/language development, and management of hearing impairment and mental retardation.
- Special attention must be given to training that provides more intensive practice with multiple handicaps and not single categorical disabilities.
Management skills in working with persons having hearing loss should be stressed.

"Systems" training in needs assessment and program planning for the hearing impaired and mentally retarded is needed.

Training is needed to better understand learning phenomena and effective methods of breaking down the learning process into components necessary for persons with combined sensory and intellectual deficits and their effect on perceptual, receptive, cognitive, and expressive ability.

Special exposure to the spectrum of communication methods should be required.

Opportunities to use a variety of teaching techniques and materials and to develop curricula are necessary.

Practicum experience with parent counseling and instruction and infant evaluation is essential.

Visits should be provided to several types of service programs and include practicum experiences in a variety of settings serving preschool, school-age, and adult HIMR persons. Ideally, professional preparation will include contact with regional or single-source service centers, residential schools, public school programs, clinics, and so forth, so trainees can gain a realistic overview of the comprehensive needs of HIMR persons.

There is a definite need to evaluate the present system of professional preparation. Qualified personnel must be available to meet the needs of HIMR persons. Inadequacies and deficiencies in professional training, according to the teachers and administrators interviewed during the project, is one present barrier to the establishment of quality programs.

In-Service and Continuing Education

Additional training of professional and paraprofessional staff can enable HIMR programs to be upgraded continually. Through well-established in-service and continuing education programs, program staff should be given the opportunity to improve their skills and acquire new techniques (for example, a course in manual communication). The four principal groups that will be interested in additional training are:

- Regular education personnel such as teachers, counselors, and administrators who have an interest in or a need to become more knowledgeable about the needs of HIMR persons;
- Special education personnel such as teachers of the deaf or mentally retarded, teacher aides, and administrators who need additional skills as they create programs for HIMR persons or advance in position;
- Special education personnel who are initially trained in the area of HIMR and who need to remain abreast of new techniques and recent research findings; and
- Parents, guardians, and other key persons who are involved in some way with HIMR persons and who desire or need to acquire information and skills to deal effectively with this group.

A variety of educational programs are possible. Location with regard to availability of resources and immediate needs of personnel will influence the kind of training program that will be needed. A plan for each staff member and for the total staff should be developed and may include:

- Guest speakers (representatives from all related disciplines),
- Films and other media-oriented presentations,
- Visits to other programs (this shall include HIMR programs as well as those in related fields),
- College and university courses (for credit if possible),
- Seminars and workshops,
- In-house meetings (this will provide the program staff an opportunity to share ideas and evaluate their entire program).

The Bureau of Educational Personnel Development (Education Professions Development Act—PL 90-35) and the Bureau of Education for the Handicapped presently fund programs that provide special education training for regular education personnel.
Individualized courses of study, and
Institutes and conferences with specific assignments for staff according to their needs and the program needs.

Ideally, the university-affiliated facility concept is designed to facilitate in-service programs and create an effective foundation for ongoing cooperative education (see next section). For example, if the appropriate resources were available, a residential school could affiliate with a nearby university or college and establish a comprehensive in-service program. This same principle is applicable to many kinds of agencies that wish to share resources. Special education public school programs, universities, single-service centers, and community mental health centers for HIMR persons can assist one another to provide in-service and continuing education if representatives from each will develop and implement a plan for such a program.

Two cogent points must be emphasized for these programs. (1) Continuing education is essential for all personnel who are in contact with HIMR persons, and (2) continuing education or in-service training programs must be interdisciplinary in nature to accommodate the total needs of HIMR persons.

University-Affiliated Facilities (UAF)

A university-affiliated facility is defined as:

A university-based or university-affiliated interdisciplinary program for the development of skilled manpower in the field of mental retardation and other developmental disabilities. (Grossman, 1973, p. 163)

The principal concern of a university-affiliated facility is to provide an environment for the clinical training of professional and technical personnel. This approach to training enhances communication among the many disciplines needed to supply valid comprehensive diagnostic services and encourages the use of a full range of services for the multiply handicapped. Core training within each discipline is accomplished in that the special educator at the UAF is responsible for instructing medical students, psychologists, and social workers as well as students majoring in special education. These procedures could help provide a clearer understanding of the needs of HIMR persons.

The Mental Retardation Act of 1963, a federally assisted program, was authorized under PL 88-164 to grant provisions for the construction of university-affiliated facilities for persons who are developmentally disabled. It has been extended under the auspices of the Developmental Disabilities Services and Facilities Construction Act of 1970 (PL 91-517). At least 20 of these facilities were approved for funding.34

Personnel Policies

Facilities should maintain an accurate and readily available description of their program and personnel policies. This written document should include:

- Information concerning salary schedules, sick leave, vacation time, health benefits, and so on;
- Provisions for periodic employee evaluations;
- Provisions for appropriate staff training programs that provide an orientation for all new employees to acquaint them with program philosophy, objectives, and practices,
- Enforcement of appropriate staff-to-client ratios and criteria for admission in accordance with individual state legislation or regulations when mandated;
- Provisions for staff members to improve their skills by—attending staff meetings, conferences, and workshops
—visiting other facilities
—participating in professional organizations
—having access to current literature in the field; and
- Provisions for regular interdisciplinary staff meetings to discuss and recommend necessary action on such matters as current program policies, assessment, placement, and development of individualized programs.

Chapter 8: Issues and Recommendations

The recommendations in this chapter represent, with few exceptions, consensus positions taken by the Steering Committee and participants at the Airlie House and Hunt Valley Conferences. The rationale for each recommendation can be found in the text or in the resolutions from the Hunt Valley Conference (see Appendix B).

Governmental agencies, program administrators, and others working to implement the recommendations should keep in mind the special needs of the total population from infancy through adulthood. Continued study and planning is imperative to identify the most promising and practical procedures for meeting the disparate needs of the hearing-impaired mentally retarded adult population. In addition, recommendations generated nationally often fail to consider issues and questions at the state or local level. The issues and questions presented to participants at the Hunt Valley Conference precede the recommendations as a means of orienting the reader to the types of questions for which answers and actions are needed. It will become evident that several questions raised in each category were not or could not be addressed in the section on recommendations.

Persons studying these issues and deriving answers to the questions that follow should give special consideration to (1) interagency service coordination (health, education, welfare, or social services), (2) national, state, and local interfacing of service provision, and (3) service needs for the total population from infancy through adulthood.

Hopefully, state and local program authorities (including parent and guardian advocates) will use this material in effecting quality services.

ISSUES

A. Legislation

By 1980, comprehensive services to meet the needs of the hearing-impaired mentally retarded (HIMR) population should be developed and operational. Legislation can serve as a primary force and catalyst in effecting program development and implementation of comprehensive services.

1. What should the legal responsibilities be at the national, state, and local levels for the health, education, and welfare of HIMR children and adults?
2. What existing legislation holds the most promise for the HIMR population?
3. Does existing legislation provide for meeting the needs of this population?
4. What legal barriers exist?
5. What additional legislation is needed at each governmental level to provide adequate services for children? adults?
6. Does the HIMR population require a special legislative package (for example, similar to the deaf-blind)?
7. What specific legislative actions should be taken?
8. Should federal or state legislation give one agency total responsibility for a full continuum of services?
9. Should legislation require interagency coordination to achieve full services?
10. Should any agency be given legislative authority to initiate legal action to ensure comprehensive services (for example, the National Center for Law and the Handicapped)?

The existence of legislation may not ensure comprehensive services to all HIMR persons. Although programmatic standards, regulatory procedures, and enforcement authority are an integral part of legislation, many agencies currently use generic or limited management criteria.

1. What program standards are needed to ensure quality comprehensive services for the target population?
2. What relationship should exist between legislation and the establishment of program standards (in principle and in practice)?
3. Do legal provisions requiring the use of specific procedures assist or prevent implementation of effective programming (for example, formal PPE systems, definitive modes of communication, due process procedures, and so on)?
B. Financing

Realistic financial resources are required to implement and maintain quality comprehensive services for the HIMR population. Presently, no single governmental agency has been given total responsibility for funding the full continuum of services. However, Senate Bill 6 (HR 70) would provide for federal funding on the state and local level based on a determined average of program costs for various types of handicapping conditions.

1. Do reliable and valid procedures exist for determining actual costs of services for the HIMR population (public and private day and residential schools; institutions)?
2. What are the areas of greatest financial need in order to achieve a comprehensive network of services for the HIMR population (training, research, programming, and so on)?
3. How can we develop cost-effective budgeting procedures?
4. Do we have systems for projecting costs of quality programs and services?
5. Where should funding come from for this population?
6. How can we interface funds for services among existing agencies?
7. Is there a preferred, effective procedure for transferring funds across political subdivisions to cover the costs of service (counties, states, regions, and so on)?
8. What funding formula(s) would be most effective to permit coverage of costs (federal, state, local)?
9. What has happened to state and local programs when federal catalytic monies have expired?

Developmentally disabled persons can place a tremendous economic hardship on their families. Purchasing comprehensive services can be devastating without some kind of subsidization. Governmental support for certain expenditures is a possible answer to this problem. One approach, commonly referred to as income maintenance, involves financial support of expenses incurred by the developmentally disabled person's family to maintain a minimal standard of living. It is based on a cost formula involving individual family income and expenses.

1. What, if any, action should be taken to ensure income maintenance for families of the HIMR?

C. Administration/Organizational Structure

A well-designed and coordinated administrative structure is required to ensure both the provision of services and program effectiveness.

1. What administrative design(s) would ensure the provision of effective services (federal, state, local)?
2. What are the most critical problems faced by program administrators in providing for each HIMR person (federal, state, local, public, private)?
3. Should there be a centralized interagency structure to plan and coordinate the provision of comprehensive services?
4. What are the primary barriers to comprehensive planning and programming?
5. In meeting the long-term needs of the HIMR population, are "single-source" agencies (agencies that address themselves to the life-long planning and management of each HIMR person) feasible and desirable?
6. What special expertise is required of an administrator in an HIMR program?
7. What criteria or systems should be used by administrators in determining program effectiveness?
8. Should administrators be required to delineate program standards to become eligible for funding?
9. What factors influence the implementation of a formal management-by-objectives program?
10. As an administrator, what personnel do you feel are most needed to operate a program for the HIMR population?
11. Is a minimal HIMR population required to maintain a viable cost-effective service?
12. What data systems are most vital to the planning, operation, and evaluation of services?

D. Identification and Assessment

Early identification of both auditory impairment and mental retardation should facilitate early intervention in habilitation programs.

1. What critical problems exist regarding the early identification of this target population?
2. Who is best equipped to conduct and participate in early identification programs?
3. What are the key parameters of identification?
4. What steps must be taken to effect quality identification systems?

Comprehensive assessments of an individual should be available and should complement the development of his or her individual program plan at each stage of development.

1. What is the most appropriate assessment system?
2. What personnel should be involved in the assessment process?
3. What special competencies are needed by assessment personnel to accurately identify combined hearing impairment and mental retardation?
4. What are the most effective procedures specifically applicable to the HIMR population?
5. How do we ensure the availability of quality comprehensive assessment (regional diagnostic centers, mobile units, and so on)?
6. How should assessment services be coordinated (what agencies, and so on)?
7. What are the critical barriers to establishing quality assessment service?
8. What is the role of assessment in accountability systems or program evaluation?
9. How do you ensure continual assessment and follow-up care?
10. What is the role of assessment personnel in individual program placement, direction, and long-term monitoring?
11. Should special training programs be developed for personnel to serve specifically in identification and assessment programs for the HIMR population?
12. Do assessment personnel need special communication skills and techniques (for example, total communication procedures)?
13. Do assessment responsibilities and skills differ for children vs adults?

E. Teaching, Management, and Supervision

Program content should be designed to prepare the HIMR population for meaningful and productive lives. Many variables such as age, degree of impairment, family background, and environmental needs will influence the creation and management of effective individual program plans. Some members of this target population need lifelong services that are instructional, habilitative, vocational, social, and recreational. Many professionals and paraprofessionals become involved in developing and providing a sequential program of teaching, management, and supervision.

1. Should instructional programs be available to HIMR adults as well as to children through a life-long educational program?
2. What modifications within existing programs should be implemented to effect a sequenced learning program from childhood through adulthood?
3. What are the most critical issues (barriers) facing workers with the HIMR population (teachers, social workers, rehabilitation counselors, and so on)?
4. What specific actions should be taken to resolve these critical issues?
5. After listing the most effective techniques used with the HIMR population for instruction, vocational placement, recreation, and so on, discuss the advantages and disadvantages of each (McGinnis Method, SALT program, total communication, and so on). Be sure to state whether a specific technique is more effective with certain living-educational arrangements (for example, institutions or day schools).
6. What significant differences exist between a curriculum for the HIMR group vs other developmentally disabled populations?

7. What, if any, special curriculum materials or guides are needed?

8. What program rules and regulations affect the type and quality of services that can be provided (teacher/pupil or counselor/client ratios, and so on)?

9. What kinds of regulatory measures should exist to ensure effective individual programming?

10. What special competencies are required of workers with this target population (for example, communication skills)?

11. What special certification criteria, if any, should be established for the different personnel working with HIMR populations?

12. What training opportunities are most important (within preservice preparation and inservice and continuing education programs)?

13. What guidelines are necessary in defining professional/paraprofessional roles?

14. What are the five to 10 most important actions that can be taken to ensure client-centered programming?

F. Professional/Paraprofessional Preparation and Utilization

HIMR programs need qualified personnel to assume a variety of responsibilities. At present, little consensus exists for the type of personnel needed or the nature of their training.

1. What personnel are most needed to create a comprehensive program for the HIMR population?

2. What special competencies do these personnel need?

3. What types of training programs are most needed (university preservice, short-term specialty training as a part of inservice or continuing education, and so on)?

4. What are the essential components of academic and practicum preparation for each worker?

5. Should and can present training programs in deafness or mental retardation be modified to accommodate the need for teachers (or other personnel) to serve the HIMR population?

6. What faculty are necessary and who are best equipped to provide training in this specialty area?

7. Should professional preparation in this specialty area occur at the graduate level?

8. Should special training programs be established? If so, how many are needed?

9. What funding is most needed?

Paraprofessional staff can assume principal roles in effecting quality programs. However, numerous questions about their training and responsibilities remain unanswered. Also, the concept of the paraprofessional is under reconsideration. Some people prefer the "lead agent" concept. A lead agent concept of paraprofessional/professional indicates the lead person who is managing specific program aspects and has adjunct professional services. In such a system, personnel serve both in professional and paraprofessional roles as a function of client-centered objectives. If the problem is primarily medical, other personnel providing services to help meet the medical objective are paramedical. If the prime objective based upon client-centered goals is educational, then adjunct services are paraeducational. If the major objective is recreational, then adjunct actions become pararecreational.

1. Identify the paraprofessionals who are most needed (ward aides, houseparents, teacher aides, and so on).

2. In principle, what should be the components of their training program?

3. Where should their training occur?

4. What are the most effective training models to use?

5. How can paraprofessionals be retained and are reclassifications necessary to accommodate more of the paraprofessional's needs (for example, salary and status)?
6. What is the role of and utilization for interpreters in comprehensive programming for HIMR persons?

Most state education agencies have a legal responsibility to evaluate the quality of programming provided for the handicapped. However, additional regulatory measures often need to be developed and enforced to ensure effective programming.

1. Are special certification requirements needed for personnel (professional and para-professional) who are working with the HIMR population?
2. If so, what are the additional certification requirements needed?
3. Should there be special accreditation standards for HIMR training programs?

The implementation of comprehensive services for the HIMR population requires a good estimate of both current and future manpower needs.

1. What is the market (present and future) for trained personnel in the area of hearing impairment combined with mental retardation?
2. What would be the most effective methods to attract personnel into this specialty area (professionals and paraprofessionals)?

**RECOMMENDATIONS**

**A. Legislation**

1. Professionals, parents, and public officials should continue pressing American society and political institutions to guarantee equal rights for America's handicapped persons.

2. Present legislation under Part C of the Education of the Handicapped Act should include provisions for and funding of programs for all children and young adults suspected of having at least one sensory impairment in addition to any other suspected handicapping conditions. In addition, legislation should assure that all adults with hearing impairment and mental retardation be provided comprehensive health care, counseling, and vocational services as needed.

3. Legislation in each state should designate a single-source (directional) agency empowered to involve appropriate agencies and to oversee the provision of all necessary and appropriate services needed by HIMR persons throughout their lives.

4. Legislation should be considered by the states to mandate year-round educational services for hearing-impaired mentally retarded persons from birth through at least 21 years of age.

5. Through legislation, Congress should assure that the secretary of HEW or other appropriate executive officers establish guidelines that provide professional standards for health, educational service, and standards of minimum human care in all federal programs relating to HIMR individuals. The secretary of HEW should seek advice from professional authorities in establishing these guidelines.

6. Through legislation, Congress should assure that the secretary of HEW or other appropriate executive officers require that all agencies (public or private) specify their procedures for insuring compliance, with established professional standards for health, educational services, and human care in all federally supported programs for persons with hearing impairment and mental retardation. If no such standards exist, said agencies should specify the steps they will take in meeting standards to resolve current problems related to client health, education, and human care services.

**B. Financing**

1. Federal legislation should be enacted authorizing commitment of public resources specifically for development of programs for hearing-impaired mentally retarded persons.

2. Demonstration models should be funded and established by university-affiliated facilities or other appropriate institutions and agencies to begin to serve the unmet needs of HIMR individuals. In addition to providing needed services, such programs should maintain adequate assessment and evaluation processes from which cost-benefit and cost-efficient data may be collected, analyzed, and disseminated to appropriate agencies.
3. Funding should be used to develop and implement (1) a number of model educational centers for hearing-impaired mentally retarded persons to be established by federal funding in both residential and day-class settings to provide optimum service to this population and adequate practicum experience for professional and paraprofessional training and (2) four or five centers for the hearing-impaired mentally retarded to serve as model demonstration programs for paraprofessional preparation with the option that additional centers be funded based on recommendations from the original demonstration centers and as a result of findings from the Office of Demographic Studies, Gallaudet College, Washington, D.C.

4 Federal funding should be provided for the support of professional paraprofessional specialized preparation programs, such support should be regional and determined on the basis of appropriate criteria including (1) interest and commitment of the institution, (2) internal/external resources and facilities available, (3) appropriate practicum opportunities, and (4) availability of diagnostic services with special expertise in working with multiple handicaps.

5. Federal funds should be made available on a matching basis to the states for the specific purpose of providing comprehensive assessment services.

6. The American Speech and Hearing Association's report should call attention to the fact that HIMR persons comprise only one such target population; therefore, future activities of the funding agency should consider examining other target populations as potential priorities for services.

C. Administration/Organizational Structure

1. Definition of the HIMR Population

It is recommended that governmental agencies and programs use the following description in defining hearing-impaired mentally retarded persons:

Those individuals who have hearing impairment, subaverage general intellectual functioning, and deficits in adaptive behavior. The combination of these three factors requires services beyond those traditionally needed by persons with either mental retardation or hearing impairment alone.

2. Governmental Agencies and Professional Organizations

a. Appropriate governmental agencies (for example, BEH) and professional organizations should designate the HIMR as a priority target population. They should (1) exert pressure to formulate governmental policies committing public resources to quality comprehensive services for the HIMR, (2) assist in the reinterpretation of existing legislation to serve this population adequately, and (3) amend regulations and guidelines of goal-oriented programs to identify the HIMR population as eligible for services in a national service priority.

b. The federal government should assume the responsibility for stimulating the development of a continuing life program that includes health, education, living environments, and occupational and recreational opportunities as they relate to the persisting problems of this target population.

c. The secretary of the Department of Health, Education, and Welfare should be charged with determining and providing a mechanism for (1) reviewing the status and development of services for the hearing-impaired mentally retarded population from birth to death; (2) setting objectives, standards, and data procedures for educational and other services required by the hearing-impaired mentally retarded population; (3) determining priorities in advancing services, research, and program evaluation; and (4) advocating implementation of priority services through such strategies as drafting model legislation, undertaking public education, and disseminating information to professional practitioners.

d. Agencies involved with hearing-impaired mentally retarded persons should assume a level of responsibility for services as designated by the figure on p. 114.
An appropriate agency or institution (for example, the Office for Handicapped Individuals or the National Institutes of Health) should assume responsibility for developing (1) a standardized system of classification for the handicapped population and (2) a standardized comprehensive diagnostic system. Both systems should be applicable and easily adaptable to HIMR persons.

f. The newly established office of the handicapped should be charged to include the hearing-impaired mentally retarded population within the scope of its clearinghouse services.

g. State departments of education should give priority funding to support programs for professional training of HIMR school personnel, employment of allied professionals, and in-service training in the management of HIMR pupils.

h. Governmental agencies and professional organizations should publish additional literature specifically relevant to the dual handicap of hearing impairment and mental retardation. It should consist of three kinds of information:
   - New program management literature for professionals in the field,
   - Information for the general public (such as that published by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.), and
   - Specially designed instructional literature to be used with and by school-aged HIMR children.

i. A national Committee for the HIMR such as the one established by the American Speech and Hearing Association should be supported federally. It should be composed of members from several professional associations involved with speech and hearing, mental retardation, and related disciplines to:
   - Establish and define standards for personnel certification specifically applicable to the HIMR population and
   - Assist with the development of standards for evaluating and accrediting educational programs for the HIMR.

j. One or more designated professional organizations should help to establish parent groups in geographic areas to meet the needs of parents or guardians of the HIMR.

3. Office of Demographic Studies
   a. The Office of Demographic Studies should expand its data system and, using general operational definitions for the HIMR population, conduct periodic demographic studies on this group of handicapped persons.

b. This office should conduct a nationwide survey to identify the total HIMR population including those persons presently receiving services and in need of services at all levels (preschool, school, and adult). Additional data should be collected on (1) achievement levels of HIMR pupils in educational programs; (2) vocational status of HIMR adolescents and adults; (3) number of available personnel certified to teach the hearing impaired, the mentally retarded, and the hearing-impaired mentally retarded; (4) employment needs for professionals and paraprofessionals who are trained to work with HIMR persons; and (5) number of existing training institutions, including data on nature of training and current status of trainees.

c. The data system should be designed to identify current resources and project future needs.

d. Survey information on resources should be published in a directory and updated annually (for example, in the American Annals of the Deaf).

e. The Office of Demographic Studies should disseminate information on the HIMR population at regular intervals to all national and state advisory committees on the handicapped and other appropriate agencies and organizations. The secretary of the Department of Health, Education, and Welfare should take the necessary steps required to ensure adequate funding for this expanded role of the Office of Demographic Studies.

The continued support of the American Speech and Hearing Association, the American Association on Mental Deficiency, and the Conference of Executives of American Schools for the Deaf is essential. These organizations already have made substantial commitments to program development for the HIMR.
4. Single-Source-Service Centers
   a. Diagnostic, educational, and counseling centers should be established in more
      states to provide single-source comprehensive differential diagnoses, assessment,
      and lifelong planning for the handicapped in general and specifically for HIMR
      persons. They should be staffed with qualified diagnostic teams and particularly
      audiologists and educators of the hearing impaired. These personnel should
      reevaluate each HIMR client annually and provide each with long-term manage-
      ment plans or services. These centers should be established in defined geographic
      areas where services are needed and operate in coordination with existing pro-
      grams for the handicapped.
   b. These centers should provide
      (a) A data bank or central registry of medical, psychological, educational, and
      other evaluations. This information should be designed to expedite the HIMR's
      placement and eliminate any duplication of effort. These records should be
      maintained in an electronic storage and retrieval system for state planning,
      service provision, and research. Built-in safeguards for control of confidentiality
      are imperative.
      (b) A program of prevention, early identification, and intervention including a
      high-risk registry.
   c. Single-source centers should be used as practicum sites for training future profes-
      sionals concerned with hearing impairment and mental retardation as well as other
      handicapping conditions. These centers should serve as research facilities and
      should disseminate information regarding available services (resources) for the
      handicapped in their region.

5. High-Risk Registry
   a. High-risk registries should be developed and implemented to facilitate the identifi-
      cation of auditory impairment and mental retardation among newborns.
   b. These registries should be incorporated in all hospitals, medical centers, and public
      health programs and should use a standardized system of description and classifi-
      cation.

6. Central Registry
   a. A task force composed of representatives from appropriate professional disciplines,
      the National Center for Health Statistics, National Center for Educational Statistics,
      Office of Demographic Studies, and state data systems should develop a
      prototype registry and implement it in one or two selected states committed to
      appropriate and effective programming for all HIMR persons to test the efficacy of
      the registry for possible use nationally.
   b. The central registry should be designed to accommodate a cooperative interagency
      plan. Data input should be received from all agencies that provide services for
      HIMR persons."
b. State governmental agencies should assume the responsibility of setting standards, ensuring qualified personnel, evaluating program budgets, and supplying technical assistance.

c. Community mental health programs should function as resources from which other community agencies such as single-source service centers, educational programs, welfare agencies, and courts can purchase consultation and treatment for the HIMR population.

d. States should give financial support to community mental health programs to expedite and facilitate the process of upgrading the mental health status of the community at large, especially the multiply handicapped. Revisions of existing medical insurance coverage plans for mental illness, more specifically mental retardation, hearing loss, and emotional disturbance should be executed.

3. Advisory Committees

a. The developmental disabilities council within each state should insure the coordination of services for all hearing-impaired, mentally retarded persons.

b. The National Advisory Council on Developmental Disabilities should recommend to the secretary of HEW that a "Request for Proposal" be issued to establish the financial and programmatic requirements for implementing and maintaining quality comprehensive services for this target population through all appropriate agencies.

c. Advisory committees should develop a specific plan and actively review, evaluate, and promote services for the HIMR population.

d. Advisory committees should hold hearings on the HIMR and formulate goals, objectives, and strategies for a comprehensive network of services by 1980. These committee hearings should include interagency departmental and program officials; interdisciplinary professionals with expertise in hearing impairment, mental retardation, and related areas; and parents and guardians with family members receiving and needing services.

e. The National Advisory Committee on the Handicapped should (1) hold hearings on present and projected services for the HIMR and (2) recommend that federal agencies establish the HIMR population as a priority group with special funding for research, services, and manpower preparation during the ensuing three- to five-year period and actively pursue either new legislative provisions or an amendment to the present legislation establishing deaf-blind programs to include "other seriously multiply handicapped."

f. States not presently using advisory committees should take the necessary steps to have them established and organized as an official, efficient body to monitor the handicapped's needs, rights, and services.

9. National Technical Assistance Center

a. A national technical assistance center for the HIMR should be established to assist with quality program planning, implementation, and evaluation. This technical assistance center should be operational for at least five years with provisions for an extended period of five years as needed.

b. The National Technical Assistance Center should employ staff to provide technical assistance to single-source service centers for the HIMR, regional demonstration centers, and educational programs (local and state).

c. The technical center should (1) conduct small group workshops for state and local staff concerned with quality programming for the HIMR, (2) collect and dispense information concerning quality components of services for the HIMR, and (3) make formal evaluations and recommendations regarding program improvement for local, state, and federal agencies.

10. Learning Resource System

a. Area Learning Resource Centers (ALRCs) should provide assistance with educational media and materials that are specifically applicable to the HIMR population. ALRCs should be responsible for (1) locating materials that are appropriate for the
HIMR population, (2) field testing new materials to evaluate their effectiveness with HIMR persons, (3) developing new materials that are applicable to the HIMR population, (4) distributing information to teachers and parents of HIMR persons and notifying them of available materials, and (5) providing instructions on the use of materials including a systematic checkout system for all media.

b. The National Center for Educational Media and Materials for the Handicapped (NCEMMH), in concert with the network of regional media centers, should be charged with the acquisition, review, analysis, and dissemination of curriculum content, techniques, and related materials for the hearing-impaired mentally retarded population to (1) survey existing curriculum content, techniques, and related materials developed within programs for the hearing impaired and programs for the mentally retarded that have relevance for the hearing-impaired mentally retarded population; (2) survey existing materials, techniques, and curricula developed by programs serving the hearing-impaired mentally retarded population, (3) analyze the acquired materials, techniques, and curricula to facilitate the generation of guidelines and objectives for evolving hearing-impaired mentally retarded training/educational programs; (4) conduct regional seminars and practice on promising strategies for the hearing-impaired mentally retarded; (5) stimulate research and demonstration projects based on the data acquired in the survey, and (6) establish procedures that will assure ongoing acquisition, evaluation, and dissemination of curricula, techniques, and materials appropriate for the hearing-impaired mentally retarded population.

c. The NCEMMH should research the possibility of serving as a national headquarters for continuing education, advanced study, and professional renewal for those who are working with HIMR persons. These programs should be coordinated by the NCEMMH; however, they should be decentralized and not confined to a single facility. They should exist in such places as universities, governmental agencies, professional organizations, and leadership training institutes.

d. Regional Resource Centers (RRCs) should provide specific assistance with educational diagnostic and prescriptive techniques to the HIMR population.

e. Teachers in programs for the hearing-impaired mentally retarded should send descriptions of their curriculum needs (materials and media) to the NCEMMH.

II. Regional Demonstration Centers

a. Federal resources should be committed to creating regional demonstration centers for HIMR populations in cooperation with existing regional centers for the handicapped, university-affiliated programs willing to develop a special interdisciplinary training curriculum and practicum, and service programs for the hearing impaired and the mentally retarded.

b. Demonstration centers should be funded in at least 20 states and have a catchment area of approximately 250,000. Allocation of funds should be mandated for a minimum of five years with assurances from participating states that the programs will be maintained if federal funds are phased out.

c. Demonstration centers should serve approximately 20 to 60 HIMR persons at one time and carefully design programs to serve persons with all degrees of disability as well as variances in age range (for example, a model center at an institution for the mentally retarded may serve persons from infancy through adulthood; a school for the deaf may maintain a center that accommodates persons from birth to age 21).

d. Demonstration centers should evaluate and disseminate information on new and improved methods for teaching and managing the HIMR population.

12 Volunteer Action Groups

a. Organized and supervised volunteer service programs such as the Foster Grandparent Program should be created and established within all programs for the HIMR.

b. An appropriate in-service training program for volunteers should be established. It should include specific program goals and standards.

c. Volunteers should assist with program activities involving both direct and indirect service to the HIMR population.
d. A professionally supervised coordinator of volunteers or, if necessary, an entire volunteer service staff should be responsible for a comprehensive volunteer program, namely recruitment, training, and placement of volunteers, adequate record keeping, and so on.

e. Volunteer programs should invite and initiate community involvement in assisting with community activities for the HIMR population.

f. Health clearance should be required of volunteers, this regulation should be funded by the specific HIMR program involved.

g. Regular time periods should be arranged for each volunteer to work with the professional staff to facilitate program continuity.

h. Special procedures should be established to acknowledge contributions of volunteers.

i. An alternate list of “on-call” volunteers should be established to provide back-up support to regular volunteers who are absent from the program.

13. Information Center

a. A public information service (for example, National Education Information Center for the Handicapped) should develop information on the dual handicaps of HIMR.

b. Professional information should be disseminated under the auspices of the Educational Resources Information Center (ERIC), the Clearinghouse for Exceptional Children Information Center, the Office for Handicapped Individuals,18 or a professional organization funded for this purpose.

c. The proposed information center service should disseminate information with respect to (1) current resources available to the HIMR population, (2) literature on the nature of this dual handicap and (3) special studies on the HIMR population.

d. Dissemination of information should be accomplished through a variety of media and should focus on programs for HIMR persons at all levels (preschool, school age, and adult).

D. Identification and Assessment

Comprehensive diagnostic services (including treatment) should be provided for all persons detected as high-risk or identified as prospective HIMR persons. These services should include provisions for formal screening, identification, assessment, placement, and reassessment and be available through Departments of Education, Mental Health, Public Health, or other designated community agencies such as single-source service centers, community mental health centers, or university-affiliated facilities. (Almost 60% of the states have placement committees that assist in determining the appropriate placement of each child. Reassessment is presently mandatory in 30% of the states. Efforts must be made to increase this requirement [State-Federal Information Clearinghouse for Exceptional Children, 1973].)

1. Prevention

a. Prevention services should be implemented as a part of single-source service center programs or other appropriate community programs in coordination with public health control systems. Information concerning prevention should be included in all single-source service center programs, community agencies, and other services concerned with the HIMR population.

b. Physicians and other appropriate personnel should be sensitized to the needs for identifying prospective high-risk persons and be trained to accommodate this population either through genetic counseling and prenatal screening or through referrals to prevention programs.

c. A high-risk registry to facilitate the identification of mental retardation and auditory impairment among newborns should be adopted; this registry should be established as a part of single-source service center, university medical center, or public health programs.

d. Medical care should be available to all mothers and infants considered to be at risk.

for complications during pregnancy, birth, and the postnatal period. This care
should include such preventive measures as genetic screening and counseling and
prenatal health care (for example, immunization programs, screening for the detec-
tion of infections and metabolic disorders, and so forth).

2. Early Identification and Intervention
a. Programs for the early identification of hearing loss and mental retardation in
infants should be implemented in single-source service centers, university hos-
pitals, community medical facilities, or local health departments. These programs
should be established nationwide and should use multiple screening techniques as
well as a high-risk register. When appropriate, the national network of university-
affiliated facilities should be used to provide training to all levels of professional
and paraprofessional staff and should assist in the coordination of a national
screening and assessment program.
b. The screening process should be used in combination with prevention, interven-
tion, and treatment and not in isolation; this technique should require linkage of
health care, educational, and welfare systems.
c. Screening should be viewed as a continuous process beginning at preconception
and repeated during the course of the preschool and school years. Those persons in
high-risk categories should receive more frequent monitoring whereas non-high-
risk infants should be satisfactorily checked at regular immunization times (about
four times during the first year) with various procedures tailored for a given age.
d. Screening and assessment should be seen as a dynamic process that continuously
surveys children in the course of their maturation and development. Screening
should not be used as a labeling process; rather, it should serve as a device for
delineating appropriate service plans.
e. Physicians-in-training and related ancillary personnel should receive instruction
on early identification of hearing loss and mental retardation.

3. Assessment
a. Additional interdisciplinary diagnostic assessment teams similar to those existing
within university-affiliated facilities, should be available to provide complete as-
sessments at all centers for the hearing impaired and mentally retarded in accord-
ance with the assessment standards of the Joint Commission on Accreditation of
Hospitals (1973) and the American Speech and Hearing Association Standards
and Guidelines for Comprehensive Language, Speech, and Hearing Programs in the
Schools (Healey, 1973).
b. Interdisciplinary assessment and reassessment should be provided with parental
or guardian consent by competent teams of individuals and include (1) a com-
prehensive audiologic evaluation to determine type and degree of hearing loss and
to explore possibilities of amplification, (2) intellectual/psychological assessments
(including tests that are nonverbal and culture free), (3) assessment of language/
speech/communication skills, (4) physiological evaluation (including medical,
neurologic, otologic, and motor function), (5) emotional and behavior as-
seSSment, (6) social case histories and social functioning, (7) educational/achieve-
mEnt, (8) vocational and occupational assessments, and (9) determination of recrea-
tional needs.
c. All adults with hearing impairment and mental retardation should be provided
comprehensive health care, counseling, and vocational services as assessed.
d. Audiologic and other appropriate interdisciplinary services should be transported
to remote local communities and catchment areas; the base for such services
should be, whenever possible, located at a program that can coordinate follow-up
comprehensive care.
e. Individuals who may be hearing impaired and mentally retarded should be pro-
vided mobile diagnostic units if they are unable to reach a single-source service
center. These mobile units should be staffed by a core interdisciplinary team com-
pounded of appropriate specialists such as an audiologist, communication specialist,
psychologist, special education teacher, nurse, work evaluator, and social worker.
These teams should provide coordination for local professional personnel and be
Issues and Recommendations

responsible to a parent agency where appropriate action on their findings can be taken.

f. Efforts should be made to determine the best means for informing parents and guardians who have HIMR children of the availability of and need for comprehensive assessment services, these efforts should include the development of guidelines with respect to behavior that would prompt referral, the use of various media, and field testing of information service effectiveness.

g. Workshops, seminars, and other procedures should be employed to increase the skills of those concerned with the education and treatment of the hearing impaired so that they can differentiate intellectual deficit from other causes of school failure.

h. Periodic review of the placement of HIMR persons should occur to ensure effective programming. In addition, those HIMR persons who are placed in community living facilities should have a status and job review at least every five years.

E. Teaching, Management, and Supervision

1. Educational Programs/Instructional Services

a. Educational services should be available for all hearing-impaired mentally retarded persons from birth through and beyond 21 years of age and should provide each HIMR person with the opportunity to develop and grow to his or her maximum potential, if necessary, existing legislation and the courts should be used to achieve educational justice for the HIMR population.

b. Educational programs for the HIMR should be coordinated and supervised by qualified persons.

c. A national evaluation system should be designed that stimulates and directs the collection and analysis of data from programs for the hearing-impaired mentally retarded including yearly evaluations that measure client-oriented behavior changes and yield measures of the effectiveness of total programs.

d. Staff:client ratios should be established for the hearing-impaired mentally retarded that are lower than ratios established for the deaf and for the mentally retarded at comparable developmental levels.

e. Each educational program should encourage both parent and community involvement. Parents or guardians should be encouraged to participate in professional staffings assembled for interpretation of competencies, disabilities, and programming needs of their child.

f. A professional journal or a section of an existing journal should be devoted to information and materials regarding education of the HIMR population, this journal should be widely disseminated to all programs, agencies, and persons actively involved in providing services to those who are both hearing impaired and mentally retarded.

g. Hearing-impaired mentally retarded persons should be provided the same medical services that are available to nonhandicapped individuals, especially in the management of otologic disease, palatal reconstruction, and orthodontic treatment.

h. Hearing-impaired mentally retarded persons should be provided appropriate prosthetic devices (that is, hearing aids or speech appliances). Provision of the above services should be determined on an individual basis with consideration for the primary physical or sensory needs and the individual's functional capabilities in tolerating treatment and learning to manage prosthetic devices.

i. Comprehensive instructional services should be available; these services should provide a broad spectrum of activities (both curricular and extracurricular) to all HIMR persons from infancy through adulthood.

j. Public schools should provide special education programs for the HIMR population unless their condition or housing arrangement precludes attendance in these programs; public schools should assume this responsibility as soon as a person is diagnosed as having the dual handicap.

k. Public schools should work in cooperation with single-source service centers to arrange appropriate program plans for each HIMR person, if needed, contractual agreements with other programs should be used.
The Hearing-Impaired Mentally Retarded: Recommendations for Action

1. Public schools should establish programs that emphasize individualized instruction and facilitate the current goal to "mainstream" handicapped persons by soliciting assistance of additional resources.

m. When appropriate, public schools should assume responsibility for educational programs within residential settings to foster continuity among programs and facilitate the transfer of pupils from one program to another.

n. Early education programs (for example, Head Start) should contain special provisions to enrich the lives of HIMR children as well.

o. Curriculum guidelines specifically geared to the HIMR population should be prepared for all levels of education.

p. To meet the practical educational and employment needs of HIMR persons, vocational preparation programs should be expanded.

2. Vocational Employment/Services

a. Prevocational Programs

i. Prevocational programs should be established as a part of all HIMR educational programs; all HIMR adolescents should be involved in year-round prevocational programs for a minimum of three years.

ii. Appropriate personnel including special educators, work-study specialists, and vocational rehabilitation counselors should act as supervisors of prevocational programs. They should have direct contact with community resources and prospective employers.

iii. Facilities and equipment for prevocational training should be adequate to meet specific needs for the work being taught (for example, adequate kitchen facilities for homemaking and appropriate garden tools for ground maintenance).

iv. Transportation should be provided when necessary. (Most states have passed legislation for transportation of school-age pupils and these provisions should include transportation to work centers as necessary.)

v. Work-study specialists who are adept at serving as a liaison between educational programs and the world of employment should be on the staff of all educational programs that serve HIMR adolescents (14 years and over).

b. Vocational Programs

i. Comprehensive vocational services should be established to meet the needs of all HIMR persons; continuous updating of these occupational services should occur to insure maximum success in preparing post-school-age HIMR persons for the current job market.

ii. Vocational services should incorporate a systematic progression of instruction, including career awareness, exploration, and experience to promote the development of realistic occupational goals for each HIMR person.

iii. Activity center programs that serve adolescent and adult HIMR populations should be improved and expanded. Where appropriate, these centers should be a part of regional demonstration projects.

iv. Activity centers should establish programs to promote the growth and development of personal, home, community, and work-oriented skills. As appropriate, these programs could establish a joint agreement with neighborhood special education programs. The activity center schedules the HIMR person (14 to 21 years) for one-half day and the public school for the other half. In this situation provisions for financial reimbursement by the public school board should be established.

v. Activity centers should develop and implement standards and guidelines for all aspects of comprehensive program operations.

vi. Provisions for enforcement of standards and licensing should be established. Standards for Community Agencies Serving Persons with Mental Retardation and Other Developmental Disabilities (Joint Commission on Accreditation of Hospitals, Accreditation Council for Facilities for the Mentally Retarded, 1973) could be used.
ii. Assessment procedures for admission to activity centers should be performed by an interdisciplinary team of professionals. Provisions for a trial admission should be established to allow for appropriate placement of HIMR persons.

viii. Vocational programs and activity centers should employ fully qualified staff and provide in-service training opportunities. There should be an increase in the employment of teachers of the hearing impaired, speech pathologists, vocational rehabilitation counselors, and other personnel pertinent to the goals and needs of the HIMR population.

ix. Federal and state governments should assume more responsibility in funding activity centers.

x. There should be greater integration of activity center programs into rehabilitation schemes for HIMR persons. These centers should establish definitive roles and coordinate programming for HIMR persons with rehabilitation and education agencies to eliminate duplication of effort. (For a more detailed report on activity centers, consult Activity Centers for Retarded Adults [President’s Committee on Mental Retardation, 1973].)

xi. Vocational programs should be established in all comprehensive residential programs for HIMR persons.

t. Sheltered workshops to accommodate the degrees of disability, versatility of acquired skills, and different living arrangements should be established for HIMR persons in all geographic areas of need (including private industrial plants). Where appropriate, these workshops should supplement existing sheltered environments for the mentally retarded.

xiii. HIMR persons who work in sheltered environments should receive a specified wage per hour established in accordance with existing state laws and regulations for private or state contracts.

xiv. Supervisors of each sheltered workshop should (1) be oriented to the special needs of HIMR persons and (2) have an appropriate background and knowledge of appropriate teaching methods. (Manual or total communication skills may be necessary in communicating effectively with HIMR persons.)

xv. As needed, HIMR workers should be subsidized to enable them to work and remain in the community.

xvi. Standards for sheltered workshop facilities should be created in all states and should be enforced.

xvii. On-the-job training activities should be encouraged, developed, and implemented for all HIMR persons who exhibit the skills for such programs.

xviii. Industries as well as small and large business establishments should be encouraged to make provisions for HIMR persons who are capable of adjusting to their particular work situation.

c. Vocational Rehabilitation

i. Vocational rehabilitation agencies should commit themselves to the goal of comprehensive services for the HIMR population.

ii. A state rehabilitation agency consultant should be appointed to serve as an overseer of state rehabilitative activities, coordinate the state’s service delivery system, and act as a liaison for both state and federal business affairs.

iii. Vocational rehabilitation programs should be improved and expanded to meet the needs of all HIMR persons needing such services. Facility standards should be enforced.

iv. All vocational rehabilitation programs should establish working relationships with other community agencies and with prospective employers of the handicapped. Among the agencies or groups that should play a part in designing

For further details consult Standards for Rehabilitation Facilities and Sheltered Workshops, U.S. Department of Health, Education, and Welfare, Social and Rehabilitation Service, Rehabilitation Service Administration.

For additional information, consult Standards for Residential Facilities for the Mentally Retarded [Joint Commission on Accreditation of Hospitals, Accreditation Council for Facilities for the Mentally Retarded, 1971].
The Hearing Impaired Mentally Retarded: Recommendations for Action

Effective vocational rehabilitation programs are (1) state employment agencies, (2) community service organizations, (3) local associations for the retarded and the hearing impaired, (4) local industries and business, and (5) national professional organizations serving the handicapped.

v. Vocational rehabilitation agencies should develop outreach programs to accommodate the needs of many forgotten HIMR adults.

vi. State vocational rehabilitation agencies, offices of the superintendent of public instruction, and other appropriate agencies should make known to the federal government the great need for interstate regional vocational training centers for "HIMR persons (such centers are a necessity for students who are not qualified to attend an educational program of higher learning)."

vii. Employers should be encouraged to hire the handicapped. They should eliminate unrealistic prerequisites (for example, written tests); state employment personnel should carefully examine and modify procedures used by employers in evaluating job performance skills.

e. When necessary, employers should redesign some jobs so they will require less skill and will accommodate HIMR persons (this should allow highly skilled employees an opportunity to make better use of the time that has been spent on routine matters).

ix. State rehabilitation agencies and state employment services should develop a cross-referral system whereby all HIMR persons seeking training or employment could be served jointly by these agencies.

x. HIMR persons should be paid no less than prevailing wages in the area. Also, they should be given all the benefits that other workers in the place of business receive.

xi. The "Job Opportunities in the Business Sector" program of the National Alliance of Businessmen should be broadened to specifically include the HIMR population.

3. Housing Services

a. Facility standards for housing HIMR persons should be enforced as established by the Joint Commission on Accreditation of Hospitals, Accreditation Council for Facilities for the Mentally Retarded; regular periodic site visits should be made.

b. Highly qualified personnel should be employed in all special living environments for the HIMR. In-service training should be provided and required.

c. Community-based group homes should be established to house HIMR persons. These residences should be available in all geographic areas identified as having adult-HIMR populations.

d. Residential settings should encourage more community involvement by promoting parental interaction and encouraging HIMR persons to visit their respective homes whenever possible.

4. Recreational Services

a. Comprehensive recreational services should be established to meet the specific needs of all HIMR persons; recreational services should be coordinated with or incorporated within existing programs and services (for example, group agencies such as Boy and Girl Scout camps, YMCAs, and YWCAs). State departments directly and indirectly concerned with recreation should combine efforts to accommodate the needs of HIMR persons. Recreational programs should be designed to ensure participation by all HIMR persons regardless of degree of disability, age, sex, and so on. Recreational services should include a multiplicity of activities to establish lifetime recreational skills and opportunities.

b. Existing public and private community recreation programs should be designed to accommodate the HIMR population in the mainstream of ongoing activities; provisions should be made to allow HIMR persons access to recreation and park services, employees of these services should be informed of the needs and recreational potentials of HIMR persons. In-service training opportunities for personnel should be provided. Adequate transportation services to recreational facilities should be provided for HIMR persons.
c. Future federally funded recreational projects should accommodate the special recreational needs of HIMR persons.

5. Family Services
   a. Universal counseling for parents of young HIMR children should be coordinated with early identification and educational programs. In such counseling, care should be taken to help parents develop realistic acceptance of hearing impairment and mental retardation, cope with it, and help their child in ways that will yield parental satisfactions. Parents should be made aware of the difficulties created by this dual handicap in the development of communication skills, educational achievement, and socialization.
   b. An appropriate agency (for example, single-source service center or state department of child and family services) should be charged with the responsibility of coordinating family counseling services for parents of HIMR persons.
   c. Parents of HIMR persons should be included in the planning, management, and evaluation of programs for their children.

F. Professional/Paraprofessional Preparation and Utilization
   1. Professional and paraprofessional preparation programs should be expanded and revised to include management of the hearing-impaired mentally retarded population. These programs should include short-term (in-service workshops and institutes) preparation programs to upgrade skills of current personnel and long-term preparation programs that extend the basic preparation beyond the level of Provisional Certification (Council on Education of the Deaf) to provide specialized preparation in the area of mental retardation.
   2. Training programs should be established in interdisciplinary settings (for example, university-affiliated facilities) to enhance channels of communication and promote a clearer understanding of, and a sensitivity to, the total HIMR person.
   3. Competencies should be developed to serve as a basis for professional certification in the area of hearing impairment and mental retardation, these competencies should be based on requirements delineated by the Council on Education of the Deaf (CED); paraprofessional certification should be referred to CED for consideration.
   4. CED should work cooperatively with state departments in the adoption of upgraded standards. Guidelines for certification of teachers of the hearing-impaired mentally retarded should be defined nationally and promulgated to state certifying agencies.
   5. One- and two-year paraprofessional preparation programs at the junior and community college level should be established in addition to continual use of noncredit approaches, these programs should be funded by governmental agencies at both the state and federal levels.
   6. Professional paraprofessional training programs should give high priority to training members of minority groups or hearing-impaired individuals, federal, state, and local organizations should direct specific attention to the utilization of such individuals in programs designed to serve the hearing-impaired mentally retarded population.
   7. Professional preparatory programs should be established for counselors, vocational instructors, and so on, to accommodate the comprehensive needs of HIMR persons.
   8. Ongoing cooperative in-service training programs should be available to all persons working with the HIMR population, continuing education should be required of all professionals and paraprofessionals who are working with HIMR persons.
   9. In-service training programs should be provided in a variety of settings and include all disciplines involved in serving the HIMR population.
   10. Conferences and regular summer institutes concerning hearing impairment and mental retardation should be given for personnel in the mental health professions who are serving HIMR persons.
   11. University-affiliated facility programs should be established for the purposes of training professional and technical personnel who work with HIMR individuals in an interdisciplinary setting; when appropriate, these university-affiliated facilities should be established in cooperation with services such as single-source service centers, residential schools, and so on.
12. Specific universities should be funded to develop model professional preparation programs and to produce graduate-level personnel to work with the HIMR population.

G. Research

1. Ongoing cooperative research programs (both biomedical and behavioral) should be expanded through universities, public schools, and community and governmental agencies, these programs should be supported by state and federal monies as well as private funds to encourage interagency and interinstitutional cooperation. Longitudinal research to facilitate program planning and development for HIMR persons and research concerned with prevention, treatment, education, habilitation, and rehabilitation should be conducted.

2. Current research findings on the HIMR population should be compiled, analyzed, and disseminated through a special publication.

3. Additional research specialists should be trained to accomplish specific research tasks in the prevention, assessment, and management techniques used in programs that have responsibilities for serving severely and multiply handicapped persons.

4. Research to validate competency-based systems for training and utilizing personnel is strongly encouraged.

5. Since quality research provides the foundation for upgrading professional preparation and assists in the delivery of quality services, federal and state governments should increase their financial support for research activities.

CONCLUSION—A NEW ERA: CONCERN AND ACTION

Today's new era of concern for the handicapped, involving the establishment of a national goal to provide full services (innovative teaching methods, mandatory legislation, the affirmation of legal rights to service, positive pressures for deinstitutionalization, and accountability) make attitudes of despair and hopelessness untenable. A reorientation in thinking will require a concerted effort to inform public officials, professional workers, and the lay public that special groups of people with multiple handicaps must be provided appropriate diagnostic, educational, habilitative, vocational, and recreational services. However, the creation of comprehensive services for the population with hearing impairment and mental retardation will not solve, altogether, the multiplicity of problems resulting from this dual handicap. Communities still must learn how to accept the handicapped. An environment typified by genuine understanding must prevail, and salient features with regard to the capabilities of this population need more emphasis. Many of these persons can become self-sufficient, they can become gainfully employed, and they can learn to communicate effectively. Sympathy and misconceptions must be replaced by positive attitudes. All persons have the right to live, to work, and to preserve their human dignity.

Although the HIMR population has been recognized, gross inequities in the availability of services can be identified in every state. Recognition of existing problems is not sufficient. National, state, and local officials must strive cooperatively to correct and change the current self-perpetuating status of inequality for these citizens.
References


The Hearing-Impaired Mentally Retarded: Recommendations for Action


References


Ohio Department of Education, Program Standards for Special Education and Legal Dismissal from School Attendance. Columbus, Ohio (June 30, 1973).


Stepp, R. E. (Ed.), *Symposium on Research and Utilization of Educational Media for Teaching the Deaf*. Lincoln, Nebr.: Department of Educational Administration, Teachers College, Univ. of Nebraska (1968).


---

The American Speech and Hearing Association has published a brochure entitled "The Deaf Mentally Retarded, Understanding Their World," which can be purchased from:

The ERIC Clearinghouse on Handicapped and Gifted Children
1920 Association Drive
Reston, Virginia 22091
I. Conference Overview

The Problem

Mental retardation and deafness are significant handicapping conditions. When both intellectual and auditory deficits are present in the same individual, the summation of the two handicaps is frequently disadvantageous for the individual and his family. In fact, under current conditions, a mentally retarded deaf person (MRD) has only one chance in ten to avoid confinement in a public institution for the mentally retarded or to receive services in a school for the deaf. MRD persons are a discrete target population in the operating plans of few governmental agencies. In recent years the focus of legislation at national, state, and local levels has been increasingly categorical. Program thrusts for the handicapped focused upon "the" mentally retarded, "the" deaf, "the" learning disabled, and other unitary handicap target populations. While categorization is a fundamental operation in science and in law, there is no evidence to support the notion that human beings—the ultimate service recipients—come packaged with tightly knit scientific or legislative labels. The prevalence of multihandicapped conditions, particularly among the severely disabled, is extensive and increasing in relative, and probably, absolute terms. Tunnel vision policies have impeded translation of this knowledge into program development for persons who do not fit squarely within the categorical confines of narrow legislation. Congressional and State legislative committee structures are narrow and categorical. Professional interest groups represent narrow and categorical interests. Indeed, the history of developing policy for the handicapped is overwhelmingly a history of narrow, categorical program thrusts at each level of government. Many service recipients have fallen between the cracks. The mentally retarded deaf is one such group. This is "The Problem."

Who Are The Mentally Retarded Deaf?

The mentally retarded deaf may be defined operationally as persons having a combination of mental retardation and hearing impairment of sufficient degree that they cannot be appropriately served by traditional programming for the mentally retarded alone or the deaf alone. Other handicapping conditions may also be present. The incidence and prevalence of this dual disability is unknown.

The best current estimate is that 15,000 to 20,000 persons under the age of 20 years fit the operational definition of MRD. This estimate is based upon studies of children enrolled in residential schools for the deaf and in public institutions for the mentally retarded. More precise data will not become available until full service programs are created.

Current placement of MRD persons is usually one of two service modes. These are:

1. Facilities For The Mentally Retarded

This category contains by far the largest number of identified MRD, most of whom reside in public institutions. As a consequence of his dual disability, the MRD person...
seldom profits from the program offerings for the non-deaf majority. It is not unusual for institutional staff to belatedly identify deafness as the primary handicap among residents being mislabeled and missered as mentally retarded or mentally disturbed. In these facilities which frequently lack expertise in serving the deaf, severity of mental retardation may be tragically overestimated. Inappropriate rehabilitational/educational services seriously compromise the likelihood that an MRD child can become self-sufficient.

2. Public And Private Day And Residential Schools For The Deaf

The MRD is often the last accepted and least served in these programs. Quality of programming is frequently poor. Application of interdisciplinary technology is rare. However, within the United States there are a sufficient number of quality programs to serve as a nucleus for program development and expansion.

The precise number of MRD being denied services is unknown, but is thought to be considerable. The U.S. Office of Education estimates that one million handicapped children are currently denied educational services. Many of these unserved children are MRD. When an MRD person is unserved, his deficits advance progressively with advancing age, and emotional disturbances are a regular consequence.

Conference Rationale

Several factors underscore the timeliness of this Conference which focuses attention upon the mentally retarded deaf.

1. Awareness Of The Changing Clinical Characteristics Of Handicapped Children

Improved prenatal and perinatal care as a result of medical advances have yielded higher survival rates for multihandicapped infants. At the same time, medical research has impacted significantly on the adventitious causes of single handicaps (such as deafness). The net result has been an increase in the proportion of multihandicapped children among the population of handicapped persons.

2. Progress In Special Educational Remediation Techniques

Prospects for ameliorating the debilitating impact of mental retardation and deafness have advanced in recent years because of increasing sophistication in special education. Examples pertinent to the MRD include: early detection and intervention, individualization of instruction, expansion of the repertoire for teaching communication skills, behavior modification, and improved media, materials and technology.

3. Advance In Audiology Resulting From Basic Audiologic Research And From Relevant Advance In The Broad Field Of Electronics

The MRD can benefit directly from recent advances in diagnostic audiology and amplification. These advances which are both conceptual and technological include: increased understanding of the anatomy and physiology of communication, and the elements in language development; auditory evoked potential and impedance audiometry; and microminiaturization of circuitry with improvement in durability, reliability, fidelity and gain of hearing aids.

4. Increased Public Recognition That The Handicapped Must Not Be Deprived Of Their Rights To Appropriate Education And Treatment Services

Within the past several years, parents, professionals and concerned citizens have begun to demand that the rights of the handicapped (especially the retarded) must be respected. These demands have taken the form of successful litigation against exclusionary and abusive laws and policies and the passage of increasingly imaginative legislation (and administrative changes). These activities provide an ample foundation for fuller efforts to insure for the MRD their rights to treatment and educational services.

Conference Structure and Operations

The Working Conferences assembled an interdisciplinary task force of specialists in audiology, education, otology, pediatrics, program planning and evaluation, psychiatry, psychology and social work. Thirty-four participants represented the professional community.
serving the deaf, the professional community serving the mentally retarded, and the many
related disciplines providing services, conducting research, training personnel, and adminis-
tering programs.

Participants convened at the invitation of Mrs. Patricia Reilly Hitt, then Assistant Secre-
tary for Community and Field Services, U.S. Department of Health, Education, and Welfare
(DHEW). Two working conferences were held at Airlie House, Warrenton, Virginia on October

Purposes of the sessions were:

1. To explore the many problems of the dual disability of mental retardation and deaf-
ness;
2. To develop recommendations targeted upon improving services available to mentally
retarded deaf persons;
3. To establish links of communication and cooperation among professionals represent-
ing the mental retardation and deaf communities.

The 27 conferees in attendance at the first session were selected because each was known
to have a unique perception of the problem based on expertise in more than one area related to
mental retardation and auditory impairment. Pre-conference reading materials, including
invited papers, were sent to participants in advance of the session. Invited papers were
presented at the conference by R. J. Ruben, M.D., R. B. Dever, Ph. D., and P. A. Rittmanic, Ph.D.
Dr. Ruben addressed the relationship between hearing loss and mental retardation, listed 12
areas of needed research and concluded with a call for early detection and treatment. Dr.
Dever discussed the discipline of applied linguistics and its application to the language and
learning problems of the MRD child. He noted that certain developmental linguistic programs
may be readily adaptable to the MRD target population. Dr. Rittmanic's contribution, titled
"Program Considerations for the Mentally Retarded Deaf" directed the conferees' attention to
the increasing prevalence of multi-handicapped children and to several preliminary deter-
rants to MRD program development such as inadequate survey research data and terminol-
ogy, as well as deficiencies in available services. Dr. Rittmanic called for the initiation of a
national survey to determine MRD incidence and resources.

Conferees were assigned to categorical work teams which focused upon needs in research,
training, service, linkage (administration) and program evaluation.

Group assignments were:

Training
Madeline W. Appell
Thomas R. Behrens
Stella Chess
William T. Darnell
Paul A. Rittmanic
Richard B. Dever
Helen Page
Patrice Costello
Joseph Parnicky
Victor H. Galloway
Herbert Goldstein
Leo Connor
Patricia G. Forsythe
Lyle L. Lloyd

Service
Victor H. Galloway
Leo Connor
Patrice Costello
Herbert Goldstein
Robert J. Ruben
Lyle L. Lloyd
Kenneth R. Mangan
William Darnell
Paul A. Rittmanic
Helen Page
David Rosen
Samuel L. Ornstein
Frank Withrow
Wallace K. Babington

Research
Stella Chess
Thomas R. Behrens
Madeline W. Appell
Louis Z. Cooper
James W. Moss
Robert J. Ruben

James J. Gallagher
Stephen P. Oigley
Doin Hicks
Richard B. Dever
John W. Melcher
Robert H. A. Haslam

Copies may be obtained from the Office of Mental Retardation Coordination, Room 3744 HEW North Building,
330 Independence Avenue, S.W., Washington, D.C. 20201.
Linkage
Kenneth R. Mangan
Joseph Parnicky
Samuel L. Ornstein
David Rosen
John W. Melcher
Wallace K. Babington

Evaluation
James J. Gallagher
Stephen P. Quigley
James W. Moss
Louis Z. Cooper
Doin Hicks
Frank Withrow

Group assignments were unstructured and provocative. Each team was asked to develop its own modus operandi, to be wide ranging and unconstrained. Each individual was encouraged to contribute, from personal perspective, the issues subjectively believed to be germane to program enrichment and program development for the mentally retarded deaf. A lengthy list of unresolved issues, recommendations, observations, laments, and wishful thinking were produced and recorded by the group recorder so designated. These products of brainstorming provided a basis for more critical and targeted group interactions at the January session.

Each participant at the January session was reassigned to one of four work teams. These teams were expanded by the participation of seven persons who attended the Task Force meeting as part of the Steering Committee of the American Speech and Hearing Association (ASHA) project entitled “Rehabilitation of the Hearing Impaired-Mentally Retarded Population.” This project is supported with funds from the Rehabilitation Services Administration, Division of Developmental Disabilities. The teams were asked to use the unedited product of the October session as the starting point only and were asked to develop and prioritize an “action document.” What should be done for the MRD? and How? Assignments were:

I
Madeline W. Appell
Thomas R. Behrens
Shirley Berger
Richard B. Dever
James W. Moss
Paul A. Rittmanic
Robert J. Ruben
David Yoder

II
Louis Z. Cooper
William T. Darnell
Patricia G. Forsythe
Victor H. Galloway
William C. Healey
Doin Hicks
Joulava M. Leggett
John C. Nace
David Rosen

III
Wallace K. Babington
William Castle
Stella Chess
Leo Connor
James J. Gallagher
Herbert Goldstein
Alfred Hirshoren
Joseph Parnicky

IV
Patrice Costello
Lyle L. Lloyd
Kenneth R. Mangan
John W. Melcher
Samuel L. Ornstein
Helen Page
Barbara C. Sonies
Frank Withrow

Each team presented its recommendations to the entire group for discussion. After this discussion, each team reconvened to refine its document prior to submission at the final session of the Conference where priorities were reviewed. A synthesis of this activity serves as the basis for the Recommendations which appear as Part III of this document.

II. Conference Recommendations

This section contains a list of recommendations for MRD program development. Central to this list is the proposal of Federal legislation incorporating the intent of several Conference Recommendations. Recommendations are accompanied by expositions relating to rationale, available resources and implementation strategy.
Recommendation 1

An Operational Definition Of Mentally Retarded Deaf Should Be Adopted For Program Development

A mentally retarded deaf (MRD) person is an individual who has a combination of mental retardation and hearing impairment of sufficient degree that he cannot be appropriately served by traditional programming for the mentally retarded or the deaf alone. The MRD person may have other handicapping conditions.

Rationale

The usefulness of a service-based definition of disability to facilitate program development has been well confirmed by experience with the Regional Deaf-Blind Centers.

Recommendation 2

The Mentally Retarded, Deaf Should Be Designated As A Priority Target Population By Appropriate Federal, State and Local Governmental Agencies And Professional Organizations

Rationale and Strategy

Government policy formulation is produced in an atmosphere of complex influences such as Congressional, executive, professional and the public at large. These many centers of influence, such as the Congress and its leaders, the "administration," executive agencies and private interest groups, exert many pressures, but no single element can necessarily impose priorities upon all other elements. Priorities that emerge respecting the distribution of public resources are determined by the interplay and resolution of actions and compromise taken by participants. "Priorities," therefore, can be established individually and collectively by all interested parties.

Two key actors in this field of influence have already established national goals directly related to the development of comprehensive services for the mentally retarded deaf. On November 17, 1971 President Richard Nixon committed the Federal Government to two major national goals:

To reduce by half the occurrence of mental retardation in the United States before the end of this century, and:

To enable one-third of the more than 200,000 retarded persons in public institutions to return to useful lives in the community.

In 1972, the U.S. Commissioner of Education, Sidney P. Marland, adopted a goal proposing that full educational opportunity for all handicapped children be achieved by 1980 (75% by 1977). Achievement of the Presidential and U.S. Office of Education goals involves program development and delivery of services to the MRD population. The MRD in public institutions are some of the most neglected and unserved or poorly served target groups among the handicapped. Deinstitutionalization means focusing new program thrusts upon unique MRD health and educational needs. The Bureau of Education for the Handicapped, U.S. Office of Education, estimates that approximately one million handicapped children are presently excluded from a free, public education. Many excluded children are multiple handicapped and the exact number is unknown. MRD represent a large portion of such persons.

Recommendation 2 can be realized through concerted actions taken by influential decision-makers to establish program development and delivery of services to the MRD as a public priority. Actions to be taken by the Department, for example, stem from its role in the "implementation" of programs already adopted by Congress. Implementation involves formulating appropriation requests and budget justifications for categorical programs obligating the amounts Congress appropriated, promulgating and enforcing program regulations and guidelines, and reporting to and informing the Administration, Congress, private interest groups and the electorate on agency activity benefiting the MRD population. Therefore, the mentally retarded deaf should be included as a priority target population in the operational planning procedures of Department constituent agencies. Inclusion is particularly necessary in planning procedures for each program purported to target upon achieving Presidential and Departmental national goals of deinstitutionalization and full educational opportunity. For example, the needs of the MRD present an excellent opportunity for the Bureau of Education for the Handicapped (BEH), Division of Developmental Disabilities (D/DD), and Maternal and Child Health Service (MCHS), to demonstrate coordinated, collaborative programming.
ulations and guidelines for these goal-oriented programs should be amended to identify the MRD as being a) eligible for service, and b) a national service priority.

Actions to be taken by private interest groups to establish the MRD as a priority stem from the nature of their role in policy formulation. This role involves mediating constituency interests and advocating policy positions to program managers and program adopters in the Department and Congress. Hence, advocacy of the MRD as a priority should be undertaken by organizations with existing service responsibilities for this target population. A list of the responsible organizations would include, but not be limited to, the following:

1. Alexander Graham Bell Association for the Deaf
2. American Academy of Pediatrics
3. American Association on Mental Deficiency
4. American Psychological Association
5. American Speech and Hearing Association
6. Conference of Executives of American Schools for the Deaf
7. Council for Exceptional Children
9. National Association for Retarded Children
10. National Association of State Directors of Special Education
11. National Association of State Mental Health Program Directors
13. United Cerebral Palsy, Inc.

The private organizations listed above should direct their individual and collective energies toward establishing and dramatizing establishment of the MRD as a priority target population. These actions should be directed toward Federal, State and local agencies, Federal, State and local legislative leaders, and also to their own members. The continued support of the American Speech and Hearing Association, the American Association on Mental Deficiency and the Conference of Executives of American Schools for the Deaf is essential. These organizations already have made substantial commitments to program development for the MRD.

Program development for the MRD should begin with fuller use of existing resources at all levels. These resources all too frequently are administered through restrictively narrow categorical programs in health, education and rehabilitation. MRD regularly "fall between the cracks." One remedy is establishing the MRD as a priority target population. This must be a multi-faceted undertaking, as indicated in the foregoing paragraphs.

Recommendation 3
Federal Legislation Should Be Enacted Authorizing Commitment Of Public Resources Specifically For MRD Program Development

Rationale and Strategy

Program of substance for the MRD will not evolve until legislative statutes specify their existence and until program managers attach administrative priority to service delivery for this target population. Such ministerial priority can be attached to existing programs as indicated above in the discussion of implementation strategy for Recommendation 2. Conference participants, however, concluded that certain acute MRD needs cannot be met with present Federal commitment. The history of developing Federal policy for the mentally retarded and for the deaf is overwhelmingly a history of program development by statutory mandate. For example, programs of substance for mentally retarded persons did not emerge until statutes clearly specified that mentally retarded persons must be served. Can we expect MRD interests to fare differently?
In 1955 there was not a single identifiable categorical mental retardation program or structure in the Federal Government. The extensiveness of Congressional concern for mental retardation between 1956 and 1962 was expressed through legislative authorization and appropriations in support of activities in mental health, vocational rehabilitation, education, maternal and child health, hospital construction, Social Security, neurological diseases and health services development. Mental retardation funds for these commitments advanced from $1 million in FY 1955 to $22.4 million in FY 1962. Sources for this growth were protective mental retardation earmarks applied to Department Appropriations Acts and administrative priority attached to Departmental developmental activities in health and rehabilitation. Categorical legislation specifically and solely devoted to mental retardation was first enacted in 1958 (Public Law 85-926), incorporating teacher training provisions. Between 1963 and 1966, policy expansion included categorical Federal entrance into health and educational commitments, facilities construction of Mental Retardation Research Centers, University Affiliated Facilities, and Community Facilities (PL 88-164). The 88th Congress had enacted Public Law 88-156, the Maternal and Child Health and Mental Retardation Planning Amendments of 1963, and Public Law 88-164, the Mental Retardation Facilities Construction Act. Escalation was firmly established now, and forthcoming enactments of health and educational programs provided legislative vehicles for increased Federal commitment to the field. In 1967 significant support for special education in the U.S. Office of Education was inaugurated with the statutory creation of the Bureau of Education for the Handicapped. Then came earmarkings of Congressional appropriations for Titles I and III of the Elementary and Secondary Education Act (1966), the Vocational Education Act (1968), and Head Start (1972). In each case, a portion of the total appropriations was specifically protected by earmarking appropriations for services to the handicapped. Prior to these earmarkings, expenditures for handicapped person's services were pathetically inequitable. Hence, earmarking in appropriations and substantive Congressional committees applied to appropriation bills and varied categorical programs in health, education and rehabilitation are protective antecedents of the past two decades of developing mental retardation policy. Congressional earmarking of funds for varied programs serving the mentally retarded have been bootstraps necessary to achieve equitable program development for a minority interest. The lesson of this history for MRD program development is clear. Federal statute should specify that MRD persons be served and direct resources to this end.

The Mentally Retarded Deaf in a simple and less complex society did not constitute a major problem. The health care and knowledge for and about such children was so limited that the probability of survival into adulthood was very low. In fact the probability of survival after birth for many of these infants was not great. With better medical knowledge and health care today, many of these individuals have normal life time expectancies of 60 to 70 years. Knowledgeable personnel to work with this severely handicapped population is almost nonexistent. Of the experts convened for this conference, only one or two persons are working full-time exclusively with the Mentally Retarded Deaf. The others are concerned professionals who have become aware of the problem through their commitment to either the deaf or retardation person. The population to be served nationally is relatively small, 15,000-20,000 persons. The educational and habilitation problems are difficult and the prognosis for complete success is limited since few of these people will become completely self-sufficient independent citizens. On the other hand, the prognosis for deinstitutionalization of the Mentally Retarded Deaf is realistic for perhaps 80% of the target population. Such persons would be able to live in the open community and work in sheltered employment areas. Both the cost efficiency of such programs and the humanitarian aspects offset the dehumanizing and costly programs currently serving them.

Unfortunately, the costs are so great and the numbers are so small that State and local governments do not have a critical mass large enough to move to implement programs for this severely handicapped group. There is an urgent need for the Federal government to stimulate the growth of these very specialized educational services based upon the economics of scale. With 15,000-20,000 people nationally in need of these new programs, the Federal government should muster the national resources in knowledge, manpower, and technology revenue to demonstrate what these people can do. Even with the court decisions mandating education for all, these children are likely to be the last to be served because of the great uncharted ground required to be covered. Once the worth of such programs can be demonstrated in terms of...
deinstitutionalization of the Mentally Retarded Deaf, the states can be expected to support such programs.

Conference participants recognized the well documented hazards of categorical programming. In fact, the current plight of the MRD illustrates one distressing structural flaw in such programming. However, these hazards do not outweigh the essential advantages of the categorical approach for initiation of services to previously excluded target populations. Conference participants supported the concept of planned incorporation of categorical programs for the MRD into broad comprehensive program thrusts after a reasonable developmental period. Therefore, special MRD legislation should be enacted during the coming year. This legislation should contain at least three basic provisions:

A. Authorization Of A Nationwide Network Of Exemplary Service And Demonstration Centers

These centers, distributed on a regional basis, should utilize experience acquired in the Regional Deaf/Blind Centers program established by PL 90-247 and in the Handicapped Children's Early Education Program established by PL 90-538. These Centers should provide a program designed to bring to bear upon MRD children as early as possible in life, those specialized, intensive professional and allied services, methods and aids found to be most effective to enable them to achieve communication with and adjustment to the world around them, so that they may have a useful and meaningful participation in society. MRD Service and Demonstration Centers should focus on a full range of interdisciplinary services such as: outreach identification, diagnostic, evaluation, education, treatment, vocational training, habilitation, medical and family services. Research, training and dissemination components should also be included.

B. Authorization Of A National Technical Assistance Resource Center For The MRD

Rapid expansion of MRD programs on a national basis can be facilitated significantly by creation of a center with responsibility for delivery of technical assistance to the model Regional Centers. Assistance in program planning and evaluation, curriculum development, record keeping, information dissemination and replication exemplify the technical assistance roles which may be undertaken. The National Technical Assistance Resource Center would insure cost-effective program development and minimize duplication of effort. Utilization of centralized technical assistance center has been successfully demonstrated in other Federal programs. For example, the "Technical Assistance Development System" (TADS), as fostered program development in early childhood education programs throughout the United States and a Developmental Disabilities/Technical Assistance System became operational to serve the 56 Developmental Disabilities Planning and Advisory Councils. The proposed National Technical Assistance Resource Center would serve similar functions. The Center would assist the Regional MRD Centers in working with state agencies to develop and deliver services to the MRD and would also bear responsibility for developing a comprehensive registry of MRD persons.

C. Authorization Of A Nationwide Survey To Ascertain The Prevalence Of MRD And Identify Available Public And Private MRD Resources

Analysis of these data would suggest directions for program development. The survey should be supervised by the National MRD Technical Assistance Resource Center. Nationwide screening and early detection procedures should also be developed and disseminated by the National Center in cooperation with the Regional MRD Service and Demonstration Centers.

Recommendation 4

Professional, Parents, And Public Officials Should Continue Pressing American Social And Political Institutions To Guarantee Equal Rights For America's Handicapped Persons

Rationale

Litigation in the previous three years has been extensive. It has included the successful contesting of certain State laws and policies regarding the:

—Right to appropriate treatment for handicapped residents of public institutions, the
—Right to public education for all persons, regardless of degree of disability, the
—Right to just compensation for labor; and
-Right to fair classification, commitment, and protection from harm.

Equal rights litigation will undoubtedly continue to adorn State and Federal court dockets. A number of cases involving rights of the handicapped are discussed in the publication “Mental Retardation and the Law.”

Law is one instrument of social change. Court actions protecting constitutional rights of the handicapped should be encouraged.

Summary

Four recommendations have been presented by the National Task Force on the Mentally Retarded Deaf. These focus upon program development for the MRD population:

Recommendation 1. The following operational definition of mentally retarded deaf should be adopted by program planners at national, state and local levels of government: A mentally retarded deaf (MRD) person is an individual who has a combination of mental retardation and hearing impairment of sufficient degree that he cannot be appropriately served by traditional programming for the mentally retarded alone or the deaf alone. The MRD person may have other handicapping conditions.

Recommendation 2. The mentally retarded deaf should be designated as a priority target population by appropriate governmental agencies and professional organizations.

Recommendation 3. Federal legislation should be enacted authorizing commitment of public resources specifically for MRD program development.

Recommendation 4. Professionals, parents and public officials should continue pressing American society and political institutions to guarantee equal rights for America’s handicapped persons.

Implementation of these Recommendations will offer new hope for the mentally retarded deaf and their families.

DHEW Publication No. (OHD) 74-22001

*Available from the Office of Mental Retardation Coordination, Room 3744 HEW North Building, 330 Independence Avenue, S.W., Washington, D.C. 20201.
PARTICIPANTS — AIRLIE HOUSE CONFERENCE

"Deaf-Mentally Retarded"
January 25-28, 1973

Miss Madeline W. Appell
Education Coordinator
Rubella Project
Department of Pediatrics
New York University Medical Center
550 First Avenue
New York, New York 10016
Mr. Wallace K. Babington
Director, Office for the Handicapped
DHEW, South Room 3511
330 C Street, S.W.
Washington, D.C. 20201
Dr. Thomas R. Behrens
Director, Clinical Speech Services
Lexington-School for the Deaf
550, East Avenue
Department of Psychiatry
Washington, D.C. 20002

Dr. Herbert Goldstein
Coordinator, Clinical Speech Services
Washington, D.C. 20201

Dr. Robert A. Haslam
Associate Professor of Pediatrics
John F. Kennedy Institute
The Johns Hopkins University
707 North Broadway
Baltimore, Maryland 21205

Dr. William C. Healey
Associate Professor of Pediatrics
The John F. Kennedy Institute
New York University Medical Center
930 Old Georgetown Road
Washington, D.C. 20014

Miss Shirley Berger
Coordinator, Clinical Speech Services
New York State Hospital and Training Center
Jackson Heights, New York 11370

Dr. William E. Oates
Dean of Instruction
National Technical Institute for the Deaf
Rochester Institute of Technology
Rochester, New York 14623

Dr. Stella Chest
Department of Psychiatry
New York University Medical Center
550 First Avenue
New York, New York 10016

Dr. Leo E. Connor
Executive Director
Lexington School for the Deaf
2626 7th Street
Jackson Heights, New York 11370

Dr. Louis Cooper
Director, Division for Handicapped Children
Model Secondary School for the Deaf
Gallaudet College
7th St. and Florida Avenue, N.E.
Washington, D.C. 20002

Dr. Joseph Parnicky
Director of Special Education
Yeshiva University
330 Morris Park Avenue
Bronx, New York 10461

Mr. William Robertson
Director, Division for Handicapped Children
Rochester Institute of Technology
National Technical Institute for the Deaf
Rochester, New York 14626

Mr. John Melcher
Director, Division for Handicapped Children
Wisconsin State Department of Public Instruction
125 Webster
Jacksonville, Illinois 62650

Mr. Victor H. Galloway
Director, Professional Services
New York University Medical Center
550 First Avenue
New York, New York 10016

Dr. Robert J. Ruben
Director, Model Secondary School for the Deaf
Gallaudet College
3 Kendall Green
Washington, D.C. 20002

Dr. Alfred Hirshoren
Division of Exceptional Children
University of Georgia
Athens, Georgia 30601

Mrs. Jowava Leggett
Program Analyst
DHEW, South Room 3517
330 C Street, S.W.
Washington, D.C. 20201

Dr. Lyle Lloyd
Executive Secretary
Mental Retardation Research and Training Committee
National Institute of Child Health and Human Development
National Institutes of Health
Bethesda, Maryland 20014

Dr. Kenneth R. Mangan
Superintendent
Illinois School for the Deaf
125 Webster
Jacksonville, Illinois 62650

Mr. Samuel Ornstein
Superintendent, Division of Handicapped Children
New York University Medical Center
550 First Avenue
New York, New York 10016

Dr. Louis Z. Cooper
Executive Director
Margaret S. Sterch School for Hearing Impaired Children
2626 7th Street
Washington, D.C. 20001

Mr. David Rosen
Superintendent
Model Secondary School for the Deaf
35135 Dodge Park Road
Sterling Heights, Michigan 48077

Miss Helen Page
Principal, Junior High School 47M
225 East 23rd Street
New York, New York 10010

Mr. William Robertson
Director, Division of Handicapped Children
Rochester Institute of Technology
National Technical Institute for the Deaf
Rochester, New York 14626

Mr. John Melcher
Director, Division for Handicapped Children
Wisconsin State Department of Public Instruction
125 Webster
Jacksonville, Illinois 62650

Mr. Samuel Ornstein
Superintendent, Division of Handicapped Children
New York University Medical Center
550 First Avenue
New York, New York 10016

Dr. James Moellering
Director, Planning, Evaluation, and Development
Child Development and Mental Retardation Center
University of Washington
Seattle, Washington 98100

Dr. John C. Nace
Director, Professional Services
Margaret S. Sterch School for Hearing Impaired Children
2626 7th Street
Washington, D.C. 20001

Miss Barbara C. Sonies
Project Manager
American Speech and Hearing Association
9030 Old Georgetown Road
Washington, D.C. 20004

Dr. Robert J. Ruben
Professor and Chairman
Albert Einstein College of Medicine
Department of Otolaryngology
Yeshiva University
1300 Morris Park Avenue
Bronx, New York 10461

Ms. Patrice Costello
Professor of Special Education
Texas Technical University
Lubbock, Texas 79400

Mr. William T. Darnell
Director, Model Secondary School for the Deaf
Gallaudet College
3 Kendall Green
Washington, D.C. 20002

Dr. Paul A. Rittmanic
Program Policy Advisor
Speech Pathology and Audiology
Illinois Department of Mental Health
Dixon State School
Dixon, Illinois 61021

Mr. David Yoder
Chairman, Communication Disorders
University of Wisconsin
Madison, Wisconsin 53706
* APPENDIX B

Hunt Valley Conference Resolutions
WHEREAS, the multi-handicapped individual has more than one handicapping condition (i.e., deafness and mental retardation often including non-functioning communicative and social skills), and

WHEREAS, the combined handicaps result in a failure of comprehensive health, social and educational programming, and

WHEREAS, the estimated prevalence of the population of such severely handicapped persons is approximately 20 to 25 thousand, and

WHEREAS, because of economic limits few states or other political subdivisions have assumed enlightened uses of common resources to insure an equal quality of life for these individuals,

BE IT RESOLVED, That the federal government assume the responsibility for stimulating the development of a continuing life program for this target population which includes health, education, living environments, and occupational and recreational opportunities as related to the persisting problems of this target population.

Approve 43
Disapprove 1
Abstain 0
WHEREAS, some of the population who initially function as deaf/mentally retarded individuals will, with early intensive health and education intervention, have their dual disability significantly reduced so that they can function as less severely handicapped individuals who may be served under traditional service agencies of state governments.

BE IT RESOLVED, That states, through their agencies, accept their responsibilities and establish a high priority for providing basic educational, health and continuing life services for this severely multi-handicapped population, and

BE IT FURTHER RESOLVED, That the Developmental Disabilities Council within each state insure the coordination of services for all deaf/mentally retarded persons.

Approve 45
Disapprove 1
Abstain 1
WHEREAS, the Developmental Disabilities Act has as a major priority the development of programs for the severely handicapped individual who has continuing life problems, and

WHEREAS, the recognized unmet needs of the deaf/mentally retarded population constitute an urgent national problem,

BE IT RESOLVED, That this problem is of such national significance that in considering its major priorities the National Advisory Council on Developmental Disabilities recommend to the Secretary of HEW that a request for proposals be issued to establish the financial and programmatic requirements for implementing and maintaining quality comprehensive services for this target population through all appropriate agencies, and

BE IT FURTHER RESOLVED, That demonstration models be funded and established by University Affiliated Facilities and/or other appropriate institutions and agencies to begin to serve the unmet needs of deaf/mentally retarded individuals. In addition to providing needed services, such programs will maintain adequate assessment and evaluation processes from which cost/benefit and cost-efficient data may be collected, analyzed, and disseminated to appropriate agencies.
WHEREAS, professional standards and standards of minimum human care vary grossly from state to state, and

WHEREAS, the federal courts have clearly established that all handicapped people are entitled to equal rights as United States citizens,

BE IT RESOLVED, That Congress assure, through legislation, that the Secretary of HEW or other appropriate executive officers establish guidelines that provide professional standards for health, educational service, and standards of minimum human care in all federal programs relating to deaf/mentally retarded individuals, and

BE IT FURTHER RESOLVED, That Congress assure, through legislation, that the Secretary of HEW seek advice from professional authorities in establishing these guidelines.

Approve 11
Disapprove 20
Abstain 7
WHEREAS, it is recognized that deaf/mentally retarded persons are only one group which is currently not being served.

BE IT RESOLVED, That the American Speech and Hearing Association report call attention to the fact that deaf/mentally retarded persons comprise only one such target population; therefore, future activities of the funding agency should consider examining other target populations as potential priorities for services.
WHEREAS, professional standards and standards of minimum human care vary grossly from state to state, and

WHEREAS, the federal courts have clearly established that all handicapped people are entitled to equal rights as United States citizens,

BE IT RESOLVED, That Congress assure, through legislation, that the Secretary of HEW or other appropriate executive officers require that all agencies (public and/or private) specify their procedures for insuring compliance with established professional standards for health, educational services, and standards for minimum human care in all federal programs for persons with deafness and mental retardation, and

BE IT FURTHER RESOLVED, That if no such standards exist, said agencies should specify the steps they will take in addressing themselves to the resolving of problems related to client health, educational, and human care services.
WHEREAS, not all children with hearing impairment and mental retardation at the pre-
school level are being identified, and

WHEREAS, parents and others responsible for the care and treatment of these children may
not be aware of the availability and/or need for comprehensive assessment.

BE IT RESOLVED, That efforts be made to determine the best means for informing these
persons of the availability of and need for such assessment services, including the
development of guidelines with respect to behavior that would prompt referral, the use
of various media, and field testing of effectiveness.

Approve 35
Disapprove 0
Abstain 0
WHEREAS, children who are mentally retarded often have hearing impairments which are
untected or often difficult to confirm, and
WHEREAS, the initial detection of hearing impaired mentally retarded children is complex,
often requiring multiple visits and specialized personnel, and
WHEREAS, resources are frequently not available or accessible in local communities, and
WHEREAS, it is frequently impractical for children to be transported long distances from
their homes for comprehensive assessment,
BE IT RESOLVED, That services be transported to remote local communities and catchment
areas, and
BE IT FURTHER RESOLVED, That for the purposes of identification, these services consist
of audiologic and other appropriate interdisciplinary services, and
BE IT FURTHER RESOLVED, That the home base for such services be, wherever possible,
located at a program that can coordinate follow-up comprehensive care.

Approve 33
Disapprove 0
Abstain 0
WHEREAS, hearing impaired children may fail to benefit from regular preschool and school programs because of intellectual deficit, and

WHEREAS, it is important to differentiate intellectual deficit from other causes of school failure,

BE IT RESOLVED, That workshops, seminars and other procedures be employed to increase the skills of those concerned with the education and treatment of the hearing impaired so that they can differentiate intellectual deficit from other causes of school failure.
WHEREAS, school age children and adults who may be hearing impaired and mentally retarded are located in various day and residential institutions or habilitation programs throughout any one state, and

WHEREAS, effective initial assessment of these individuals demands extended evaluation,

BE IT RESOLVED, That when transportation to and housing of these individuals in a regional center is not practical the parent agency should employ mobile units to reach this population, and

BE IT FURTHER RESOLVED, That these mobile units be staffed by a core interdisciplinary team composed of appropriate specialists such as an audiologist, communication specialist, psychologist, special education teacher, nurse, work evaluator, and social worker, and

BE IT FURTHER RESOLVED, That the mobile unit team work with and coordinate with the local professional personnel, and

BE IT FURTHER RESOLVED, That this core interdisciplinary team be responsible to a parent agency where action on the team's findings and recommendations can be coordinated and implemented with other agencies and established programs.

Approve 42
Dissaprove 1
Abstain 3
WHEREAS, admission criteria for residential placement of the hearing impaired and the retarded have not always heretofore included interdisciplinary comprehensive diagnosis and evaluation, and

WHEREAS, incomplete assessments may have resulted in inappropriate placement of children and adults into training centers for mentally retarded and educational programs for hearing impaired children and adults, and

WHEREAS, inappropriate placement may prevent the maximum educational, social, and personal development of these persons,

BE IT RESOLVED, That new interdisciplinary diagnostic assessment teams and those existing within University Affiliated Facilities provide complete assessments at all centers for the hearing impaired and mentally retarded in accordance with the assessment standards of the Joint Commission on Accreditation of Hospitals, and

BE IT FURTHER RESOLVED, That federal funds be made available on a matching basis to the states for the specific purpose of providing such diagnostic and assessment services.

Approve 37
Disapprove 0
Abstain 6
WHEREAS, the hearing impaired mentally retarded child and adult present unique diagnostic problems which are best served by a highly sophisticated interdisciplinary assessment team having comprehensive diagnostic facilities at their disposal, and

WHEREAS, identification and assessment centers for the deaf/blind possess the basic resources and organizational structure conducive to differential assessment of multi-handicapped children,

WHEREAS, having comprehensive diagnostic facilities at their disposal, and

BE IT FURTHER RESOLVED, That

WHEREAS, identification and assessment centers for the deaf/blind possess the basic resources and organizational structure conducive to differential assessment of multi-handicapped children,

BE IT RESOLVED, That present legislation under Part C of the Education of the Handicapped Act include provisions for and funding of programs for all children and young adults suspected of having at least one sensory impairment in addition to any other suspected handicapping conditions.

Present: Approve 38
Disapprove 2
Abstain 0
WHEREAS, adults who are hearing impaired and mentally retarded will need continuing care and follow-up.

BE IT RESOLVED, That all adults with hearing impairment and mental retardation be provided comprehensive health care, counseling and vocational services as needed, and

BE IT FURTHER RESOLVED, That those who are placed in community living facilities have a status and job review at least every five years.

Approve 27
Disapprove 5
Abstain 11
WHEREAS, some hearing impaired mentally retarded individuals have been denied treatment such as surgery indicated for otologic disease and palatal-dental deviations, and have been denied the benefits of hearing and speech prostheses solely on the basis of their sub-average functioning level, and

WHEREAS, hearing impaired mentally retarded individuals have the same constitutional rights to treatment and education as do all other individuals,

BE IT RESOLVED, That hearing impaired mentally retarded persons be provided the same medical services that are available to non-retarded individuals, especially in the management of otologic disease, palatal reconstruction, and orthodontic treatment, and

BE IT FURTHER RESOLVED, That hearing impaired mentally retarded persons be provided appropriate prosthetic devices (i.e. hearing aids, speech appliances), and

BE IT FURTHER RESOLVED, That provision of the above services be determined on an individual basis with due consideration being given to the primary physical or sensory needs and to the individual's functional capabilities in tolerating treatment and in managing or learning to manage prosthetic devices.

Approve 36
Disapprove 1
Abstain 0

*previously Resolution #8 as submitted by Group III (Teaching/Management/Supervision)*
WHEREAS, the hearing impaired mentally retarded population encompasses a multiplicity of degrees and kinds of handicaps.

WHEREAS, 

BE IT RESOLVED, That 

BE IT FURTHER RESOLVED, That 

WHEREAS, 

BE IT RESOLVED, That interdisciplinary assessment procedures be used in the diagnosis, evaluation, program planning, placement and diagnostic teaching procedures for all hearing impaired mentally retarded persons, and 

BE IT FURTHER RESOLVED, That interdisciplinary assessment and re-assessment be provided with parental or guardian consent by competent teams of individuals and include: (1) comprehensive audiolgiic evaluation to determine type and degree of hearing loss and to explore possibilities of amplification; (2) intellectual/psychological assessments; (3) assessment of language/speech/communication skills; (4) physiological evaluation (including medical, otological, neurological, visual, and motor function; (5) emotional and behavior assessment; (6) social case histories and social functioning; (7) educational achievement; (8) vocational and occupational assessments; and, (9) determination of recreational needs.

Approve 28

Disapprove 3

Abstain 2

Previously Resolution #2 as submitted by Group III (Teaching/Management/Supervision)
WHEREAS, it is necessary for hearing impaired mentally retarded persons to receive supportive services throughout their life span, and

WHEREAS, numerous community agencies provide these services,

BE IT RESOLVED, That legislation in each state designate a single source (directional) agency with power to involve appropriate agencies to insure (oversee) that hearing impaired mentally retarded persons receive all necessary and appropriate services needed throughout their lives, and

BE IT FURTHER RESOLVED, That legislation be considered by the states to mandate year-round educational services for hearing impaired mentally retarded persons from birth through, at least, twenty-one years of age, and

BE IT FURTHER RESOLVED, That agencies involved with hearing impaired mentally retarded persons assume a level of responsibility for services as designated by the attached chart.

*see attachment (p.114)

Approve  19
Disapprove 11
Abstain 11
<table>
<thead>
<tr>
<th>Services</th>
<th>Life Span</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Management</td>
<td>Birth, Childhood, Adolescence, Adulthood, Aging, Death</td>
</tr>
<tr>
<td>Pre/Elem/Sec.Ed.</td>
<td></td>
</tr>
<tr>
<td>Continuing Ed.</td>
<td></td>
</tr>
<tr>
<td>Voc. Habilitation</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
</tr>
<tr>
<td>Med'Health</td>
<td></td>
</tr>
<tr>
<td>Welfare</td>
<td></td>
</tr>
<tr>
<td>Foster Placement</td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
</tr>
</tbody>
</table>
WHEREAS, the parents or guardians of the hearing impaired mentally retarded generally have unique responsibilities and concerns,

WHEREAS,  

BE IT RESOLVED, That  

BE IT FURTHER RESOLVED, That

WHEREAS

BE IT RESOLVED, That parents or guardians be encouraged to participate in professional staffings assembled for interpretation of competencies, disabilities and programming needs of their child.

Disapprove 0

Abstain 0

*Appeared previously as Resolution #3
The Hearing Impaired Mentally Retarded: Recommendations for Action

RESOLUTION FORM

RESOLUTION NUMBER: 3
ACTION:
DATE:

PLEASE TYPE OR PRINT DOUBLE SPACE

WHEREAS, a critical need exists for teachers who possess specific skills for dealing

1. With the hearing impaired mentally retarded population (such as the interfacing of
devotional language abilities with life situation needs).

2. BE IT RESOLVED, That support programs for professional training of school personnel,
   retraining of allied professionals, and in-service training be given top priority by
   state departments of education, and

3. BE IT FURTHER RESOLVED, That guidelines for certification of teachers of the hearing
   impaired mentally retarded be defined nationally and promulgated to state certifying
   agencies.

Suggested Areas for Training Skills*

1. Developmental aspects of language
2. Living-learning experience programs
3. Functional analyses of behavior (programming skills and data
   reporting and collection)
4. Psychological aspects
5. Behavioral management principles and techniques
6. Command of interdisciplinary fields, i.e.: relevant terminology,
   knowledge of tests and measurements
7. Audioligic/statologic background
8. Hearing aid/amplification management
9. Communication training - proficiency in manual/oral communicative
   systems
10. Practicum with hearing impaired mentally retarded
11. Parent/client staff counseling techniques

*The above areas are intended for study and are not intended to be
an exhaustive list of training skills necessary for teachers of hearing
impaired mentally retarded individuals.

Approve 30
Disapprove 3
Abstain 0

*Appeared previously as Resolution #4
RESOLUTION FORM

RESOLUTION NUMBER........4*
ACTION........see below........
DATE........August 28, 1974

(PLEASE USE THE FOLLOWING FORM):

WHEREAS, ........................................
....................................................... and
WHEREAS, ........................................
BE IT RESOLVED, That ........................
....................................................... and
BE IT FURTHER RESOLVED, That ..........

1. WHEREAS, the data concerning the incidence and characteristics of the hearing impaired
mentally retarded population are grossly inadequate, and

2. WHEREAS, the data related to the availability and quality of services for hearing impaired
mentally retarded individuals are insufficient to help in providing coordinated programs
for this population,

3. 

4. 

5. 

6. 

7. BE IT RESOLVED, That the Secretary of Health, Education, and Welfare be charged with

determining and providing a mechanism for: (1) reviewing the status and development of
services for the hearing impaired mentally retarded population from birth to death; (2)
setting objectives, standards, and data procedures for educational and other services
required by the hearing impaired mentally retarded population; (3) determining priorities
in advancing services, research, and program evaluation; and, (4) advocating implementa-
tion of priority services through such strategies as drafting model legislation, under-
taking public education and disseminating information to professional practitioners.

8. 

9. 

10. 

11. 

12. 

13. 

14. 

15. 

16. 

17. 

18. 

19. 

20. 

21. 

22. 

23. *appeared previously as Resolution #5

Approve 32
Disapprove 2
Abstain 3

Page 1 of pp.

SUBMITTED BY: Teaching/Management/Supervision (Group III)
Data Submitted: August 27, 1974
WHEREAS, no organized system exists for gathering, analyzing and disseminating the available educational information regarding the hearing impaired mentally retarded population,

BE IT RESOLVED, That the National Center for Educational Media and Materials for the Handicapped, in concert with the network of regional centers, be charged with the acquisition, review, analysis and dissemination of curriculum content, techniques, and related materials for the hearing impaired mentally retarded population: (1) to survey existing curricula content, techniques and related materials developed within programs for the hearing impaired and within the programs for the mentally retarded which have relevance for the hearing impaired mentally retarded population; (2) to survey existing materials, techniques and curricula developed by programs serving the hearing impaired mentally retarded population; (3) to analyze the acquired materials, techniques and curricula in order to facilitate the generation of guidelines and objectives for evolving hearing impaired mentally retarded training/educational programs; (4) to conduct regional seminars and practica in promising strategies for the hearing impaired mentally retarded practitioners; (5) to stimulate research and demonstration projects based on the data acquired in the survey; and, (6) to establish procedures which will assure ongoing acquisition, evaluation, and dissemination of curricula, techniques, and materials appropriate for the hearing impaired mentally retarded population.

Approve 35
Disapprove 0
Abstain 0

* appeared previously as a portion of Resolution #6 & 7, combined
WHEREAS, no organized system exists to serve as a central clearinghouse for all information concerning the hearing impaired mentally retarded population,

BE IT RESOLVED, That the newly established Office of the Handicapped be charged with including the hearing impaired mentally retarded population within the scope of its clearinghouse services.

†subsequent to the Hunt Valley Conference, the Office of the Handicapped was renamed the Office for Handicapped Individuals
WHEREAS, this special population has no thoroughly researched and documented data available on standards for and effectiveness of approaches to curriculum, teaching, program design, use of diagnostic and evaluation tools, and professional/paraprofessional training programs that would safeguard total as well as individual program development.

BE IT RESOLVED, That a national evaluation system be designed that stimulates and directs the collection and analysis of data from programs for the hearing impaired mentally retarded including yearly evaluations that measure child-oriented behavior changes and yield measures of the effectiveness of total programs.

*appeared previously as Resolution #9
WHEREAS, teacher/pupil ratios should be optimal to insure maximum progress of individuals
given their abilities and should be in line with specified ratios for deaf/blind,
deaf, and mental retardation classes,

BE IT RESOLVED, That ratios be established for the hearing impaired mentally retarded
which are lower than ratios established for the deaf and for the mentally retarded at
comparable developmental levels.

Approve 30
Disapprove 2
Abstain 6

*appeared previously as Resolution #10
WHEREAS, demographic studies report that 8 to 12 percent of the hearing impaired population is also mentally retarded, and

WHEREAS, the needs of the hearing impaired mentally retarded population are not being met in existing programs indicating that a crisis situation may be extant; and

WHEREAS, there is a wide range of hearing impairments, degrees of mental retardation, age ranges, and educational/training settings, and

WHEREAS, all professionals preparing to work with the hearing impaired mentally retarded or other multi-handicapped hearing impaired persons should receive basic background preparation in the psychological, sociological, educational, and communicative problems/potentials of this population, and

WHEREAS, there are few professional/paraprofessional preparation programs,

BE IT RESOLVED, That professional and paraprofessional preparation programs for managing the hearing impaired mentally retarded population be established to include: short term (in-service, workshop, institute) preparation programs to upgrade skills of current personnel; long term preparation programs that extend the basic preparation beyond the level of Provisional Certification (Council on Education of the Deaf) to provide specialized preparation in the area of mental retardation, and
WHEREAS, ..............................................
 ..............................................................
 WHEREAS, ..............................................
 BE IT RESOLVED, That ....................................
 ..............................................................
 BE IT FURTHER RESOLVED, That .................

PLEASE TYPE OR PRINT, DOUBLE SPACE

1 BE IT FURTHER RESOLVED, That federal funding be provided for the support of such
specialized preparation programs, and

2

3

4 BE IT FURTHER RESOLVED, That such support be regional and determined on the basis of
appropriate criteria including: (1) interest and commitment of the institution; (2)
internal/external resources and facilities availability; (3) appropriate practicum
opportunities; and, (4) availability of diagnostic services with special expertise.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Approve 31

Disapprove 0

Abstain 2
WHEREAS, there is a dearth of experienced professional programs as well as a lack of sufficient federal and state funding, and

WHEREAS, hearing impaired mentally retarded programming requires a low pupil-teacher ratio (1:4) necessitating large numbers of instructional and supportive personnel,

BE IT RESOLVED, That: (1) an agency such as the Office of Demographic Studies with experience in conducting surveys of the hearing impaired population conduct an indepth study to determine the employment needs for professionals and paraprofessionals trained to work with the hearing impaired mentally retarded; (2) the office(s) of the Department of Health, Education, and Welfare assume responsibility for assisting regional and state agencies to obtain funding for the development and operation of one and two year paraprofessional preparation programs at the junior and community college level in addition to the use of non-credit approaches; (3) a number of model educational centers for hearing impaired mentally retarded persons be established by federal funding in both residential and day class settings to provide optimum service to this population and adequate practicum experience for the paraprofessionals; and, (4) four or five centers for the hearing impaired mentally retarded develop model demonstration programs for paraprofessional preparation with the option that additional centers be funded based on recommendations from the original demonstration centers and as a result of findings from the Office of Demographic Studies. Gallaudet College, Washington, D.C.
WHEREAS, certification standards are non-existent for professional and paraprofessional personnel serving the hearing impaired mentally retarded population, and

WHEREAS, standards should be derived from competency based criteria,

BE IT RESOLVED, That competencies developed at the ASHA-HMR Conference of August, 1974, at Hunt Valley, Maryland serve as a basis for professional certification at the graduate level, and that these competencies remain consistent with state requirements as delineated by the Council on Education of the Deaf (CED), and

BE IT FURTHER RESOLVED, That the question of paraprofessional certification be referred to CED for consideration, and

BE IT FURTHER RESOLVED, That the CED work cooperatively with state departments in the adoption and/or inclusion of determined standards.
WHEREAS, a disproportionately large number of hearing impaired mentally retarded persons
may be present within various minority groups, and

WHEREAS, hearing impaired individuals working at both professional and paraprofessional
levels might serve as effective models in that they may be more sensitive to the needs
of the hearing impaired mentally retarded population,

BE IT RESOLVED, That professional/paraprofessional training programs give high priority
to training members of minority groups and/or hearing impaired individuals, and

BE IT FURTHER RESOLVED, That federal, state, and local organizations direct specific
attention to the utilization of such individuals in programs designed to serve the
hearing impaired mentally retarded population.
PARTICIPANTS — HUNT VALLEY CONFERENCE

"Hearing-Impaired Mentally Retarded"

August 25-28, 1974

Dr. William Ambrose
Assistant Professor—Audiology
Division of Exceptional Children
University of Georgia
Athens, Georgia 30602

Mr. Ronald Anderson
Coordinator of Deaf Education
Dixon State School
820 East Second Street
Dixon, Illinois 61021

Mr. Wallace K. Babington
Director Office for the Handicapped
9311 South HEW
Department of Health, Education, and Welfare
Washington, D.C. 20201

Dr. Gerald J. Bentsberg
Director, Research and Training Center in Mental Retardation
Texas Tech University
Box 4510
Lubbock, Texas 79409

Dr. Grant B. Bitter, Director
Teacher Education, Area of the Deaf
190 Portland Street
Boston, Massachusetts 02114

Mr. Jerry Brown
Consultant, Hearing Services
Department of Public Instruction
Grimes State Office Building
Des Moines, Iowa 50319

Dr. Wallace T. Brune, Director
Tucker-Maxon Oral School for the Deaf
2840 S.E. Holgate Boulevard
Portland, Oregon 97202

Dr. William E. Castle
Dean of Instruction
National Technical Institute for the Deaf
Rochester Institute of Technology
P.O. Box 3415
Rochester, New York

Mr. David Costello
Teaching of the Hearing Impaired-Mentally Handicapped
Dixon State School
913 Chestnut Avenue
Dixon, Illinois 61021

Dr. Jerry B. Crittenden
Coordinator, Aural (Re) Habilitation
Apartment 45
Department of Communicology
University of South Florida
Tampa, Florida 33620

Mr. Richard J. Dowling
Director of Governmental Affairs
American Speech and Hearing Association
9030 Old Georgetown Road
Washington, D.C. 20014

Dr. Gilbert Delgado
Dean of the Graduate School
The Graduate School
Hall Memorial Building
Gallaudet College
Washington, D.C. 20002

Ms. Patria Forsythe
Professional Staff Member
Senate Subcommittee on the Handicapped
4230 New Senate Office Building
Washington, D.C. 20510

Mrs. Mary Gross
Teacher of the Deaf Retarded
Boulder River School and Hospital
314 13th Avenue
Helena, Montana 59601

Mr. Ernest Hirston
Education Program Specialist
Media Services and Captioned Films
BEIHJUSOE
400 Maryland Avenue, S.W.
Washington, D.C. 20202

Dr. Fredia K. Hammermeister
Coordinator, Program for the Education of the Hearing-Impaired
University of Pittsburgh
Department of Special Education and Rehabilitation
Pittsburgh, Pennsylvania 15260

Dr. William C. Healey
Associate Secretary for School Affairs
American Speech and Hearing Association
9300 Old Georgetown Road
Washington, D.C. 20014

Ms. Betty Heidbreder
Professional Staff Member
Senate Committees on Aging
Room G-225
Dirksen Senate Office Building
Washington, D.C. 20510

Ms. Judy Heumann
Research Assistant
Senate and Public Welfare Committee
4320 Dirksen Senate Office Building
Washington, D.C. 20510

Dr. Doin E. Hicks
Dean, Pre-College Programs
Director, MSSD, Gallaudet College
3 Kendall Green
Washington, D.C. 20002

Mr. Charles Hill
Executive Secretary—PRWAD
814 Thayer Avenue
Silver Spring, Maryland 20910

Ms. Ellen Horner
Administrative Assistant
American Association on Mental Deficiency
R.D. #1, Box 282
Spring City, Pennsylvania 19475

Ms. Doreen Karp Norman
Supervisor
Programs for Deaf and Hard of Hearing
Broward County Public Schools
Department of Special Education
Ft. Lauderdale, Florida 33310

Mr. James Kemp
Assistant Director of Regional Rehabilitation Center
Florida State University
Tallahassee, Florida 32304

Dr. Glenn L. Lloyd
Associate Director, Program for the Deaf
NYU Deafness Research and Training Center
80 Washington Square E
New York, New York 10003

Dr. Caroline Mitchell
Clinical Psychologist
Gallaudet Center for Communication Disorders
1966 Inwood Road
Dallas, Texas 75225

Dr. James W. Moss
Dean, Planning, Evaluation and Development
Child Development and Mental Retardation Center
University of Washington
Seattle, Washington 98101

Dr. Doris Naiman
Director of Training
New York University
School of Education
Deafness Research and Training Center
80 Washington Square East
New York, New York 10003

Dr. Paul S. Niswander
Chief Speech Pathology and Audiology
The Nisonger Center
1580 Cannon Drive
Columbus, Ohio 43210

Miss Wendie K. Nowlin
Special Worker/Center Coordinator
Georgia Center for the Multi Handicapped
2040 Ridgewood Drive, N.E.
Atlanta, Georgia 30307
APPENDIX C

Professional Resources

Alexander Graham Bell Association for the Deaf
3417 Volta Place, N.W.
Washington, D.C. 20007

American Academy of Pediatrics
1801 H Street, N.W.
Washington, D.C. 20006

American Annals of the Deaf
5034 Wisconsin Avenue, N.W.
Washington, D.C. 20016

American Association for Health, Physical Education, and Recreation
National Education Association Building
1201 16th Street, N.W.
Washington, D.C. 20036

American Association on Mental Deficiency
5201 Connecticut Avenue, N.W.
Washington, D.C. 20015

American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

American Psychological Association
1200 17th Street, N.W.
Washington, D.C. 20036

American Speech and Hearing Association
9030 Old Georgetown Road
Washington, D.C. 20014

Conference of Executives of American Schools for the Deaf
5034 Wisconsin Avenue, N.W.
Washington, D.C. 20016

Council on Education of the Deaf
1201 16th Street, N.W.
Washington, D.C. 20036

New York School for the Deaf
555 Knollwood Road
White Plains, New York 10603

Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

National Association of Coordinators of State Programs for the Mentally Retarded
2001 Jefferson Davis Highway
Arlington, Virginia 22202

National Association of the Deaf
814 Thayer Avenue
Silver Spring, Maryland 20910

National Association of Private Residential Facilities for the Mentally Retarded
8269 Leesburg Pike, Suite B5
Falls Church, Virginia 22044

National Association for Retarded Children
1522 K Street, N.W.
Washington, D.C. 20005

National Association of State Directors of Special Education
1201 16th Street, N.W.
Washington, D.C. 20036

National Association of State Mental Health Program Directors
15 E Street, N.W.
Washington, D.C. 20001

National Association of Superintendents of Public Residential Facilities for the Mentally Retarded
Dr. Richard C. Scheerenberger
Central Wisconsin Colony and Training School
317 Knutson Drive
Madison, Wisconsin 53704

Unified Cerebral Palsy
66 East 34th Street
New York, New York 10016
Governmental Resources

Bureau of Education for the Handicapped
U.S. Department of Health, Education, and Welfare
Regional Office Building 3, Room 2019
7th and D Street, S.W.
Washington, D.C. 20202

Maternal and Child Health
5600 Fishers Lane
Parklawn Building
Rockville, Maryland 20852

National Institute of Child Health and Human Development
National Institutes of Health
Bethesda, Maryland 20814

National Institutes of Health
Bethesda, Maryland 20814

National Institute of Neurological Diseases and Stroke
National Institutes of Health
Bethesda, Maryland 20814

Office of Child Development
400 6th Street, S.W.
Washington, D.C. 20013

Office for Handicapped Individuals and Office of Mental Retardation Coordination
330 C Street, S.W.
U.S. Department of Health, Education, and Welfare
South Building, Room 3517
Washington, D.C. 20201

Social and Rehabilitation Service
330 C Street, S.W.
U.S. Department of Health, Education, and Welfare
South
Washington, D.C. 20201

Rehabilitation Services Administration
U.S. Department of Health, Education, and Welfare
South
330 C Street, S.W.
Washington, D.C. 20201

Division of Developmental Disabilities
U.S. Department of Health, Education, and Welfare
South Building, Room 3014
330 C Street, S.W.
Washington, D.C. 20201

Committees

National Advisory Committee on the Handicapped
400 Maryland Avenue, S.W.
Washington, D.C. 20002

President’s Committee on Employment of the Handicapped
Vanguard Building
1111 20th Street, N.W.
Washington, D.C. 20210

President’s Committee on Mental Retardation
Washington, D.C. 20001


133
The Hearing-Impaired Mentally Retarded: Recommendations for Action


Appendix D


Recommendations for Action


Hodes, W., Possibilities in the rehabilitation of children suffering from hardness of hearing, auditory and mental retardation. *HNO*, 13, 233-235 (August 1965).


Indiana School for the Deaf, Multiply Handicapped Deaf Children. (Title III Educational Project) Indianapolis, Ind.: School for the Deaf (1973).


Little, S. W., Suspected hearing defects in phenylketonuria. *Arch. Otolaryng.,* 75, 515-518 (1962).


Lloyd, L. L., *Audiology Abbreviation in Initials.* Demonstration Project Report No. 35. Parsons, Kans.: Parsons State Hospital and Training Center (no date).

Lloyd, L. L., Comparison of six selected audiometric measures on mentally retarded children. Also Demonstration Project Report No. 36. Parsons, Kans.: Parsons State Hospital and Training Center (no date).

Lloyd, L. L., Helping your retarded patients with hearing impairments. Also Demonstration Project Report No. 23. Parsons, Kans.: Parsons State Hospital and Training Center (no date).


Appendix D


The Hearing-Impaired Mentally Retarded: Recommendations for Action


Luszki, W. A., A degree of hearing loss related to intelligence as measured by the WAIS and WISC. Doctoral dissertation, Univ. of Georgia (1964).


Nicolson, M., Speech and learning characteristics of the deaf mentally retarded. (abstract) *Asha,* 7, 400-401 (1965).

148


Parsons State Hospital and Training Center Speech and Hearing Department, A Report on the Speech and Hearing Program for All 106 State Institutions for the Mentally Retarded. Demonstration Project Report No. 5. Parsons, Kans.: Parsons State Hospital and Training Center (1964).

Parsons State Hospital and Training Center Speech and Hearing Department, A Report on the Speech and Hearing Programs for 104 Private and Residential Institutions for the Mentally Retarded. Demonstration Project Report No. 5. Parsons, Kans.: Parsons State Hospital and Training Center (1964).


Recommendations for Action


Püfan, C., Psychology of deafness as a branch of the psychology of deficiency. Rev. Psicol., 11, 81-90 (1965).


Appendix D


Shepherd, J., Intelligence testing of the multiple handicapped child with communication difficulties. *Spastics Quart.*, 14, 28 (1965).


Appendix D.


Smith, R. C., Relation between the lipreading ability and intelligence of the mentally retarded. (abstract) *Asha*, 7, 417 (1965).


Stepp, R. E. (Ed.), *Symposium on Research and Utilization of Educational Media for Teaching the Deaf*. Lincoln, Nebr.: Teachers College, Department of Educational Administration, Univ. of Nebraska (1968).


Vacalbre, L., Apparent subnormality caused by auditory defect or real subnormality with other causes contributing to the diagnostic differential orientation. Arch. ital. Laryng., 76, 189-198 (November-December 1968).


Appendix D


Appendix D


