

**Model State Plan for
Vocational Rehabilitation
Services to Persons who
are Deaf, Deaf-Blind,
Hard of Hearing,
or Late Deafened**

2008

**University of Arkansas RRTC
for Persons who are Deaf or Hard of Hearing**

**CSAVR Committee for Individuals who are Deaf,
Deaf-Blind, Hard of Hearing or Late-Deafened**

**MODEL STATE PLAN
FOR
REHABILITATION OF PERSONS
WHO ARE DEAF, DEAF-BLIND,
HARD OF HEARING OR LATE DEAFENED**

Edited by
Douglas Watson, Thomas Jennings, Patricia Tomlinson,
Steven Boone & Glenn Anderson

The University of Arkansas Rehabilitation Research and Training Center prepared this Fifth Edition of the MSP for Persons who are Deaf or Hard of Hearing in cooperation with the Council of State Administrators of Vocational Rehabilitation, Standing Committee on Services for Individuals who are Deaf, Deaf-Blind, Hard of Hearing or Late Deafened.

April, 2008

Published 2008

University of Arkansas
Rehabilitation Research & Training Center for
Persons who are Deaf or Hard of Hearing
26 Corporate Hill Drive
Little Rock, AR 72205

The contents of this publication were developed under a research and training center grant (H133B010501) from the National Institute of Disability and Rehabilitation Research, Office of Special Education and Rehabilitative Services, Department of Education, Washington, D.C. 20202. However, the contents do not necessarily represent the policy of that agency, and do not imply endorsement by the Federal Government.

All programs administered by the University of Arkansas Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing are rendered on a non-discriminatory basis without regard to disability, race, creed, color or national origin in compliance with the Rehabilitation Act of 1973. All applicants for program participation and/or services have a right to file complaints and to appeal according to regulations governing this principle.



COUNCIL OF STATE ADMINISTRATORS OF VOCATIONAL REHABILITATION

4733 Bethesda Avenue, Suite 330
Bethesda, Maryland 20814
(301) 654-8414 phone
(301) 654-5542 fax
www.rehabnetwork.org

Chief Executive Officer
Carl Suter
carlsuter@rehabnetwork.org

OFFICERS

President

Linda Mock
Portland, OR

President-Elect

Brian Sigman
Windsor, CT

Secretary/Treasurer

Andrea Guest
Wilmington, DE

Immediate Past President

Butch McMillan
Jackson, Mississippi

REGIONAL REPS

Region I

Paul Leather
Concord, NH

Region II

Rebecca Cort
Albany, NY

Region III

Vacant

Region IV

Larry Bryant
West Columbia, SC

Region V

John Connelly
Columbus, OH

Region VI

Barbara Madrigal
Austin, Texas

Region VII

Frank Lloyd
Lincoln, NE

Region VIII

Nancy Smith
Denver, CO

Region IX

Mick Coleman
Carson City, NV

Region X

Michael Graham
Boise, ID

COMMITTEE CHAIRS

Partnerships & Alliances
Stephaine Taylor, Salem OR

Deaf, Hard of Hearing,
Late Deafened & Deaf Blind
Linda Harrington, NC General

Employment

Steve Shivers, AL Combined
Human Resource Development

Charlene Dwyer, WI Combined
Bill Palmer, FL General

Legislative

John Connelly, OH Combined
Management Services

Joe Mathews, MT Combined

Rehabilitation Research
Mick Coleman, NV Combined

Social Security Relationships
Brenda Moore, CT General

Don Uchida, UT Combined

Transition

Bob Burns, MD Combined

Douglas Watson, Ph.D., Director
Rehabilitation Research & Training Center for Persons who are Deaf/HH
University of Arkansas
26 Corporate Hill Drive
Little Rock, AR 72205

January 28, 2008

Dear Dr. Watson:

On behalf of the Executive Committee of the Council of State Administrator for Vocational Rehabilitation (CSAVR) I am pleased to endorse and recommend the fifth edition of the Model State Plan for Rehabilitation of individuals Who Are Deaf, Deaf-Blind, Hard of Hearing, and Late Deafened.

This document is targeted specifically to State Vocational Rehabilitation agencies. It can be used to assess programs, staffing, and services for consumers with hearing loss along the full spectrum of hearing loss: deaf, deaf-blind, hard of hearing, and late deafened. It provides information and strategies for program assessment and development or enhancement of rehabilitation services for individuals with all varieties of hearing loss.

We thank the VR professionals and others who devoted their time and expertise to the development of this plan.

CSAVR strongly encourages full implementation of this Model State Plan.

Sincerely,

Linda Mock
President

Membership consists of the chief administrative officers of the state rehabilitation agencies responsible for administration of the state-federal rehabilitation programs in each of the states.

Preface to Fifth Edition

In 2006, the CSAVR Standing Committee on Services for Individuals who are Deaf, Deaf-Blind, Hard of Hearing and Late Deafened requested that a fifth revision of the Model State Plan (MSP) be undertaken to update and expand the MSP to address the needs of the entire spectrum of consumers with hearing loss. The CSAVR Standing Committee requested the assistance of the University of Arkansas Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing (RT-31) in working with a group of State Coordinators for the Deaf (SCDs) and others to revise the MSP.

This editorial group was charged with developing a comprehensive document that identifies and includes strategies to impact broad range of consumers with hearing loss and keep pace with legislation, technology, and service innovations since the fourth MSP edition (Watson, 1990). This new edition addresses, for the first time, the needs of all consumers with hearing loss served by rehabilitation, whether deaf, deaf-blind, hard of hearing or late deafened.

On behalf of the CSAVR Standing Committee, I recommend this fifth publication of the MSP. It is an excellent resource document to assist states with the development and improvement of rehabilitation services, as well as a being a model for building or restructuring state programs for individuals with all types of hearing loss.

My special thanks and appreciation is extended to the dedicated members of the editorial group, the University of Arkansas RT-31 staff, and others who gave their time, energy, and expertise in the development of this plan.

Authors and Contributors to the 2008 MSP

Tammy Adams, AL	Glenn Anderson, AR	Timothy Beatty, CA
Steven Boone, AR	Patty Conway, KY	Angela Feltner, TX
Terrye Fish, NC	Thomas Jennings, NJ	Susan Lascek, GA
Rubin Latz, MN	Rebecca Sills, GA	Linda Stauffer, AR
Patricia Tomlinson, NJ	Douglas Watson, AR	

The CSAVR Standing Committee encourages full implementation of this Model State Plan.

Sincerely,

Thomas G. Jennings
Chair, MSP Editorial Group
Past President, CSAVR
April, 2008

Table of Contents

	Page
Preface	v
Guiding Principles	vii
Acronyms	viii
Introduction	1
Chapter 1: People with Hearing Loss	3
Chapter 2: The Vocational Rehabilitation Process	18
Chapter 3: Personnel Development and Standards	33
Chapter 4: Transition Service	51
Chapter 5: Communication Access	62
Chapter 6: Technology and Accommodations	72
Chapter 7: Partnerships and Interagency Agreements (IAs)	85
Chapter 8: Independent Living Skills	94
Chapter 9: Future Directions	104
References	114

Guiding Principles

Goal: Through access to quality services and environmental supports, consumers with hearing loss will be able to work, advance in their careers, and live in communities of their choice. In their efforts to assist consumers achieve this goal, rehabilitation administrators, counselors, and related service providers will be guided by agency missions, professional ethics, and a set of core values that include the following:

- Treat all consumers with courtesy and respect.
- Recognize the unique characteristics, cultural diversity, and varied needs of this population.
- Ensure that individuals with hearing loss have easy access to services in their preferred mode of communication.
- Recognize that individuals with hearing loss are viable members of the workforce and have a right to economic independence.
- Believe in the “can do” of consumers seeking vocational rehabilitation and related services.
- Ensure that people with all levels of hearing loss have an even playing field commensurate with their abilities and skills.
- Be models of communicative access and workplace/community integration.
- Be models of innovation and continuous improvement in providing quality services to consumers.
- Develop partnerships that will maximize provision of services, employment opportunities, and self-sufficiency.
- Support and promote the efforts of employers who are committed to recruitment, hiring, retention, and advancement of employees with hearing loss.
- Advocate that the RSA support programs that adequately and effectively address the needs of this population.

Acronyms

ACA	Augmentative and Alternative Communication
AADB	American Association of Deaf-Blind
ADA	Americans with Disabilities Act
ALD	Assistive Listening Device
ALDA	Association of Late Deafened Adults
ASL	American Sign Language
BEI	Board of Evaluation of Interpreters
CA	Communication Assistant
CAN	Computer Assisted Note Taking
CART	Computer Assisted Realtime Transcription- Also known as Communication Access Realtime Translation
CDI	Certified Deaf Interpreter
CFR	Code of Federal Regulations
CIL	Center for Independent Living
CLV	Contact Language Varieties
CRC	Certified Rehabilitation Counselor
CRCC	Commission on Rehabilitation Counselor Certification
CRP	Community Rehabilitation
CS	Communication Specialist
CSAVR	Council of State Administrators of Vocational Rehabilitation
CSPD	Comprehensive System of Personnel Development
DB	Deaf-Blind
DSS	Disability Support Services Office
EDP	Equipment Distribution Program
FCC	Federal Communication Commission
FM	Frequency Modulation
GPS	Global Positioning System
HKNC	Helen Keller National Center
HL	Hearing Loss
HLAA	Hearing Loss Association of America
HoH or HH	Hard of Hearing
HR	Human Resource
IA	Interagency Agreement
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Educational Plan
IHE	Institution of Higher Education
IL	Independent Living
ILC	Independent Living Center
ILS	Independent Living Services
IP	Internet protocol
IPE	Individual Plan for Employment
IRI	Institute of Rehabilitation Issues
ITP	Individualized Transition Plan
LD	Late Deafened
LFD	Low Functioning Deaf

LD	Late Deafened
LFD	Low Functioning Deaf
LVD	Large Visual Display
MHz	Megahertz
MICS	Missouri Interpreter Certification System
MOU	Memorandum of Understanding
MSP	Model State Plan for Vocational Rehabilitation of Persons Who Are Deaf, Deaf
NAD	National Association of the Deaf
NADC	National Asian Deaf Congress
NBDA	National Black Deaf Advocates
NCDB	National Coalition on Deaf
NFADB	National Family Association for the Deaf
NFB	National Federation for the Blind
NTID	National Technical Institute for the Deaf
NTS	NTS- Nex Talk Service
QUAST	Mid America Quality Assurance Screening Test
PDA	Personal Digital Assistant
PEPNET	Postsecondary Education Programs Network
PEP-D	Post-Employment Training Administration of Programs Serving Consumers who are Deaf and Hard of Hearing
PL	Public Law
POP	Print on Palm
RCEP	Rehabilitation Continuing Education Program
RCD	Rehabilitation Counselor for the Deaf
RCDB	Rehabilitation Counselor for Deaf-Blind
RCHH	Rehabilitation Counselor for the Hard of Hearing
RID	Registry for Interpreters for the Deaf
RP	Retinitis Pigmentosa
RSA	Rehabilitation Services Administration
RT	Research & Training Center
SCD	State Coordinator for Services for Individuals Who Are Deaf
SCDB	State Coordinator for Services for Individuals Who Are Deaf
SCDHH	State Coordinator for Services Individuals Who Are Deaf and Hard of Hearing
SCHH	State Coordinator for Individuals Who Are Hard of Hearing
SCPI	Sign Communication Proficiency Interview
SERID	Southeast Regional Institute on Deafness
SERTOMA	Services To Mankind
SILC	State Independent Living Council
SLPI	Sign Language Proficiency Interview
SRC	State Rehabilitation Council
SSA	Social Security Administration
SSDI	Social Security Disability Insurance
SSI	Supplemental Security Income
TDD	Telecommunication Device for the Deaf

TEDPA	Telecommunications Equipment Distribution Program
TRS	Telephone Relay System
TTY	Teletypewriter
USBLN	United States Business Leadership Network
VCO	Voice Carry Over
VR	Vocational Rehabilitation
VRI	Video Remote Interpreting
VRS	Video Relay Services
WIA	Workforce Investment Act

INTRODUCTION

This is the fifth edition of the Model State Plan. The first three editions (Schein, 1973; Schein, 1978; & Schein, 1980) were published by the New York University Deafness Center (RT-17). The fourth edition of the MSP (Watson, 1990) was published by the University of Arkansas Rehabilitation Research & Training Center for Persons who are Deaf or Hard of Hearing (RT-31). All four prior editions have been written by representatives of state agencies, regional programs, and national organizations who were experts in the field of deafness rehabilitation, including experienced State Coordinators for the Deaf (SCDs). Many agency administrators, other agency personnel, federal officers, and consumer advocates reviewed and provided feedback to enhance these documents. Leadership has come from the Council of State Administrators of Vocational Rehabilitation (CSAVR) Committee on Deafness- now the CSAVR Committee on Deaf, Deaf-Blind, Hard of Hearing, and Late Deafened - in concert with the National Research and Training Centers on Deafness. The intended audiences have been state directors of vocational rehabilitation, SCDs, Rehabilitation Counselors for the Deaf (RCD), Regional Rehabilitation Continuing Education Programs (RRCEPs), and the Rehabilitation Services Administration (RSA).

MSP revisions have been driven by Amendments to the Rehabilitation Act as they have mandated new initiatives: 1978 (PL 99-602) introduced Independent Living and 1986 (PL-99-506) introduced transition and supported employment. This fifth edition addresses changes made in the most recent Amendments of 1992 (PL 102-973) and 1998 (PL 105-220) which introduced consumer informed choice and strengthened consumer active participation in employment plan development. These principles are critical to making the case for communication accessible services for our target populations.

The original intent of the CSAVR Committee was to offer a document that provided guidance to states for development of specialized services and personnel to work with a unique subpopulation of consumers with hearing loss – those who are deaf and primarily dependent on visual communication (e.g., Sign Language). With the 1990 edition, the scope was expanded to include a section on consumers who are hard of hearing and late deafened. This fifth edition for the first time recognizes that there are four distinct subpopulations of consumers with hearing loss - culturally deaf, deaf-blind, late deafened, and hard of hearing, all with their own set of unique communication and service needs. This MSP offers an even playing field to all.

In 1976, the CSAVR Committee on Deafness, in conjunction with the New York University Research and Training Center, conducted a survey to determine the extent of implementation of the original MSP. The survey documented almost universal acceptance of the MSP as a concept. Some states had adopted the guidelines in their entirety. Others adopted guidelines to some extent. Over the ensuing years states have retained these “recommended” programs and staff to varying degrees. It is of interest to note that the titles “SCD” and “RCD” were coined by the original MSP and have survived over the thirty plus intervening years.

There is growing awareness that services to meet the needs of consumers who are culturally deaf are not meeting the needs of consumers who do not use sign language for communication and who have different psychosocial, and employment service needs. Some states have developed comprehensive programs to include these populations, while others are struggling with staffing, training, and service delivery issues.

In developing programs for consumers who are hard of hearing, late deafened, and deaf-blind, we find parallels to the issues we dealt with in the 1970s when we were making the case for specialized services for signing culturally Deaf consumers -- most agencies have a “generalist” philosophy of counselor assignments and resist specialized caseloads. The agency needs to understand that the target populations do in fact have unique needs that require specialized staff and services. Consumers are reluctant to seek services where their preferred communication needs are not effectively met. Consumers generally are not aware that there is a wide scope of vocational rehabilitation services available that can address their unique employment needs. Services that are communication accessible need to be advocated for and developed. When special programs and staff show successes, the consumer base increases and programs are replicated.

These are challenging times. Recruiting and maintaining a workforce of qualified counselors who meet CSPD standards and have the additional expertise to serve these target populations is becoming increasingly difficult. This problem is exacerbated by the decline in recent years in the number of specialized pre-service training programs in rehabilitation counseling, especially those with federal-support. In addition, many existing programs were initially designed to prepare counselors to serve deaf consumers (RCDs). These programs have struggled to infuse and provide comparable specialized training toward the needs of the other distinct groups within the population. Clearly identifying staff to serve signing as well as non-signing consumers will demand creative strategies in times of “doing more with less.” The National Research and Training Center on Deaf and Hard of Hearing- supporting VR programs nationally for more than thirty years - has not been refunded, leaving a major void in leadership and cutting edge practices. The RSA Office on Deafness and Communication Disorders- supporting states since the early 1970s- has been disbanded along with the Regional Offices and their staff specialists in hearing loss. Each of these challenges has impacted the field’s ability to provide critically needed services to these target groups. We hope that this MSP provides strategies that will assist states to meet the needs of the diverse target populations and maintain quality services in spite of the challenges faced.

We are proud of the work of the editorial group who authored this fifth edition of the MSP. We endorse it as an excellent set of guidelines for enhancing services for the full range of VR consumers who have hearing loss.

The Editors
April, 2008

CHAPTER ONE

PEOPLE WITH HEARING LOSS

People with hearing loss represent a highly diverse group. The various sub-populations in this group present major service challenges to the vocational rehabilitation system (VR) and its allied network of service providers (e.g., comprehensive rehabilitation centers, postsecondary education programs, and community-based rehabilitation programs). This chapter provides an introduction to the target population, basic demography estimates of their prevalence, and recent data regarding their participation in vocational rehabilitation services.

Introduction to the Target Population and Rehabilitation Needs

Hearing loss is the most prevalent, chronic, physically disabling condition in the United States today. Applying estimates of the prevalence of the population to contemporary population data from the United States Census, it is estimated that more than one in every ten Americans, or 30.6 million among 300 million, have a hearing loss. Approximately 18 million of these persons are of working age (16 to 64 years old). The employment status of working age (21-64) persons with hearing loss varies depending on level of loss. McNeil (1993) reported that 63.6% of persons with some functional limitation in their hearing ability were employed and 58.2% of those totally unable to hear normal conversational speech were employed. In comparison, 80.5% of all persons ages 21-64 without a disability were employed.

Hearing loss is becoming more prevalent among the general population. In an analysis of National Health Interview Surveys from 1971 to 1981, Ries (1985) reported that prevalence rates for hearing problems across all ages have increased steadily from 71.6 to 82.9 per 1,000 of the general population. The greatest increases occurred in the under 17 age group and 45 to 64 age groups. These trends have continued with the aging of the “baby boomer” population who are experiencing age-related hearing loss, and with people living longer.

A vast array of services has been directed toward the rehabilitation needs of these populations resulting in positive employment outcomes. For example, in analysis of the 2006 RSA-911 database regarding all persons with hearing loss, 79% (25,664 of 32,599 consumers served) obtained employment. Persons with hearing loss are highly successful in obtaining employment as compared to persons with other disabilities. In 2006, 56% of persons with other disabilities obtained employment (180,126 of 319,538 consumers served). Furthermore, it is significant that in FY 2006, 12.4% of all cases closed with an employment outcome (status 26) were for individuals who had some type and degree of hearing impairment as their primary disabling condition. This increase in closed cases for persons with hearing impairment continues a trend beginning in FY2002, where for the first time individuals with hearing loss represented at least 10% of successful case closures for all persons served by VR, an increase that resulted from consecutive

increases in annual percentage rates since 1998 (Kosovich, 2004). Attachment 1 presents comparable historical data regarding rehabilitation outcomes for consumers with hearing loss for over 40 years. Despite this overall success, substantial needs remain for specific subgroups within the population.

Even though this target population shares hearing loss as a disability, it is not a homogeneous population. Persons with hearing loss vary on degree and type of loss, age at onset of loss, preferred communication mode, and race or ethnic background. Examples of the diversity of this population are evident in the variety of terms used to describe its various subgroups such as: deaf, deaf-blind, hard of hearing, late deafened, minority deaf, and traditionally underserved or "low functioning" deaf. These differences impact upon the nature of vocational rehabilitation needs and the resulting service delivery models and programs designed to meet these needs.

Vocational Rehabilitation Services for Persons with Hearing Loss

In 2003, the coding scheme for disability or impairment type utilized by RSA changed to a new system that recognizes the following categories of consumers. (See Attachment 1.2). The intent behind these changes was to shift focus to the more "functional" aspects of deafness or hearing loss, primarily related to the person's functional communication and its impact at work. The current coding scheme includes:

Contemporary definitions and codes for the population using RSA 911 Instructions

- 03 Deafness, Primary Communication Visual
- 04 Deafness, Primary Communication Auditory
- 05 Hearing Loss, Primary Communication Visual
- 06 Hearing Loss, Primary Communication Auditory
- 07 Other Hearing Impairments (Tinnitus, Meniere's Disease, Hyperacusis, etc)
- 08 Deaf-Blind
- 09 Communicative Impairments (expressive/receptive)

Deafness, Primary Communication Visual (*Category 03*). In general terms, persons from category 03 may include persons traditionally identified as Deaf who rely upon sign language as their primary communication strategy. Such persons often depend on sign language interpreters when involved with others who use speech and hearing for communication, while using text technology and video relay for telecommunication as well as captioning for access to media.

Traditionally, Deaf persons are those with "a hearing loss of such severity that the individual must depend primarily upon visual communication such as writing, text reading (i.e., CART or computer-aided real-time translation), speech reading, American Sign Language, sign language interpreting, and gestures" (RSA, 1984, p. 15; Watson, 1990; Watson & Taff-Watson, 1995). Historically, these persons have been recognized as in need of a broad array of rehabilitation services which take into account the ways in which the severity of their hearing loss impacts functioning within a variety of life

domains, including academic, vocational, and social functioning (Boone & Long, 1988; Watson, 1990; Watson & Taff-Watson, 1995). Within the employment domain, persons who are deaf experience problems and barriers across all aspects of the employment continuum, ranging across the transition from school to postsecondary training, entry into the labor force, job maintenance, job advancement, and job retraining (Anderson & McGee, 1996; Boone & Long, 1988; Foster, 1992; Schroedel & Watson, 1991).

Deafness, Primary Communication Auditory (*Category 04*). Persons who would be coded category 04 include persons who do not primarily rely upon sign language for communication including the “oral deaf,” or non-signing persons considered late deafened.

This group includes individuals with adult onset hearing loss, commonly identified as "late deafened." and those who are described as “oral deaf.” Late Deafened persons have an onset of deafness or severe loss of hearing that occurred after the normal acquisition and development of speech and language. Although the onset of late deafness can occur suddenly or over a period of years, the age at onset generally occurs during adolescence or adulthood (Howe, 1993-1994). The prevalence of adult onset deafness among persons in the general population is relatively high. Using data from the National Health Interview Survey, Ries (1992) noted that 73.4% of persons who had no measurable hearing or at best could hear words shouted in the ear, reported an onset of hearing loss after 19 years of age. Similar findings were noted 20 years earlier by Schein and Delk (1974), whose national survey found that more than two-thirds of the respondents who reported being unable to hear or understand speech had an age of onset at 19 years of age or older.

In functional terms, late deafened adults can no longer understand speech without visual clues and cannot rely on audition alone as a means of receptive communication (Howe, 1993-1994; Region VI Rehabilitation Continuing Education Program, University of Arkansas, 1993). While some late deafened persons may use assistive listening devices, they depend on visual or tactile modes of communication to replace or supplement audition, such as speech reading, text reading (e.g., CART), sign language, interpreting, or tactile cuing. With regard to rehabilitation service outcomes, assessment of RSA-911 data indicated that many late deafened persons are underserved or experience less than satisfactory outcomes (Howe, 1993-1994).

People who become deaf during adulthood face substantially different adjustment challenges than those who became deaf during childhood. Many late deafened persons must relearn various ways of coping in their everyday lives. Among their rehabilitation service needs are those related to retraining and/or pursuing postsecondary training, learning about assistive technology and communication accommodations, and learning self-advocacy skills to obtain appropriate accommodations in school or on the job (Graham, 1995; Howe, 1993-1994; Scherich, 1996). Among their independent living and community adjustment needs are those related to finding social and cultural activities where communication is not stressful and learning coping skills to help resolve

communication barriers and the experience of being "estranged" from significant others in their home, community, or work settings (Graham, 1995, Howe, 1993-1994).

The other group in this category is generally referred to as "Oral Deaf." Oral deaf persons include those who grow up audiotically deaf, but do not learn or use American Sign Language as a primary communication choice. As such, they may not subscribe to the cultural norms of those members of the Deaf community who use sign language, especially ASL, as their primary means of communication..

Hearing Loss, Primary Communication Visual (*Category 05*). Persons who would be coded category 05 may include persons who are audiotically hard of hearing and utilize vision for communication.

Persons who are hard of hearing include those with a hearing impairment resulting in a functional loss, but not to the extent that the individual must depend primarily upon visual communication. These persons exhibit different, but significant, rehabilitation needs. A detailed discussion of their needs is presented in the document, *Rehabilitation of Individuals who are Hard of Hearing and Late Deafened: A Guide for Rehabilitation Practitioners* (Region VI Rehabilitation Continuing Education Program, University of Arkansas, 1993) and in Stone and Fennell (1990). Although members of this group may experience problems and barriers across the full continuum of employment, many authors note that on-the-job communication and interactions with supervisors and co-workers, job retention, and job advancement are prominent areas of concern (Hetu & Getty, 1992; Stone & Fennell, 1990). In addition, persons who are hard of hearing also experience problems similar to persons who are deaf in areas such as job interviewing and entry, access to workplace accommodations, lower wages than persons without disabilities, and diminished opportunities for job advancement (Foster, 1992; Mowry, 1987; Schein, 1987; Scherich, 1996).

Hearing Loss, Primary Communication Auditory (*Category 06*). Persons who would be coded category 06 include persons who have lost some of their hearing ability but are able to communicate with others - most often through speech and hearing, with or without hearing technology. These "Hard of Hearing" individuals have the ability to hear spoken communication and understand some or all of what is spoken in various situations depending on their ability and willingness to use assistive technology. The key rehabilitation need for many of these individuals lies in provision of appropriate technology, including hearing aids as well as other assistive listening devices. In addition, many experience psychosocial barriers in their personal and work lives. These barriers often result in significant rehabilitation needs that go beyond technology. Many of the needs of this population are also clearly presented in *Rehabilitation of Individuals who are Hard of Hearing and Late Deafened Guide* (University of Arkansas RRCEP, 1993) that was previously described.

Other Hearing Impairments (*Category 07*). Persons who would be coded category 07 may represent a number of persons who for the most part have hearing impairment that may not in fact impact their ability to communicate in most situations.

Persons who are Deaf-Blind (Category 08). The deaf-blind population is heterogeneous due to a myriad of factors: etiology, age of onset, degree of vision and hearing loss, communication preference, educational background, life experience, cultural background and strengths and ability.

Persons who are deaf-blind can benefit from a comprehensive and holistic approach to rehabilitation. Services can be extensive, depending on many factors including psychosocial adjustment and training needs such as alternative communication methods, orientation and mobility, vocational exploration and work experience and adaptive skill for community living. The disability of deaf-blindness creates barriers and challenges in communication resulting in isolation. Opportunities for these individuals to participate in collaborative learning with peers are positive in building self-esteem and a sense of identity with the community.

Rehabilitation service needs of consumers who are deaf-blind are varied and the pace of individual progress may be slower than expected of persons with other disabilities due to the dual sensory loss. Because of the unique needs of this low incidence group, individualized and specialized rehabilitation services by a multi-disciplinary team is beneficial. Vocational training, inclusive to an individual who is deaf-blind, must consider communication access as the primary factor for success. A number of factors are significant to overcoming barriers to employment. These include, but are not limited to adjustment to vision and hearing loss, orientation and mobility, transportation, communication access, self-advocacy, adaptive technology, adaptive skills for community living, social opportunities and social skills, and provision of support service providers (SSPs).

Communicative Impairments - expressive/receptive – (Category 9). Persons who would be coded category 09 represent those individuals whose speech and language impairments come in combination with other impairments such as cerebral palsy, TBI, stroke, mental retardation, multiple sclerosis, deafness, etc.

Populations Posing Challenges to VR

In addition to these primary coded groups, it is critical to note that there are two additional groups of individuals with hearing loss that are likely to be served by vocational rehabilitation programs. While not formally identified in the RSA-911 coding system, members of these groups often present significant rehabilitation needs. The two groups include (1) those who have hearing loss and are members of racial or ethnic minority groups and (2) persons identified as deaf and low functioning or at risk.

Consumers with Hearing Loss and Members of Racial or Ethnic Minority Groups

Information concerning the prevalence and incidence of hearing loss among persons from diverse groups (African-American, Hispanic or Latino, Asian/Pacific Islander, or Native American) is not well developed. Schein and Delk (1974) reported a prevalence rate for

persons who are non-white of 150 per 100,000, which was substantially lower than for persons who are White. Similarly, Hotchkiss (1989) analyzed 1987 NCHS data and reported lower prevalence rates for African-Americans across all ages.

Prevalence rates, however, do not provide an indication of the proportion of the population of persons who are deaf and hard of hearing and are also members of diverse racial or ethnic minority groups. Very little data exist to address this issue. Existing data is based on student populations (Allen, Rawlings, & Schildroth, 1989; Cohen, Fischgrund, & Redding, 1990; Schildroth & Hotto, 1995). For example, Allen, Rawlings, and Schildroth (1989) based their research on studies of the transition of students who are deaf from school to work. Their sample was 21% Black, 11% Hispanic, and 4% other. The Annual Survey of Deaf and Hard of Hearing Children and Youth, as reported by Schildroth and Hotto (1995), revealed two significant trends occurring among educational program serving deaf or hard of hearing students: (a) a decrease in the percentage of White student enrollments from 76% to 60% and (b) an increase in the percentage of minority student enrollments from 24% to 40%. The most significant changes were noted in Hispanic/Latino student enrollments, which increased from 7% to 16%. They also reported some notable geographical trends, which have significant implications for rehabilitation programs. In many states, particularly those in the South, Southwest, and West, there were higher enrollments of minority students compared to White students.

These enrollment trends indicate that minority students are becoming the "new majority" in educational programs serving deaf or hard of hearing students (Anderson & McGee, 1996). The dramatic changes in the demographic makeup of students in educational programs indicates that by the end of this decade, minority persons will comprise a major proportion of the caseloads of many state VR and community-based rehabilitation programs, particularly those in the South, Southwest, and West. On a final note regarding prevalence estimates, the number of persons who are either hard of hearing or late deafened and members of diverse racial or ethnic minority groups is unavailable.

With regard to employability issues, persons who are deaf or hard of hearing and members of a racial or ethnic minority group experience problems and barriers across all levels of the employment spectrum. These issues range from inadequate academic preparation to making successful transitions from high school to postsecondary training and/or work, high attrition from postsecondary programs, and inadequate preparation for job entry and advancement in the workplace (Anderson & McGee, 1996; Anderson & Watson, 1993; MacLeod-Gallinger, 1993; Schroedel & Watson, 1991).

Persons who are labeled as “Low Functioning” or “At Risk”

Persons who are labeled as “low functioning” or “at risk” include those who have historically been identified as a priority target population largely on the basis of common "functional" characteristics in addition to deafness (IRI, 1999; National LFD Model, 2005; Commission on Education of the Deaf, 1988; Mathey & Lafayette, 1990; Stewart, 1979). Although a precise definition for this target group is not available, these persons

generally tend to exhibit functional limitations in the academic achievement skills needed to pursue advanced training at the postsecondary level, the communication and social skills for independence on the job and in the community, and the vocational skills to independently obtain and maintain employment (Hurwitz, 1989; Long, Long, & Ouelette, 1993; Mathey & Lafayette, 1990). A set of mediating factors that also tend to have relevance when identifying the common characteristics associated with this target group include possessing one or more disabilities in addition to deafness (Hurwitz, 1989; Stewart, 1979). The relevance of possessing one or more additional disabilities can be noted in the terms that have historically been used to describe this target group, such as developmentally disabled, multiply-disabled, and severely disabled (Long, Long, & Ouelette, 1993).

Data from the Annual Survey of Deaf and Hard of Hearing Children and Youth (Schildroth & Hotto, 1994, 1995) indicate that approximately 30% of the students identified by the survey each year exhibit educationally significant disabilities in addition to deafness. The rehabilitation implications of these educationally significant secondary disabilities are considerable. Schildroth and Hotto (1994) reported that students without additional disabilities are more likely to graduate with a high school diploma than those with additional disabilities. In today's job market, a high school diploma combined with a post-high school vocational training certificate have become the minimum required to qualify for many entry-level jobs (Anderson & McGee, 1996). Furthermore, while specific data were not available, anecdotal evidence from programs that provide direct services to this target population noted a high prevalence of additional disabilities among those they served (Long, Long, & Ouelette, 1993). Finally, the lack of a precise definition has hindered the availability and dissemination of data regarding the prevalence of this target population for the purposes of program planning and development.

The rehabilitation needs of low functioning persons, in contrast to other target groups of persons who are deaf or hard of hearing, generally require services and programming that, for the most part, are highly specialized, comprehensive, and long term. These types of employment preparation, independent living training, and ongoing transitional services tend to be costly and intensive. In most places, these types of long-term or extended services are provided by community rehabilitation programs. Also, effective service delivery to this population requires professionals with highly specialized training, experience, and skills. As a consequence, only a few programs in the U.S. have the mix of specialized services and qualified professional personnel to adequately meet the needs of this group. The lack of systematic program evaluation and outcome studies at these programs has hindered the rehabilitation profession's efforts to adequately respond to the needs of this target population as well as improve existing service delivery systems.

Estimates of Prevalence

By applying previous estimates of the prevalence of hearing loss to contemporary data from the United States Census, it is possible to estimate the number of Americans with three types of hearing loss. Since the incidence of hearing loss varies significantly by

age, it is also critical to look at these estimates by key age groups within the population. Since there has never been a comprehensive census of the parameters of this population, it is necessary to base estimates of the population on a number of key assumptions (Schroedel, 2006). These key assumptions include:

More than one in every ten Americans, or 30.6 million among 300 million, has a hearing loss.

According to research conducted by Kochkin (2007), the population of people in the United States with hearing loss has grown from an estimated 28 million in 1989 to over 31 million in 2004, and is anticipated to grow to 40 million people in less than a generation. About a half million are Deaf and the rest are hard of hearing or late deafened. The number of hard of hearing and late deafened people is increasing as the population becomes older. Over the age of 45, the percentage of people having a hearing loss increases sharply, and over the age of 70 may reach as high as 50 percent. As the workforce ages, these statistics have real implications for vocational rehabilitation programs. There has also been an increase in the number of younger people having noise induced hearing loss from loud music and occupational noise.

Several factors explain why this new estimate is higher than previously reported estimates.

- The population is increasing as the nation yearly adds 2.8 million individuals.
- The population is “graying” as people live longer. Increase in age is closely associated with increased prevalence of hearing loss: 26% of those 65 to 74 years old and 40% of those 75 and older have a hearing loss compared to 2% of those under age 18.
- The “baby boomer” bubble, or those born between 1945 and 1964, comprises the largest age group across the chronological age spectrum. As these persons become older, increasing numbers begin to lose their hearing: 15% of those in this age range have a hearing loss.

Following these socio-demographic trends, we refined our population calibrations to more accurately estimate the total number of persons with hearing loss as well as those in specific age groups.

Table 1.1
Prevalence of Hearing Loss in America (Schroedel, 2006)

Age Group	Deaf	Late Deafened	Hard of Hearing	Total
15-19	49,200	None	1,376,300	1,425,500
20-44	211,200	1,236,500	4,673,200	6,121,100
45-64	372,800	2,183,400	8,252,500	10,808,800
65-74	169,500	992,200	3,750,400	4,912,100
75 up	254,300	1,489,700	5,630,600	7,374,700
Total	1,057,300	5,901,800	23,683,000	30,642,200

Comparable estimates are not available for deaf-blindness. Prevalence of deaf-blindness in the United States differs widely and has been estimated by RSA to be approximately 41,000 individuals at all ages of onset. It is believed by geneticists that more than half are deaf-blind due to Usher's Syndrome. Aging of the population is increasing the prevalence of deaf blindness. Examination of data regarding seniors illustrates this increase (Sansing, 2006). These estimates were based upon the results of the National Health Interview Survey.

Table 1.2
Prevalence of Seniors Age 55 and above with Sensory Loss (vision, hearing or dual loss):

Total sensory loss 2005	-	9.79 million
Projected by 2010	-	10.63 million
Dual sensory loss 2005	-	1.134 million
Dual sensory loss projected by 2010	-	1.2114 million

Source: National Health Interview Survey, 2006.

Participation of Persons with Hearing Loss in Vocational Rehabilitation

Population estimates are useful in defining the parameters of the population. However it must be noted that many of these individuals may not need or be eligible for services from VR. Despite this lack of participation, it is clear that many persons (i.e., 40,000 to 50,000 each year) do receive significant services from VR on an annual basis. The national RSA-911 database tracks rehabilitation services received, the characteristics, and rehabilitation outcomes achieved by these individuals on an annual basis.

Historically, VR has provided services to this population that is beneficial in producing employment outcomes. Table 1.3 presents RSA-911 data for three recent Fiscal Years

(FY 2004, FY 2005 & FY 2006) to illustrate the outcomes of those persons closed by the Federal/State VR program who have achieved a successful employment outcome as compared to persons with all other impairments. Additional longitudinal evidence for the success of vocational rehabilitation in producing employment outcomes for persons with hearing loss is included in Attachment 1.1.

Table 1.3
Rehabilitation Employment Outcomes of Persons who are Deaf or Hard of Hearing Compared to All Closures– FY 2006-2004

FY 2006	All Other Impairments	All Hearing Loss	03 Deaf, Visual	04 Deaf, Auditory	05 H.L. Visual	06 H.L. Auditory	07 Other HL	08 Deaf Blind
All Closures	579145	38004	9352	3237	3751	19712	1507	445
Employment Outcome	181703	24,088	4,474	1,962	2244	14230	947	231
Percent with Successful Outcome	31.4%	63.4%	47.8%	60.6%	60.0%	72.2%	63.0%	52.0%
FY 2005								
All Closures	581097	35782	9310	3029	3675	17861	1457	450
Employment Outcome	184324	22371	4397	1865	2179	12813	899	218
Percent with Successful Outcome	31.7%	62.5%	47.2%	61.6%	59.3%	71.7%	61.7%	48.4%
FY 2004								
All Closures	618574	35466	9640	2974	4009	16913	1433	497
Employment Outcome	191753	21679	4548	1752	2368	11892	864	254
Percent with Successful Outcome	31.0%	61.0%	47.2%	58.9%	59.1%	70.3%	60.3%	51.1%

Additional evidence regarding wages of persons with hearing loss compared to persons with other impairments is provided in Table 1.4. This Table presents means weekly wages at closure for FY 2006.

Table 1.4
Weekly Wages at Closure for Persons who are Deaf or Hard of Hearing Compared to All Closures– FY 2006

FY2006	All Other Impairments	All Hearing Loss	03 Deaf, Visual	04 Deaf, Auditory	05 H.L. Visual	06 H.L. Auditory	07 Other HL	08 Deaf Blind
Mean	319	455	344	434	413	499	498	320
Standard Deviation	235	325	224	302	252	354	325	312
Sample Size	181754	24088	4474	1962	2244	14230	947	231

Table 1.5 presents average costs of purchased services for persons with hearing loss compared to all other types of impairment for FY2006. The data reflects the total amount of money spent by the State VR agency to purchase services for an individual over the life of the current service record. It includes all expenditures for all types of purchased services from public and/or private vendors. It does not include costs incurred for program administration and for salaries of counselors and other staff. It also excludes costs for services provided by programs owned and operated by the State VR agency that are not billed on an individual basis.

Table 1.5
Costs of Purchased Services for VR consumers (FY2006)

Impairment Code	Mean	Standard Deviation	Sample Size*
All Other Disabilities	2240	5862	579145
All Hearing Impaired	3790	9395	38004
03- Deafness-Visual	6441	5751	9352
04- Deafness-Auditory	2861	6167	32337
05- Hearing Loss-Visual	4259	10027	3751
06- Hearing Loss-Auditory	2592	3505	19712
07- Other Hearing Impairment	2356	6156	615642
08 – Deaf-blind	8771	19341	445

*Sample size (N) varies due to missing data

Table 1.6 presents closure status for persons with hearing loss for FY2006. This Table indicates the majority of closed cases achieved positive employment outcomes.

Table 1.6
Frequency of Cases by Closure Type for Persons who are Deaf or Hard of Hearing
By Functional Impairment Codes– FY 2006

Impairment Code	Closed Cases	Closure Type						
		As Applicant	From Extended Evaluation	With IPE, but without Services	On Waiting List	After Eligibility, Before IPE	With Employment Outcome	Without Employment Outcome.
03- Deafness-Visual	9352	443	38	82	119	1612	4474	2584
04- Deafness-Auditory	3237	260	10	18	47	430	1962	510
05- Hearing Loss-Visual	3751	251	8	16	87	458	2244	687
06- Hearing Loss-Auditory	19712	1284	19	56	543	1599	14230	1981
07- Other Hearing Impairment	1507	180	8	5	26	172	947	169
08 Deaf-Blind	445	25	7	4	1	66	231	111
Total	38004	2443	90	181	823	4337	24088	6042

Other Population Issues

Due to complications in RSA 911 coding, it is felt that often individuals who should be coded as 08 – Deaf-Blind are over looked. There are several factors which lead to confusion in this area. Some individuals may be coded as blind or visually impaired and also have a secondary coding as hard of hearing or deaf. For example, counselors who are blind themselves may not be able to see that a consumer has hearing aids. These individuals may be late deafened and have good speech. A counselor for the deaf may not typically ask questions about progressive visual loss. A counselor may code as primary and secondary disabilities rather than using the “deaf-blind” code. This often leads to miss-coding and possible under-reporting of Deaf-Blind consumers.

Attachment 1.1**Historical Comparison of Successful Rehabilitation Employment Outcomes for Individuals Who Are Deaf and Hard of Hearing with Successful Rehabilitation Employment Outcomes for All Individuals**

Year	Total Cases	Successful Outcomes for All Individuals	Successful Deaf & HoH Outcomes / % of All	Successful Deaf Outcomes / % of All D & HoH	Successful HoH Outcomes / % of All D & HoH
2003		217,557	23,455 (10.8%)*	6,898 (29.4%)*	16,557 (70.6%)*
2002		221,031	22,937 (10.4%)*	7,243 (31.6%)*	15,694 (68.4%)*
2001		233,684	22,751 (9.7%)*	7,936 (34.9%)*	14,815 (65.1%)*
2000		236,218	19,394 (8.2%)*	7,409 (38.2%)*	11,985 (61.8%)*
1999		231,697	18,295 (7.9%)*	7,157 (39.1%)*	11,138 (60.9%)*
1998		222,275	16,887 (7.6%)	6,750 (40.0%)	10,137 (60.0%)
1997		211,576	15,243 (7.2%)	6,134 (40.2%)	9,109 (59.8%)
1996		213,780	15,718 (7.4%)	6,238 (39.7%)	9,480 (60.3%)
1995		209,600	15,187 (7.2%)	5,990 (39.4%)	9,197 (60.6%)
1994		202,824	16,029 (7.9%)	6,022 (37.6%)	10,007 (62.4%)
1993		193,918	15,901 (8.2%)	5,830 (36.7%)	10,071 (63.3%)
1992		191,821	16,094 (8.4%)	5,881 (36.5%)	10,213 (63.5%)
1991		202,831	16,832 (8.3%)	5,958 (35.4%)	10,874 (64.6%)
1990		214,874	19,335 (9.0%)	6,820 (35.3%)	12,515 (64.7%)
1989		220,408	20,184 (9.2%)	7,075 (35.1%)	13,109 (64.9%)
1988		218,241	19,693 (9.0%)	7,130 (36.2%)	12,563 (63.8%)
1987		219,616	-----	-----	-----
1986		223,354	18,568 (8.3%)	7,021 (37.8%)	11,547 (62.2%)
1985		227,652	-----	-----	-----
1984		225,772	16,626 (7.4%)	6,296 (37.9%)	10,330 (62.1%)
1983		216,231	15,585 (7.2%)	6,127 (39.3%)	9,458 (60.7%)
1982		226,924	15,519 (6.8%)	6,423 (41.4%)	9,096 (58.6%)
1981		255,881	17,298 (6.8%)	7,212 (41.7%)	10,086 (58.3%)
1980		277,136	18,679 (6.7%)	7,630 (40.8%)	11,049 (59.2%)
1979		288,325	17,540 (6.1%)	7,308 (41.7%)	10,232 (58.3%)
1978		294,396	16,859 (5.7%)	6,877 (40.8%)	9,982 (59.2%)
1977		291,202	16,223 (5.6%)	6,135 (37.8%)	10,088 (62.2%)
1976		303,328	16,015 (5.3%)	5,936 (37.1%)	10,079 (62.9%)
1975		324,039	15,887 (4.9%)	6,066 (38.2%)	9,821 (61.8%)
1974		361,138	16,675 (4.6%)	6,689 (40.1%)	9,986 (59.9%)
1973		360,726	16,869 (4.7%)	6,728 (39.9%)	10,141 (60.1%)
1972		326,138	16,429 (5.0%)	6,412 (39.0%)	10,017 (61.0%)
1971		291,272	13,735 (4.7%)	5,566 (40.5%)	8,169 (59.5%)
1970		266,975	14,334 (5.4%)	5,915 (41.3%)	8,419 (58.7%)
1969		241,390	12,769 (5.3%)	5,598 (43.8%)	7,171 (56.2%)
1968		207,918	12,269 (6.9%)	5,523 (45.0%)	6,746 (55.0%)
1967		173,594	10,363 (6.0%)	4,923 (47.5%)	5,440 (52.5%)
1966		154,279	9,015 (5.8%)	2,731 (30.3%)	6,284 (69.7%)
1965		134,859	8,130 (6.0%)	2,560 (31.5%)	5,570 (68.5%)
1964		119,708	7,376 (6.2%)	2,243 (30.4%)	5,133 (69.6%)
1963		110,136	6,767 (6.1%)	2,077 (30.7%)	4,690 (69.3%)
1962		102,377	6,328 (6.2%)	1,866 (29.5%)	4,462 (70.5%)
1961		92,501	5,438 (5.9%)	1,595 (29.3%)	3,843 (70.7%)
1960		88,275	5,410 (6.1%)	1,617 (29.9%)	3,793 (70.1%)

Note: Detailed information are not available for 1985 and 1987. For the years 1999, 2000, 2001, 2002, and 2003, the numbers of successful outcomes for all deaf and hard of hearing individuals and the numbers of successful outcomes for all deaf individuals include deaf-blind individuals. * Indicates inclusion of Deaf-Blind rehabs in 1999, 2000, 2001, 2002 and 2003 (280 in 1999, 193 in 2000, 295 in 2001, 297 in 2002, and 296 in 2003).

Attachment 1.2

RSA-911 CASE SERVICE REPORT

RSA PD-03-07

Sensory Communicative Impairments

03 *Deafness, Primary Communication Visual*

Receptive Communication – primarily uses some form of sign language

Expressive Communication – primarily uses some form of sign language

Most rely on sign language interpreters as their first choice for communication access with hearing people.

Generally use TDD and TDD or VRS Relay Services.

04 *Deafness, Primary Communication Auditory*

Receptive Communication – primarily depends on speech reading and/or visual communication such as speech to text translation.

Expressive Communication – primarily use spoken language.

Have been identified in the past as being oral deaf or late deafened adults and now would also include many deaf individuals who use cochlear implants and/or English based sign language.

Generally use TDD and TDD or VRS Relay Services, including Voice Carry-over (VCO) option.

05 *Hearing Loss, Primary Communication Visual*

Receptive Communication – primarily depends on auditory input by hearing aids and/or assistive listening technology and often relies on visual cues such as speech reading, body language, text translation or an English based sign language to supplement auditory input.

Expressive Communication – primarily use spoken language.

Generally use amplified telephone along with hearing aid T switch and may use TTD/VCO.

06 *Hearing Loss, Primary Communication Auditory*

Receptive Communication – primarily uses remaining residual hearing which allows the individual to hear and understand speech with little or no visual input, generally with the use of hearing aids and can benefit from assistive listening technology use in some situations.

Expressive Communication – primarily use spoken language.

Generally use telephone with ease using appropriate amplification

07 Other Hearing Impairments (Tinnitus, Meniere's Disease, Hyperacusis, etc.)

While hearing loss is a major form of hearing impairment, there are other conditions of the hearing mechanism that bring with them functional limitations leading to disability such as the constant head noise of Tinnitus, the dizziness of Meniere's Disease or the extreme sensitivity to sound of hyperacusis. Such conditions require thorough evaluation by trained physicians and a variety of interventions are available requiring consultation with trained hearing health specialists.

08 Deaf-Blindness: Definition of Individual Who is Deaf-Blind. The term "individual who is deaf-blind" means any individual:

(A) (i) *who has a central visual acuity of 20/200 or less in the better eye with corrective lenses, or a field defect such that the peripheral diameter of visual field subtends an angular distance no greater than 20 degrees, or a progressive visual loss having a prognosis leading to one or both of these conditions;*

(ii) *who has a chronic hearing impairment so severe that most speech cannot be understood with optimum amplification, or a progressive hearing loss having a prognosis leading to this condition, and*

(iii) *for whom the combination of impairments described in clauses (i) and (ii) cause extreme difficulty in attaining independence in daily life activities, achieving psychosocial adjustment, or obtaining a vocation;*

(B) *who despite the inability to be measured accurately for hearing and vision loss due to cognitive or behavioral constraints, or both, can be determined through functional and performance assessment to have severe hearing and visual disabilities that cause extreme difficulty in attaining independence in daily life activities, achieving psychosocial adjustment or obtaining vocational objectives.*

NOTE: *This explanation does not require the two impairments to be acquired together in order for the code to apply.*

09 Communicative Impairments (expressive/receptive)

Speech and Language impairments for the most part come in combination with other impairments such as cerebral palsy, TBI, stroke, mental retardation, multiple sclerosis, deafness, et., requiring significant intervention in addition to those provided relative to identified major disabling conditions. It is essential that communicative disabilities be recognized and attended to as either the major or secondary disability and appropriate interventions such as the use of augmentative and alternative communication (ACC) systems be implemented.

CHAPTER TWO

THE VOCATIONAL REHABILITATION PROCESS

The Rehabilitation Act of 1973 and subsequent amendments legislatively defines the vocational rehabilitation process and the provision of services to eligible consumers. The Act also serves as a guide for rehabilitation administrators and counselors in their efforts to meaningfully serve individuals who apply for services through the state-federal vocational rehabilitation program. Essentially, the vocational rehabilitation process involves the counselor and consumer in a series of decisions and activities which are intended to move the consumer toward successful employment outcomes.

Recognizing the increasing diversity among consumers seeking VR services, this chapter emphasizes that persons with hearing loss are not all alike. Many have unique needs that will need to be addressed in a variety of ways to achieve successful employment outcomes. This is a major difference from the earlier editions of the Model State Plan. There has been a shift in focus in providing these services from the label or category of the consumer such as deaf, deaf-blind, or hard of hearing to a more holistic person-centered approach that recognizes and addresses the diversity within these groups of individuals with respect to their communication preferences, cultural differences, and functional issues. These issues are addressed further in the sections that follow.

Identifying Consumers who are Deaf, Deaf-Blind, Hard of Hearing or Late Deafened

The service needs of consumers with hearing loss are likely to differ due to a variety of unique factors. These factors include age at onset and degree of hearing and/or vision loss, adjustment to hearing and/or vision loss, educational, vocational, and psychosocial ramifications of hearing and/or vision loss, etiology of deaf blindness, racial, ethnic, and cultural differences, and presence of additional disabilities (see chapter 1 for further discussion of population size and characteristics).

VR counselors will need to do creative outreach to identify the various groups of persons with hearing loss or combined hearing and vision loss who need VR services. Given that the target population of persons with hearing loss is large and diverse, a vast array of referral sources should be approached to identify these potential VR consumers. When conducting outreach with prospective consumers who are hard of hearing, counselors are encouraged to be aware that many of these individuals may not be aware of their own functional limitations or how VR services and available technology may benefit them in their employment situations. In addition, it should be noted that for individuals with combined vision and hearing loss, services by specialized qualified professionals are often necessary. In part, this is because the combination of both sensory losses presents more of a challenge when selecting service providers who possess this unique skill set.

Referral Development

Referral development activities such as outreach, public relations, and information sharing with new and existing referral sources can help facilitate appropriate referrals to VR. In addition, referral development activities can assist referral sources in determining how to present the potential consumer's full range of employment-related problems and needs to the VR counselor in functional terms. Some of the types of referral sources VR counselors may generally cultivate for potential consumers who are deaf, deaf-blind, hard of hearing, or late deafened, are briefly listed below.

- Secondary education programs: School personnel such as teachers, guidance counselors, audiologists, or special education coordinators are likely to be good contacts for identifying students with a hearing loss or combined vision and hearing loss and receiving services under an Individualized Education Plan (IEP). Furthermore, through regular outreach and contact with secondary education programs, VR counselors may also identify students with a lesser decibel level of hearing loss not receiving services under an IEP. It should not be assumed that these students are not eligible or appropriate for VR services because they are not receiving secondary education services under an IEP. VR counselors are encouraged to be persistent in efforts to identify students with hearing loss who may surface at any time. This often necessitates frequent outreach and contact with secondary programs.
- Postsecondary education programs and Disability Support Services (DSS) Offices: In many cases, students with hearing loss who are enrolled in a postsecondary education program and receiving classroom support services through DSS are those who are likely to be recipients of VR services. However, it is not uncommon for individuals with all levels of hearing and vision loss to "fall through the cracks" and at times not be identified or referred for VR services until after they are enrolled in postsecondary programs. This may result in the need for VR counselors to expedite services to assess the appropriateness of the training program for the individual and/or recommend needed accommodations to be successful in the postsecondary program.
- Hearing aid and assistive technology dispensers.
- Health care agencies and programs, including physicians, ophthalmologists and low vision specialists, nurses, audiologists, speech/language pathologists, hospitals/clinics, mental health centers.
- Community service centers and Centers for Independent Living that serve persons who are deaf or hard of hearing.
- State and local affiliates or chapters of national organizations such as the National Association of the Deaf (NAD), Hearing Loss Association of America (HLAA), Association of Late Deafened Adults (ALDA), National Black Deaf

Advocates (NBDA), and the National Asian Deaf Congress (NADC), American Association of Deaf-Blind (AADB) and the National Federation for the Blind (NFB), National Family Association for the Deaf-Blind (NFADB), American Association of Deaf-Blind (AADB), statewide deaf-blind programs, and National Coalition on Deaf-Blindness (NCDB).(See Attachment 2.1 for more information).

- Community agencies and programs focusing on serving individuals from different cultures, languages, and nationalities who may not be equipped to serve applicants who have a hearing loss.
- Employers, human resource personnel and employer assistance programs: These resources can be particularly helpful for identifying potential VR consumers who have acquired hearing loss as adults and/or are experiencing progressive hearing losses and struggling to perform their jobs.
- Professional groups such as state chapters of the Speech, Language, and Hearing Association and state chapters or affiliates of hearing aid dispensers.
- Interpreters, private interpreting agencies, and state chapters of the Registry of Interpreters for the Deaf.
- Unions
- Groups such as National Family Association for the Deaf-Blind (NFADB), American Association of Deaf-Blind (AADB), statewide deaf-blind programs, and National Coalition on Deaf-Blindness (NCDB).
- Other State agencies serving individuals who are blind or visually impaired.
- Other VR consumers: Often, consumers who are deaf, deaf-blind, hard of hearing, or late deafened will know of other individuals who may need VR services and can share contact information about the VR counselor available in their area.

Eligibility

Vocational Rehabilitation is an eligibility program. It is not a program that provides entitlement services such as those provided under the Individuals with Disabilities Education Act (IDEA) or services received through the Social Security Administration (SSA). To receive vocational rehabilitation services, an applicant must be determined eligible based on specific criteria that the individual have a physical or mental impairment that is a substantial impediment to employment, requires VR services to become employed and can benefit from these VR services in terms of an employment outcome.

Presumptive Eligibility

The intent of presumptive eligibility is to use existing data and information to provide more timely services to individuals who have already met stringent eligibility requirements set by the Social Security Administration (SSA). Any individual who has been determined by SSA to be eligible for SSI or SSDI because they are blind or disabled is presumed eligible for vocational rehabilitation (VR) services and considered to be at least significantly disabled. This means any consumer with a hearing loss who applies for VR services and is also a recipient of SSI or SSDI benefits will become eligible for services based on that information.

VR agencies are mandated to make eligibility decisions within 60 days of the referral date. Thus, a vital role for vocational rehabilitation counselors involves obtaining all applicable diagnostic and case finding information, analyzing it as a whole, and determining what specific problems or impairments will interfere with the consumer's ability to get or keep a job. This phase of the planning process is especially important because, by law, vocational rehabilitation services can be provided for only those disability related limitations that specifically impact on the consumer's employment or ability to gain employment.

In determining eligibility, information at a minimum should include:

- documentation of the nature and level of hearing loss;
- documentation of vision loss or other disabling conditions;
- communication mode and language preference (including amplification and communication strategies used);
- assessment of communication functioning in various environments such as in one to one, small, and large group situations, telephone (or telecommunications) communication;
- personal and psychological adjustment and acceptance of hearing loss; and
- family, social, and work relationships.

Accurately obtaining and considering such information is often helpful for counselors during the process of eligibility determination for diverse consumers with hearing loss.

Impediments to employment ideally should be stated in functional terms whereby the impact on the current job or a consumer's current ability to obtain or maintain employment, is clearly understood. Doing so also helps consumers understand and be informed regarding the reasons specific service options are being provided as well as what the expected results (or impact on employment) may be. This becomes the basis for decisions regarding the kinds of services that will be included in a consumer's Individual Plan for Employment (IPE). This process allows consumers to become active participants in plan development and thereby have vested interests in the implementation of the plans and the desired successful outcomes.

Eligibility and Order of Selection for Services

If a VR agency cannot serve all eligible consumers, then they must, by law, enter into an Order of Selection for Services process. Under this process, consumers who are determined to be the most significantly disabled, must be served before other eligible consumers. As more state VR agencies enter into an Order of Selection for Services, concern is being expressed about where certain target groups of consumers with hearing loss (such as those who are hard of hearing or late deafened) fall on the Order of Selection priority list. Quite possibly the mandate to serve consumers who are most significantly disabled, before other eligible consumers, may be incorrectly interpreted to mean that only persons who are deaf and use sign language would qualify as most significantly disabled under an Order of Selection. In recent years, VR agencies have shifted from dependence primarily on medical or audiological criteria to increased reliance on functional limitations for purposes of determining eligibility and order of selection.

It is up to the individual state agencies to determine how they will prioritize, define, and apply criteria to designate eligible individuals as “most significantly disabled.” In applying their criteria, state agencies are encouraged to avoid developing priorities that exclude individuals (e.g., those who are hard of hearing or late deafened) on the basis of a medical rather than a functional diagnosis. State agencies are also encouraged to be aware that functional impediments to employment of individuals who are hard of hearing or late deafened can be severe and vocationally debilitating and that they may have little correlation to the level of their decibel loss.

To assist states in developing priorities for “the most significantly disabled,” it is helpful to consider the meaning of the mandated definition for “individual with a severe disability.” Many consumers who are hard of hearing and late deafened meet this definition if their severely limited functional capacities in areas of communication, self-direction, interpersonal skills and work tolerance are recognized. In addition, multiple vocational rehabilitation services over an extended period of time are required to benefit individuals who are hard of hearing or late deafened in terms of an employment outcome. This should be understood and taken into consideration by state agencies during the process of developing priorities for an Order of Selection.

As mentioned previously, state VR agencies may be operating under an Order of Selection process. As a result, some individuals with hearing loss who are determined eligible for services may be placed on a wait list due to their determined category in the Order of Selection process. The Rehabilitation Act provides that eligible individuals, who do not meet the order of selection criteria, shall have access to services provided by other federal and state programs through an information and referral system. This information and referral system may include One Stop Career Centers, state employment agencies, Independent Living Centers and other local programs serving persons who are deaf or hard of hearing.

Comprehensive Assessment to Identify Rehabilitation Needs and Develop the IPE

Once eligibility has been established, additional information and data often are obtained to help pinpoint the full range, scope, and options of services needed to overcome employment impediments established at the time of eligibility determination. Clearly, the vocational rehabilitation counselor's skill and expertise to appropriately and adequately assess each individual consumer in terms of overall vocational functioning is a unique service not available elsewhere or understood by many professionals.

At this stage of the VR process, the VR counselor explains and provides information on the full range of service needs and options available to assist consumers, address identified impediments, and maximize employment opportunities. Consumers can then make informed choices in concert with counselors on what services, objectives and vocational goal should be included in the IPE.

Examples of additional information and evaluations to consider in the comprehensive assessment include:

- *Basic Medical Evaluations.* This assessment can be used to check for secondary issues such as the presence of any previously unidentified medical condition or that are a result of late manifestation of the congenital rubella syndrome, usher's syndrome or other progressive conditions.
- *Otologic Evaluations.* This is a specialized hearing assessment that can be used to determine the need for medical intervention and/or to determine future prognosis.
- *Audiological Evaluations.* This assessment service is used to determine extent or level of hearing loss. It also includes hearing aid evaluations and recommendations and how they should interface with any ALDS, as well as the need for speech therapy and aural rehabilitation.
- *Additional Communication Assessments.* These assessments should begin at the first counselor/consumer contact and continue throughout the VR process to accurately identify and address communication issues. Communication preferences and effectiveness may vary. Some examples are summarized below.
 - For consumers who are hard of hearing or late deafened, a number of assessment tools are available, including family and significant other surveys that the VR counselor can use. This information can also be shared with audiologists.
 - For some consumers who are deaf, counselors may assess the sign communication skills of consumers to determine if additional training in American Sign Language would be beneficial.
 - For consumers with combined hearing and vision loss, the primary and preferred communication method must be identified. Depending on individual preferences, needs, and environment, these methods include close vision, tactile sign language, and Braille, among others.

- For consumers who are deaf and low functioning (LFD), family members, friends, and/or CDIs (Certified Deaf Interpreters) may be helpful. Individual preferences, needs, and environment should be considered.
- Others, such as cochlear implant users may have additional communication issues and needs. These could include the environmental accommodations, assistive technology, or post-surgical rehabilitation services in order to maximize the benefits from the implants.
- *Ophthalmologic or Optometric Evaluations* (including visual fields testing). This assessment may be used to rule out conditions such as retinitis pigmentosa (RP) and to gain the best possible visual correction due to reliance on visual input for communication. For individuals with hearing and vision loss or those at risk for vision loss, regular screenings and evaluations are usually needed.
- *Psychological and Psychosocial assessments*. In addition to intelligence, academic achievement, aptitude or vocational interest testing, these assessments can identify emotional or mental health issues that may need to be addressed.
- *Assessment of adjustment to and acceptance of, hearing loss and coping skill acquisition*.
- *Orientation and Mobility Assessments*. This includes skills which will assist the individual, particularly those with a combined hearing and vision loss, to travel safely and efficiently negotiate environments in order to attain training, obtain and maintain employment.
- *Low Vision Services*. These include assessment and identification of factors affecting the provision of services designed to maximize a consumer's residual or subnormal vision. The evaluation of a consumer's vision or acuity and the determination of necessary aids is only a part of the low vision service available to consumers. Based on assessment of acuity and other factors the low vision specialist can prescribe or recommend optical and non-optical aids and/or appliances to meet the needs of the consumer.
- *Rehabilitation Technology Assessment*. A Rehabilitation Technologist or Assistive Devices Specialist may be consulted, at any point through out the rehabilitation process, for technology recommendations, including job site assessments and modifications. Ever-changing technological advances makes this assessment and any resulting services essential for providing accommodations on the job and realizing functioning at the consumer's maximum potential in employment.
- *Vocational Assessment*. This approach is used to assess an individual's skills, interests, and abilities. The goal of the assessment is to assist the individual in determining appropriate vocational options and determining employment goals through informed choice. As emphasized in current professional literature,

vocational assessments activities should result in an in-depth vocational profile with functional recommendations regarding training, job placement, and related support services. Vocational assessments for individuals who are deaf-blind or who are deaf and low functioning (LFD) are more effective when conducted using a person-centered approach. For individuals who are deaf-blind and individuals who are deaf and low functioning (LFD), functional assessments are often recommended. Functional assessments may be conducted in the following areas:

- Orientation and mobility - orientation to work sites and safe and independent travel to and from work
 - Communication such as with employers and co-workers as well as social skills and initiating conversations
 - Self-advocacy such as with employers and co-workers regarding needs for job-related accommodations.
 - Independent living such as assessing skills that enable the individual to maintain independent or semi-independent living. To ensure comprehensive assessment information is obtained, it is generally recommended that an interdisciplinary team of qualified professionals be used. These may include specialists related to orientation and mobility, communication, independent living and adaptive technology.
- *Job site assessments.* This involves counselors visiting work sites to make recommendations for needed modifications or accommodations and to determine the communication demands on the job. Counselors may also review the essential functions of the job and make recommendations for assistive technology or suggest communication strategies to help minimize or circumvent potential problems related to a consumer's ability to carry out their job responsibilities.
 - *Specialty Assessments.* When secondary disabilities in addition to hearing loss are indicated, it is often advisable for additional specialists to be consulted in order to obtain comprehensive information. Generally it is recommended that these additional specialists comprise a multidisciplinary team of qualified professionals. This information can be helpful to counselors in becoming aware of possible medical or mental health issues that may impact the rehabilitation process and attainment of consumer employment goals.

The Individual Plan of Employment (IPE)

After comprehensive assessments are completed, counselors and consumers together discuss, plan, and determine employment goals and needed services which are the basis for the Individual Plan of Employment (IPE). The IPE planning session must, by law, be conducted in a consumer's preferred mode of communication. This ensures more active participation in the planning and therefore, a better understanding of options for employment and related services. Maximum efforts must take place for informed and

effective direct two-way communication between consumers and counselors. (Also see Chapter 5, Communication Access).

Throughout the VR process, but especially at the time of IPE development, counselors are encouraged to ensure that consumers are informed about the choices they have related to available services. This often necessitates more than simply listing the names of service providers. In general, the informed choice process is enhanced when counselors provide more descriptive information about the consumer's service provider options. For example, for consumers considering their options regarding postsecondary training programs, it can be helpful to their decision-making when counselors provide them with information about the types and quality of support services available for students with hearing loss at the programs being considered. Furthermore, for some consumers, particularly those who may require more intensive or comprehensive services, such as those who deaf and low-functioning (LFD) or who are deaf-blind, additional strategies may be helpful for IPE development and for facilitating the informed choice process. One suggested strategy is person-centered planning which utilizes a multidisciplinary team approach for goal development and service coordination.

VR agencies are encouraged to ensure that their consumer information guides are provided in accessible formats for persons with hearing loss. Essentially, these guides are developed to offer detailed information regarding the rights consumers seeking services from VR agencies.

Once counselors and consumers agree on an IPE, the next phase of the VR process involves the provision of services to help facilitate attainment of employment goals. Additional discussion regarding plan development is discussed in chapter 4 on Transition Services.

Scope of Services

As the nation's labor market continues to expand with more "high tech" jobs, there is also a corresponding increase in the demand among employers for workers who possess acceptable proficiency in a variety of skill areas such as reading, writing, computing, math, and interpersonal communication, among others. As this trend in the labor market continues, it becomes even more important for state VR agencies to work collaboratively with postsecondary education programs at all levels to support efforts that can help enhance employment opportunities this target population of VR consumers (also see Chapter 7 on Interagency Partnerships and Agreements).

To address efforts to enhance employment opportunities, a wide variety of service options are available for counselors and consumers to consider depending on the employment goals and service options specified in the IPE. Some examples of the scope of services that may be considered are listed below:

- vocational assessments, communication assessment, functional or worksite assessments

- vocational counseling and guidance to ensure consumers have a clear understanding of the world of work and to help develop appropriate vocational goals
- job readiness training to develop job seeking and retention skills
- career exploration that introduces consumers to the vast array of current and emerging occupations
- independent living skills training
- vocational training through enrollment in a postsecondary education program
- Interpreter services
- On-the-job training
- Job shadowing opportunities
- Job coaching
- Supported employment
- Rehabilitation Technology services to address barriers in the work place and needed accommodations as well as technology to function independently
- Services provided through comprehensive rehabilitation facilities. This is a possible service option for those who need long-term, intensive services such as for consumers who are deaf and low-functioning (LFD).
- Services available from Community Rehabilitation programs (CRPs) or other service providers. Ideally, professionals working in these programs should also be knowledgeable of deaf culture and be skilled in various modes of communication, including how to work with a professional interpreter. This could include job coaches, vocational evaluators, psychologists, and related professional personnel.

Individuals who are deaf-blind may need a variety of services that address limitations caused by either the hearing or the vision loss or result from the combination of the two disabilities. Often, these individuals will need services from both a rehabilitation counselor for the deaf and a counselor for the blind. In some states, these services are provided within the same agency. In other states, however, these services are only available from separate agencies. Due to the dual needs of the individuals, some states with separate agencies for general vocational rehabilitation services and blind services have developed agreements to have counselors from both agencies serve these persons at the same time with (both open cases) to provide more effective services. Often, the state will have a statewide deaf-blind coordinator to assist these counselors with assessment and identifying appropriate specialized services such as those offered by the Helen Keller National Center and their affiliates.

Individuals who are hard of hearing or late deafened can be helped to achieve employment goals through the provision of a variety of services in addition to those listed under broader category of scope of services. Some of these may include:

- *Assertiveness Training and Confidence Building.* Low self-esteem is a frequently identified problem among persons who are hard of hearing or late deafened. Assertiveness in asking other people to alter environment or change their behavior to enhance communication effectiveness or be more easily understood involves

taking a risk. Persons who are not accustomed to being assertive or who appear to have low self-esteem may benefit from being referred for assertion training or confidence building counseling.

- *Regular Guidance and Counseling sessions* with the VR Counselor. A VR counselor who has received training about the psychosocial needs of persons who are hard of hearing or late deafened may provide some general guidance and counseling to help consumers learn more about their hearing loss and the resources available to assist them. Also, Guidance and Counseling and information may be provided as consumers start utilizing technology such as hearing aids and other assistive listening devices.
- *Intensive Counseling and Therapy.* It is not unusual for counselors to encounter consumers who experience difficulties with the grieving process as well as coping and adjustment issues related to their hearing loss, especially those who incur adult-onset loss of hearing. Generally, they may need to be referred for intensive counseling and therapy with knowledgeable and trained mental health service providers.
- *Coping Skills Support Groups.* For some consumers, referral to coping skills support groups may be beneficial. These types of groups have been found to be successful in assisting consumers to learn to cope with communication problems and stresses encountered while in training and on the job. Ideally, the leaders of these types of groups would include those who are knowledgeable and trained to work with persons who are hard of hearing or late deafened. Additional resources include those such as the Hearing Loss Association of America (HLAA) and the Association of Late Deafened Adults (ALDA).
- *Communication Skills Training.* This can include individual and group instruction in speech reading, sign language, as well as instruction in learning strategies for preventing or reducing communication problems.

Finding local referral sources with the competency to work with consumers who are deaf, hard of hearing, late deafened, and deaf-blind can be challenging for many counselors due to a dearth of available resources. A key role for State Coordinators of Services for Deaf/Hard of Hearing Individuals along with local VR counselors involves that of identifying and developing appropriate resources to meet the needs of their consumers.

Job Development and Placement

The ultimate goal of VR services is the achievement of employment goals resulting in the attainment of gainful employment and independence. To facilitate achievement of consumer employment goals through the job development and placement process, a number of factors should be considered. These are addressed in the sections that follow.

- ***Motivating consumers to work***

Many consumers served by VR qualify for Social Security benefits. When considering employment options, counselors may find some Social Security benefits recipients reluctant or not highly motivated to work due to concerns about the impact of a job on their benefits. When such situations arise, it can be helpful for counselors and consumers to seek assistance from Social Security Benefits Specialists either through the Social Security Administration or state VR programs. These specialists offer work incentives planning and assistance to persons with disabilities, ages 14-65, who receive Supplemental Security Income (SSI), Social Security Disability Insurance (SSDI) or both and have an interest in working. These specialists can also assist in determining the income level that would impact consumer SSI or SSDI benefits. In addition, counselors can help facilitate consumer motivation to work by explaining the advantages of work as opposed to dependency on Social Security benefits. The advantages include the potential for increased earnings, employer-provided benefits, and a sense of independence and self-worth attributed to working an earning an income.

- ***Marketing to employers***

Federal legislation such as the Americans with Disabilities Act (ADA) and the expansion of technology and related workplace accommodations have greatly contributed to opening doors of opportunity for persons with disabilities including those who are deaf, deaf-blind, hard of hearing, and late-deafened. In spite of these advances in the workplace, attitudinal obstacles remain. Chief among them are those associated with overcoming employer reluctance due to concerns about communication and safety related to hiring individuals with hearing loss. Counselors and placement professionals who remain abreast of current developments in telecommunications technology can help amend and address many of these concerns. Information on telecommunications technology and work-related accommodations are further discussed in chapter 5 (Communication) and chapter 6 (Technology and Accommodations).

- ***Job retention and career advancement***

Once consumers obtain employment, a desired outcome is that they will retain their jobs and advance in their careers. It is not uncommon, however, for consumers with hearing loss to encounter challenges in their efforts to advance in their careers. These challenges are attributed, at least in part, to communication barriers. These communication barriers may include lack of access to sign language interpreters, assistive listening devices, and difficulties interacting and communicating with co-workers and supervisors. Factors critical to job retention and advancement may include:

- Access to in-service training or continuing education to upgrade skills
- Access to staff meetings
- reassignment of job duties if needed to eliminate communication barriers
- availability of appropriate technology to make the work environment accessible

- access to individual and small group coaching or mentoring

Advocating for Workplace Accommodations

Often, persons who are hard of hearing are not willing to call attention to their hearing loss or are unaware of the severity of the hearing loss and tend to become isolated in the workplace. These workers can benefit from access to training to become more aware of appropriate workplace accommodation as well as ways to effectively assert themselves in addressing their on-the-job communication needs.

Appropriate accommodations should be implemented in all phases of employment, from participation in the selection process to training and advancement. With the ever expanding use of video relay services and video remote interpreting services, the issues of communication for employees who are deaf and rely on sign language can be minimized or even eliminated altogether (also see Chapter 6, Technology and Accommodations).

Closure

Once a consumer has been placed in a job, it is helpful for the counselor to conduct regular follow-up contacts to ensure satisfactory job placement and adjustment. At times there may be situations in which the counselor is not able to assist the consumer attain satisfactory job placement and retention due to factors such as an inability to perform work tasks. On the other hand, however, through regular follow-up contacts, the counselor can proactively assist both consumers and employers by addressing issues such as the following:

- Is the employment suited to the consumer's education, abilities, and choice?
- Is the employer aware of the consumer's hearing loss? Accepting of it?
- Is the workplace environment arranged to best facilitate communication?
- Are assistive listening devices going to be used? Do they know how to operate them?
- Is all needed technology in place, operational and easily maintained?
- Are consumer's supervisor and co-workers comfortable and successful in communicating with consumer?
- Are procedures in place to provide assistive listening devices or other appropriate accommodations, such as interpreters, for staff meetings and training?
- Do the consumer and the employer understand post-employment services that may be available from VR?

Post Employment Services

At the time of case closure, the VR counselor must inform the consumer of the potential for post employment services. When the consumer requests additional services after closure, the VR Counselor must determine whether it is most appropriate to provide services in post employment or open a new VR case. If there are extensive issues to be addressed to resolve problems on the job or if the consumer is changing to a new job or position, a new case may be considered. If the consumer needs some minimal assistance

to address on the job difficulties, post employment may be more appropriate. Some post employment services that may be considered for consumers who are deaf, deaf-blind, hard of hearing, or late deafened are:

- Consultation or technical assistance to a work site supervisor;
- Work site assessment and recommendations for modifications or accommodations if the work site changes;
- Replacement and/or repair of hearing aid (consumer should be counseled prior to case closure of his/her expected role in contribution or full payment dependent upon situation and salary);
- Trouble shooting and problem solving in conflict situations.
- Interpreter services where appropriate and requested.

Attachment 2.1

Selected List of National Resources

American Association of Deaf-Blind (AADB)
8630 Fenton Street, Suite 121
Silver Spring, MD 20910
(301) 495-4403 (V); 495-4402 (TTY); 495-4404 (FAX)
info@aadb.org

American Deafness and Rehabilitation Association
PO Box 480
Myersville, MD 21773
(301) 293.8969
ADARAorgn@aol.com

Arkansas Rehabilitation Research & Training Center for Persons who
are Deaf or Hard of Hearing
University of Arkansas
26 Corporate Drive
Little Rock, AR 72205
(501) 686.9692 (Voice); (501) 686.9691 (Video Phone); (501) 686.9698 (FAX)
DWatson@uark.edu; sboone@uark.edu; ganderso@uark.edu

Association of Late Deafened Adults (ALDA)
8036 Macintosh Lane
Rockford, IL 61107
(866) 402-1515 (V); 332-2532 (TTY); 570-1811 (FAX)
www.alda.org

Council of State Administrators of Vocational Rehabilitation
Suite 330
4733 Bethesda Avenue
Bethesda, Maryland 20814
Telephone: 301- 654-8414
Fax: 301-654-5542
<http://www.rehabnetwork.org/>

Hearing Loss Association of America (HLAA)
7910 Woodmont Ave. #1200
Bethesda, MD 20814
(301) 657-2248 (V); 657-2249 (TTY); 913-9413 (FAX)
www.hearingloss.org

National Asian Deaf Congress (NADC)
P.O. Box 17583
San Diego, CA 92177
www.nadc-usa.org

National Association of the Deaf (NAD)
8630 Fenton Street, Suite 820
Silver Spring, MD 20910
(301) 587-1788 (V); 587-1789 (TTY); 587-1791 (FAX)
www.nad.org

National Black Deaf Advocates (NBDA)
www.nbda.org

National Coalition on Deaf-Blindness (NCDB)
www.dbcoalition.org

National Family Association of the Deaf-Blind (NFADB)
141 Middle Neck Road
Sands Point, NY 11050
(800) 255-0411 (V); (516-883-9060 (FAX)
www.nfadb.org

National Federation of the Blind (NFB)
1800 Johnson Street
Baltimore, MD 21230
(410) 659-9314 (V); (410) 685-5653 (FAX)
www.nfb.org

CHAPTER THREE

PERSONNEL DEVELOPMENT AND STANDARDS

The Rehabilitation Act Amendments of 1998 require state agencies to describe in their State Plan procedures and activities that will be undertaken to establish and maintain a comprehensive system of personnel development (CSPD) designed to ensure an adequate supply of qualified rehabilitation personnel. Policies and procedures must be in place that establish and maintain standards to ensure personnel are appropriately and adequately prepared and trained. The Act also requires that personnel must be able to communicate with consumers in appropriate modes of communication or obtain the services of individuals who can provide appropriate communication.

Counselor Competencies

Competencies to effectively serve the varied consumers with hearing loss are beyond the essential core competencies for most VR counselors and staff. Recognizing that not all counselors have all competencies needed to serve all the subpopulations of persons with hearing loss, some states have started to make some significant changes in their staffing arrangements to serve the wide variety of consumers with hearing loss and have revamped training to these personnel.

These competencies are specific and should match the consumer's needs. For example, stating that effective communication skills are necessary will not clarify that while some staff will need fluent ASL skills when working with some deaf persons, while other staff will need clear, strong speech communication when working with most hard of hearing consumers. In essence, the past practice of having the same counselor serve all of these consumers and try to meet their communication needs can result in unsuccessful VR service provision for the consumer.

Like the varying communication needs of these consumers, many other needs such as guidance and counseling for psychosocial development, technological solutions, accommodations for training and employment, etc., are very distinct depending on the specific functioning and effects of the hearing loss and, in some cases, the addition of a vision loss upon the individual.

Staff Positions and Team Structure

After these competencies are addressed, a comprehensive review of the personnel structure and composition of positions should occur to determine if appropriate staff are effectively serving all of these individuals and/or whether caseloads and personnel can be better aligned to meet these needs. Staffing needs can then be documented and appropriate plans designed for staff development and training.

While the need for effective communication is the top priority for persons with hearing loss, the skill sets that are needed can be very different and it may not be practical to be

provided by the same counselor. Even though this is not mandated by the requirements of the CSPD, the importance of addressing these distinct personnel needs cannot be dismissed. State agencies should exhibit the same vigilance.

It has been established in previous chapters that consumers with hearing loss have unique communication barriers that separate them from easy access to traditional rehabilitation services. It follows that the VR agency should make provision within its administration to tailor services to meet the rehabilitation needs of consumers with hearing loss. Fundamental to this premise is the employment of qualified and specialized personnel in the agency's regular complement. This section focuses on recommended agency staffing patterns to meet the counseling, guidance, and employment needs of consumers with varying types of hearing loss and communication modes.

The Statewide Coordinator for Individuals Who Are Deaf, Deaf-Blind, Hard of Hearing, and Late Deafened (SCD/DB/HH/LD)

It is the responsibility of state VR agencies to support adequate and effective delivery of rehabilitation services. Therefore, it is recommended that each agency have at the administrative level a staff person who has sole responsibility and authority for planning, developing and implementing structured, identifiable programming of rehabilitation services for persons who are deaf, deaf-blind, hard of hearing or late deafened (SCD/DB/HH/LD).

When these duties cannot be an administrator's sole responsibility because of the small size of the state agency, the duties should, to the extent possible, be an *identifiable* cluster in the job description of a single administrator who is placed highly enough in the organizational hierarchy to influence and implement policy.

The SCD/DB/HH/LD should have authority and salary level commensurate with administrative responsibilities to maintain a coordinated service delivery system responsive to the needs of consumers who are deaf, deaf-blind, hard of hearing and late deafened. Overall responsibilities include needs assessment, planning, program development, implementation, staff training, and program evaluation.

To assure maximum visibility and a strong voice for rehabilitation of consumers with hearing loss in the state VR agencies, administrators are encouraged to adopt one of three models regarding placement of the SCD/DB/HH/LD within the organizational structure. Placement should avoid, to the extent possible, assignment of multiple program responsibilities which could contribute to a lower priority for services to consumers with a hearing disability:

1. *Full-line authority.* The SCD/DB/HH/LD would manage a special section within the existing agency, with a separate budget and supervisory responsibilities. The full-line authority alternative would assure selection of qualified personnel (see KAS below) and effective delivery of rehabilitation services to consumers who are deaf, deaf-blind, hard of hearing and late deafened. This model can be very

effective as state agencies seek to recruit individuals with hearing loss themselves in counseling positions. The SCD/DB/HH/LD can be an effective supervisor and communicate directly with these staff persons.

2. *Shared-line authority.* Since line supervisors often lack knowledge of the differing communication, psychosocial, employment, and technological needs of the target consumer population, shared line authority would occur in the areas of recruitment and assignment of counselors, staff training, and programs to enhance the quality of services to consumers with hearing loss. While the actual supervision of counselors working with persons with hearing loss is handled by the local manager, a strong cooperative relationship exists with the SCD/DB/HH/LD to provide technical assistance with case services and to provide input regarding staff.
3. *Without-line authority.* The SCD/DB/HH/LD would be a recognized member of the agency's central staff, acting as a consultant. The SCD/DB/HH/LD, reporting preferably to the state administrator but not having line authority, would still have a line of direct communication to counselors and their supervisors.

The SCD/DB/HH/LD ideally should not carry a caseload. Combining SCD/DB/HH/LD and counselor functions can work to the detriment of both.

Essential functions of the SCD/DB/HH/LD

- Be responsible for providing technical assistance, resources, information, referral, and support to the staff serving consumers with hearing loss.
- Identify needs, coordinate program planning, and recommend policy for the development of quality agency services.
- Be responsible for the recruitment of qualified personnel and assist the appointing officer in their selection and in the interview process.
- Be responsible for developing core competencies expected of their RCDs, RCDBs, and RCHHs, using the MSP as a guide.
- Be responsible for developing and coordinating in-service training across all staff levels within the agency.
- Provide ongoing consultation and direction to all phases of the state agency's programs which have bearing on the quality and quantity of services provided to persons with hearing loss, including direct assistance to district supervisors and their counselors in finding solutions to the unusual problems of service delivery to this population and to expanding rehabilitation services.
- Be responsible for regularly scheduled information exchange meetings of staff serving consumers with hearing loss.
- Be responsible for reviewing, evaluating, and making recommendations relating to grant and legislation proposals having a bearing on services to the target populations.
- Recommend persons to represent the target populations on the State Rehabilitation Council (SRC).

- Represent the state on the Council of State Administrator of Vocational Rehabilitation (CSAVR) Standing Committee on Services to Consumers who are Deaf, Deaf-Blind, Hard of Hearing, and Late Deafened.
- Provide consultation to the state rehabilitation administration on the value, composition and operation of a State Advisory Council on Hearing Loss and serve as the agency liaison to the advisory council, if established.
- Stimulate, through technical assistance and other means, existing community resources to develop programs for consumers with hearing loss needed to supplement VR services, e.g., diagnostic services, evaluation, mental health, educational programming, supported employment, and community-based interpreting services. Also, consult with the state VR agency's specialist on facilities regarding grants to facilities serving or planning to serve consumers with special communication needs.
- Participate in state agency negotiations to develop mandated MOUs with state postsecondary training programs to ensure inclusion of accommodations for students with hearing loss.
- Maintain lines of communication and cooperative agreements for mutual support and exchange of information between the various consumer groups and the state agency. (Prototype examples for these agreements are available on the CSAVR website: www.rehabnetwork.org).
- Be responsible for annually reviewing and evaluating the state program of services to consumers with hearing loss as it relates to the State Plan and the Statewide Comprehensive Needs Assessment.
- Act as liaison with specialists on deafness in RSA Central Office, in other government agencies, in Regional Resource Centers, and in Research and Training Centers, as well as in other public and voluntary agencies.
- Ability to lead a statewide network of professional staff.

Knowledge, Abilities and Skills (KAS)

The position would require the necessary education and experience to satisfactorily meet the state's criteria for employment at this level in addition to knowledge, abilities, and skills in serving these consumer groups. The KAS would be applicable to all three models of placement in the organizational structure.

Knowledge of:

- the educational, linguistic, psychosocial, socio-cultural, and vocational needs unique to each of the four hearing loss disability groups;
- the unique needs of those individuals with communication disabilities from linguistically and culturally diverse backgrounds;
- the full spectrum of communication strategies including the utilization of assistive technology;
- the Rehabilitation Act and concurrent issues impacting consumer service delivery and outcomes;
- existing statewide service systems; and
- National Hearing Loss organizations and resources.

Ability to:

- relate and communicate with members of the deaf, deaf-blind, hard of hearing, and late deafened populations in an effective and meaningful basis;
- provide vision and leadership to a coordinated system of delivery for consumers with communication disabilities throughout the state;
- advocate for the needs of the population;
- be responsive to consumer constituent groups;
- lead a statewide network of professional staff;
- interface with all VR programs and service providers;
- develop professional relationships within a wide constituent base;
- obtain and allocate resources; and
- collaborate and form partnerships with existing statewide service systems and organizations.

Skills:

- demonstrate proficiency in American Sign Language and other communication systems utilized by these populations;
- organization and management skills; and
- a strong customer service perspective.

Other State Coordinators and Administrators

In addition to the primary State Coordinator position as previously described, a number of state agencies have further developed services for the subpopulations of persons with hearing loss and have assigned additional specific state coordinators for these programs such as the Statewide Coordinator for Deaf-Blindness (SCDB) or the Statewide Coordinator of Services to Hard of Hearing and Late Deafened (SCHH/LD). These persons generally are more focused on developing services and programs and addressing training and resource needs for their specific designated consumer group(s). VR services to persons with hearing loss have grown and changed tremendously. Therefore, state VR agencies will need to evaluate additional administrative and coordinating duties to determine how these responsibilities can be met. Often, this workload is beyond the duties of a single position.

In order to meet the unique needs of persons with both hearing and vision loss, state VR agencies serving these consumers are encouraged at the administrative level to have a person whose sole responsibility is to plan and develop programming of rehabilitation services for deaf-blind persons. In some states this position may be the Statewide Coordinator of Deaf-Blind Services. In other states this position may be referred to as a Deaf-Blind Specialist. In a few states, the Deaf-Blind Specialists work under the SCD. Regardless of specific job titles used, this person should work collaboratively with the general VR agency's SCD responsible for programmatic leadership of agency services for persons who are deaf, hard of hearing and late deafened, as well as state agency rehabilitation personnel designated to work with people who are blind or have low vision. (See Chapter 2. on the VR Process for more information about dual service provision).

As states begin to address and improve services to persons who are hard of hearing or late deafened, an administrative or coordinator position specializing in this area may be advisable. States that have focused on services to this group have seen the number of persons served and rehabilitated grow significantly. Since the services they need can be very different from established services geared to deaf consumers, an administrator may be needed to address this population and redesign existing services, including reviewing and updating affected policies and practices.

Rehabilitation Counselors Serving Individuals Who Are Deaf, Deaf-Blind, Hard of Hearing and Late Deafened

In previous editions of the Model State Plan, the Rehabilitation Counselor information mainly focused on services to persons who are deaf and use sign language and therefore was described and referenced in terms of “the Rehabilitation Counselor for the Deaf (RCD).” This person was typically responsible to provide rehabilitation services to all consumers with hearing loss regardless of their communication mode or unique needs. One of the major differences in this document is equal attention to the specific needs of persons with hearing loss whether they are deaf, deaf-blind, hard of hearing or late deafened or whether they use sign language or not as their preferred communication mode. This represents a major shift in the recommended approach for service provision and possible staffing patterns (Stauffer & Boone, 2007).

When recruiting candidates to become Rehabilitation Counselors serving persons with hearing loss, it is ideal to consider qualified applicants who have hearing loss themselves. These individuals may have communication skills and firsthand knowledge of the issues and functional limitations related to employment and can “connect” well with consumers.

Other Rehabilitation Counselor positions that are being used and may be beneficial for state agencies to consider include Rehabilitation Counselors for the Deaf-Blind (RCDB) and Rehabilitation Counselors for Hard of Hearing and Late Deafened (RCHH/LD), sometimes called “Communication Specialists.” State agencies should focus on specific communication needs of the consumers, such as signing consumers verses non-signing consumers, to appropriately match staff skill sets with type of specialty caseloads.

Rehabilitation Counselor for the Deaf (RCD)

The RCDs would carry out the same functions as any counselor providing state/federal VR services. In addition, the RCDs would become involved with the deaf community in order to provide outreach services and to be aware of the issues in the deaf community within their geographic area. The RCDs would keep the SCD advised of the resource gaps in the area, and cooperatively plan with the SCDs in developing the necessary resources. In addition, the RCDs serve as subject matter experts to other field staff.

Essential Functions of the RCD

- Evaluates disabilities to determine functional limitations and assets, with specific expertise in psychosocial and vocational implications of hearing loss.
- Conducts vocational assessments and evaluates placement adequacy to establish suitable vocational objectives for consumers who are deaf.
- Develops and maintains a community network of referral sources.
- Develops and evaluates rehabilitation plans that fit consumers' communication needs, aptitudes, education levels, physical abilities, and career goals.
- Develops and implements a system for providing job placement for consumers who are deaf.

Knowledge of:

- the unique educational, linguistic, psychosocial, socio-cultural, and vocational needs as they apply specifically to individuals who are deaf;
- the unique needs of those individuals with communication disabilities from linguistically and culturally diverse backgrounds;
- the different functional levels of deaf individuals (i.e., Low Functioning Deaf (LFD), highly visual, etc.);
- various symptoms that may cause underlying factors in working with those who are deaf (i.e., mental illness, emotional disorders, and personality disorders);
- the full spectrum of communication strategies including the utilization of assistive technology for particular groups of individuals who are deaf;
- various community resources (i.e., Sign Language Interpreting Services, Social Services, community partners for Job Placement, Supported Employment, etc.); and
- the Rehabilitation Act and related issues impacting consumer service delivery and outcomes.

Ability to:

- relate and communicate with the deaf population on an effective and meaningful basis;
- advocate for the needs of the population;
- utilize empowerment strategies to foster self-reliance and independence;
- be responsive to stakeholders;
- interface with service providers;
- obtain and allocate resources; and
- advocate for the needs of the population.

Skills:

- demonstrate proficiency, both expressively and receptively, in communicating via American Sign Language and other communication systems utilized by these populations.

Supervision of the Rehabilitation Counselor for Deaf

The responsibility for casework supervision, approval of financial plans and IPEs should be clearly identified in the state VR agency manual. Supervision may be exercised by either the district administrator or by the SCD. However, the supervisor must have some understanding of the special considerations required in order to adequately serve a deaf caseload. Such special considerations include:

- Interviews take longer when sign language is used and allowances must be made for adequate time to achieve full understanding by the deaf consumer of the VR service process.
- Key support staff (secretary, aids and psychological consultant) should, to the maximum extent possible, be persons who can communicate with deaf people and who understand deafness. A secretary or aide should be provided who can communicate with consumers who drop in while the RCD is unavailable.
- The use of video phone technology by signing staff can greatly reduce the amount of time required for telephone communication. Investment in this technology for counselors serving this population can result in a cost savings to the agency, reducing staff costs for travel and increasing staff efficiency.
- The RCD may engage in nontraditional VR activities which contribute substantially to deafness rehabilitation. Such activities include: attending deaf-club meetings, assisting deaf consumers with court appearances and drivers license renewal, and assisting deaf consumers when they apply for other types of services, such as public assistance, Social Security, and mental health.
- The RCD should encourage and assist counselor aides and volunteers in outreach activities, as the deaf population is often isolated from the usual channels of communication and, therefore, may not be aware of the availability of VR services.
- The first few days after placement on a job are often particularly difficult for a deaf consumer. New interpersonal relationships must be developed, new communications patterns established, new transportation routes learned, and often new skills and talents are demanded. RCDs may need additional time to assist the consumer adapt to these new routines and demands of the work place.

Rehabilitation Counselor for the Deaf-Blind (RCDB)

Due to the unique and complex issues of consumers with combined hearing and vision loss, counselors serving this population need additional training and skills beyond information for deafness and hearing loss to be effective. Deaf-blindness is a disability that can often render an individual to have multiple functional limitations needing a variety of comprehensive services from several different programs. Again, the consumer's preferred communication mode should be the priority in determining the counselor to serve the individual. In some situations Rehabilitation Counselors for the Deaf-Blind (RCDBs) are established to ensure the wide array of needed services are identified and provided.

States vary in the way services for persons who are blind or have vision loss are structured. State VR services are provided in either separate general and blind agencies or in a combined agency providing both general and blind services. For states that have separate agencies, it is imperative that services available from each program be provided in some sort of coordinated fashion as needed for the deaf-blind consumer. The RCDB may be effective in either the general, blind and/or combined VR agencies - depending on the level and quality of coordination and support provided by the lead agency.

These counselors may serve as RCDBs only or they may serve other persons with hearing and/or vision loss depending on caseload size, communication skills, location, etc. The hearing and/or vision loss can also be progressive, causing different or additional functional limitations that necessitate multiple cases for the individual.

Essential Functions of the RCDB

- Gathers and evaluates additional medical and vision information to determine functional limitations of combined hearing and vision loss.
- Completes additional assessments, including use of specialized resources and programs to develop a comprehensive plan of services addressing combined hearing and vision loss needs.
- Develops and maintains a community network of existing and potential resources for deaf-blind service provision.
- Forms and arranges teams of service providers to address the comprehensive issues of individual deaf-blind consumers.

Knowledge of:

- visual conditions that cause or lead to blindness and/or low vision;
- techniques used to teach independent living skills for people who are blind or have low vision, including Braille, technology and mobility; and
- resources in blindness and deaf-blindness

Ability to:

- relate and communicate with consumers who have any degree of combined vision and hearing loss in the modality of consumer preference;
- advocate for the needs of the population;
- be responsive to consumer constituent groups;
- interface with all VR programs and service providers;
- develop professional relationships within a wide constituent base;
- obtain and allocate resources; and
- collaborate and form partnerships with existing statewide service systems and organizations.

Skills:

- proficiency in American Sign Language and other communication systems utilized by this population;
- organization and management skills;

- has strong customer service skills; and
- works effectively with a diverse community of consumers.

Rehabilitation Counselor for the Hard of Hearing and Late Deafened (RCHH) or Communication Specialist (CS)

Optimal services for consumers who are hard of hearing or late deafened are provided by specialists who are knowledgeable about the unique ramifications of partial hearing loss or profound hearing loss that occurs after language is developed. These counselors should be skilled in various techniques, strategies and assistive technology to communicate with these individuals, recognizing that often these consumers are not aware of this information or skilled in using these interventions. The preferred communication mode should be the determining factor as to whether the person is served by an RCD who is proficient in sign language or an RCHH skilled in other communication techniques, regardless of the person's self-proclaimed disability, i.e., deaf, hard of hearing, etc.

Compared to the RCDs, these RCHH or CS personnel need to have clear speech and enunciation skills and be aware of effective speaker behaviors required for effective communication. Consideration for these different communication needs should be addressed when identifying counselors to serve these caseloads. Counselors serving consumers who are hard of hearing or late deafened should have a "critical mass" of these persons on their caseload to ensure that their knowledge and skills are honed, increased, and kept up to date. Depending on the general population, the number of available counselors and caseload size, the RCHH or Communication Specialist may or may not serve other general cases or another specialty caseload.

These counselors may also serve in the RCD capacity only if they can fulfill the communication needs of both populations. Often, these staff persons are skilled general caseload counselors who are interested and willing to take on the additional training requirements to become proficient in this area. Sometimes existing personnel who are hard of hearing or late deafened themselves are interested in acquiring these skills or these persons can be targeted for recruitment for these positions. The ability to connect with these consumers as "having been there" is extremely effective since these persons tend to be very isolated and unaware that others have had similar experiences and that success is possible.

Due to the nature and often progressiveness of acquired hearing loss, hard of hearing and late deafened consumers are often employed when work-related and other problems occur. Hopefully, they will find vocational rehabilitation services in time to save their existing job or maintain employment. However, they may be desperate or in a crisis situation with their job at the time of referral and may need expedited services for a successful employment outcome.

The RCHH or Communication Specialist should target employers and HR directors in their areas concerning the incidence of employees with hearing loss and the available

services. If vocational rehabilitation services are provided early to employees with hearing loss, a higher success rate will be possible. If state agencies recognize these needs and adjust services accordingly, they will achieve a substantial increase in the number of hard of hearing and late deafened persons served and rehabilitated.

Essential functions

- Gather audiological and other medical information to determine the extent of hearing loss and recommendations for hearing aids and other treatments.
- Assess communication problems in general and on the job.
- Assess and recognize which problems are hearing related (and which are not). Make appropriate referrals for non-hearing related issues such as mental health services.
- Determine and identify which technologies are available for the benefit of the consumer in all areas of work, home and other settings.
- Perform job site analysis and recommend modifications/accommodations, including communication strategies.
- Counsel consumers in needed communication/coping strategies and techniques.
- Refer consumers to appropriate community resources and other sources related to hearing loss information, support groups and services.

Knowledge of:

- psychosocial needs of persons who are hard of hearing or late deafened;
- issues of stigma of the hearing loss and hearing aids;
- the vocational impact of hearing loss, including significance of adult onset hearing loss;
- etiology and audiological aspects of hearing loss, including current trends in treatment and hearing aids and other assistive listening devices;
- the full spectrum of communication strategies and available technology for communication assistance;
- coping skills and resources to obtain and develop these skills; and
- available resources and support groups for consumers.

Ability to:

- identify possible strategies and techniques for effective communication in various settings;
- identify and assess communication demands in job settings and to conduct job analysis and job site analysis;
- identify appropriate technology for use in personal and work settings and demonstrate use and function of these devices; and
- counsel consumers on basic care and maintenance of hearing aids, realistic expectations of hearing aids, troubleshooting, use and benefits of telecoils, etc.

Skills:

- demonstrate proficiency in appropriate communication strategies as appropriate such as effective speaker behavior, use of assistive listening devices and visual display technology;
- demonstrate skills in counseling consumers related to specific issues of hearing loss such as resolving communication problems and barriers at work and in personal situations;
- assesses consumer's level of coping skills and acceptance of hearing loss (stages of grief); and
- determine functional limitations caused by hearing loss.

Supervision of the Rehabilitation Counselor for Hard of Hearing and Late Deafened or Communication Specialist

Supervision of RCHHs should generally be handled by the local supervisor with technical assistance available from the administrative coordinator responsible for these services. However, it is imperative that the local supervisor of these counselors receive condensed training concerning the needs and services to these consumers. Also, administrators and supervisors should determine appropriate case requirements and caseload management for this population. Case reviews and recommendations for improvement should occur on a regular basis. Counselor budgets may also be affected by hearing aid and technology purchases as well as the cost of medical/physical restoration services.

Counselor Aides and Interpreters

Because of shortages of specialists on deafness, administrators may wish to utilize counselor aides who have skills in communication with deaf persons but who do not have the academic qualifications to be counselors. Caution should be exercised to be certain that the counselor aide, technician, or interpreter does not usurp the counselor's role. Their job description should clearly outline the extent of the counselor aides' responsibilities; emphasizing that their primary role is to perform those functions assigned to them by the counselor. In many cases, the aide serves as the communication link between deaf consumers and general agency resource personnel who do not have communication skills.

Developing a career ladder that promotes counselor aides, after suitable experience and education, to RCDs can provide a long-range solution to personnel demands. Capable deaf, deaf-blind, hard of hearing and late deafened individuals should also be considered as counselor aides.

A "Staff Interpreter" is sometimes employed to facilitate communication between consumers who use sign language and Vocational Rehabilitation staff or other persons, i.e., employers, doctors, postsecondary instructors etc., involved in an individual's rehabilitation program of services. The staff interpreter position involves a high level of accountability for dealing with confidential information and sensitive issues in an ethical

manner. The position may include other duties as assigned. Employment of staff interpreters may enable the VR agency to better address the sign language interpreter shortage, have the convenience of on demand communication access for all staff and consumers, and to potentially achieve a cost savings.

Certification of Rehabilitation Counselors

Issues have recently surfaced concerning problems with high stakes testing and its impact on some persons with hearing loss taking the Certified Rehabilitation Counselor (CRC) exam. Several test takers with hearing loss have reported encountering difficulty passing the CRC test, even after extensive preparation. To study and address this problem with the CRC exam, the Commission on Rehabilitation Counselor Certification (CRCC) convened a deafness advisory panel in July 2007. The panel recognized that individuals with hearing loss who have never had access to spoken English do not have the opportunity to learn the language auditorally, including constant exposure to its many meaning and nuances. For some individuals who use ASL, written tests such as the CRC may be difficult because of the language and may not actually measure the skills of the test taker. State agencies need to be aware of ways in which this situation may impact test takers who are deaf. The CRCC has produced a white paper summarizing recommendations from the panel to address test equity and accommodations. (Reid, C. & Nunez, P. (July, 2007). Exploring Test Equity Issues for the CRC Examination: CRCC Deafness Advisory Panel.)

Training

State VR agencies should develop comprehensive, long-range training plans, including earning of degrees, and should provide for development of regularly scheduled in-service training experiences for all staff involved with consumers with hearing loss. RCD//DB HH/LDs should have opportunities for training equal to and often beyond those for other agency staff. Performance standards need to be established for these counselors. These standards should assure that the qualifications listed above have been met and that agency practices are keeping pace with new knowledge. The standards may also be extended to other personnel frequently working with deaf people.

In 2002, the State of California assured through legislation (SB 105) that the direct service staff and program managers for deaf and blind services will have demonstrated experience and sensitivity in working with the target population. A copy of the bill is available for review in its entirety at www.leginfo.ca.gov/pub/01-02/bill/sen/sb_0101-0150/sb_105_bill_20020929_chaptered.html

While the career ladder concept is recommended, its application must not lead to a deterioration of services. The agency should be careful to provide suitable replacements for counseling personnel (e.g., RCD/DB/HH/LD specialists) and counselor aides who are promoted or otherwise removed from casework.

Pre-Service Training Programs

Currently, most general or cross-disability oriented graduate or undergraduate programs in Rehabilitation Counseling offer minimal, if any, academic curricula and instruction concerning effective intervention and services with this population. Only a small number of specialized programs currently provide Rehabilitation Counseling with persons who are deaf and hard of hearing. The need for trained counselors currently far exceeds the number of students graduating from these programs each year. In addition, given the limited number of courses that can be offered within a degree program, the academic curricula in most of these programs are not designed to provide instruction, at least in depth, concerning the vocational rehabilitation of all the various key target groups that comprise the population of persons with hearing loss. Thus, some programs may be oriented toward preparing students to work with persons who are deaf, while others may place more emphasis on working with other target groups. Nevertheless, as federal funding priorities continue to shift, the number of specialized programs in Rehabilitation Counseling with persons who are deaf or hard of hearing is diminishing in spite of the growing need for trained personnel.

In-Service Training and Human Resource Development

Because of the limited number of rehabilitation programs available to provide this type of training, the state vocational rehabilitation agency should utilize a wide array of resources for internal training to assist counselors in developing the necessary competencies to effectively serve this population. This training also provides the opportunity for staff to build on existing skills for continuous quality improvement.

State VR agencies are encouraged to explore all available training options, such as in-state and out of state programs, including online training, to meet the mandate of staff development for counselors serving consumers who are deaf, deaf-blind, hard of hearing or late deafened.

In addition to internal training provided to counselors, external training options should be evaluated and considered for professional development. External trainings may be preferred in order to have a critical mass of trainees. Additionally, if states or regions share resources and combine trainees, they are often able to attract high level trainers and presenters. Finally, external training encourages networking with others for resources and to process issues and concerns and develop resolutions. National and state organizations committed to promoting the highest level of service delivery to these populations offer training through conferences and online programs targeting the essential competencies necessary to meet the unique needs of these populations. Some options currently available are included in Attachment 3.1

Retention

The retention of qualified staff is essential. States should develop plans to encourage staff retention. Such plans will reduce the fiscal impact associated with the hiring and training processes. Strategies for staff retention include (25th IRI, 2000):

- Flexibility of hours and working conditions to allow the professional to attend the various functions necessary to be known to and accepted by the deaf community.
- Opportunities to meet with peers (in deafness, LFD, discipline).
- Continued development (in discipline, communication, and deafness).
- Inclusion in the organizational team.
- Development of a career ladder as the professional develops KASs and is able to use these with the more challenging individuals.
- Recognition as a senior or master counselor with financial incentives.
- Careful goal setting that considers the complex factors and time necessary to successfully place individuals in this group.
- Awareness of burnout indicators.

Passing the Torch

As with the entire federal/state rehabilitation program nationwide, VR leaders and counselors serving consumers with hearing loss are aging and retiring at rapid rates, often leaving a void in knowledge and skills to continue services at existing levels, much less improve or expand in this area. States are encouraged to plan for this leadership succession and network with individuals and groups for mentoring and assistance for new personnel. The SCDListserv (RSA-SCDLISTSERV@LISTSERV.ED.GOV) can be an effective tool for needed mentoring and information, as well as the biennial SCD, SCDB, and SCHH conference supported by RSA. Also, the Council of State Administrator in Vocational Rehabilitation (CSAVR) Committee on Services to Individuals who are Deaf, Deaf-Blind, Hard of Hearing and Late Deafened (www.rehabnetwork.org) is comprised of mostly SCDs from around the country to address current issues and emerging trends. States are encouraged to become involved in these activities and opportunities.

SUMMARY

It is recommended that a state's plan for services to individuals who are deaf, deaf-blind, hard of hearing, and late deafened include:

- the provision for a State Coordinator for the Deaf;
- depending upon the demographics of the state, the provision for other state coordinators (e.g., State Coordinator for the Deaf-Blind; State Coordinator for Hard of Hearing Services) specialized counselors designated to serve consumers who are deaf, deaf-blind, hard of hearing, and late deafened;
- a delineation of the skills that a counselor should possess in order to provide services to clients who are deaf, deaf-blind, hard of hearing, and late deafened.
- a system to evaluate skills of counselors who are to serve people who are deaf,

- deaf-blind, hard of hearing, and late deafened and a system to match skill sets of these counselors with appropriate specialty caseloads; and
- a plan for the in-service training of staff that are to provide services to consumers with hearing loss.

For additional guidance, link to the Kentucky VR Services Deaf and Hard of Hearing Services Guide at www.ovr.ky.gov/programs_services/deaf_services.htm.

Attachment 3.1 Selected Training Resources

- San Diego State University: The “Post-Employment Training Administration of Programs Serving Consumers who are Deaf and Hard of Hearing” (PET-D) program provides leadership and administrative training to those who serve consumers who are deaf and hard of hearing. PET-D training is provided through a two-step, 21-unit post-baccalaureate certificate in Rehabilitation Administration. (interwork.sdsu.edu/web_education/pet_d.html)
- [*Orientation to Serving College Students Who are Deaf or Hard of Hearing*](#) is designed for education professionals who are serving students who are deaf or hard of hearing. Others who may benefit from completion of the training include prospective employers of deaf and hard of hearing students and beginning students preparing for careers in deaf education, audiology, communication disorders, rehabilitation, or sign language interpreting. The instructional goal of the project is to provide a basic understanding of hearing loss and its implications for communication and learning in a secondary or postsecondary setting. The training is offered at no charge, and individuals who complete the training in one sitting may download and print an official certificate of completion issued by PEPNet. (www.pepnet.org/training.asp#orient)
- The American Academy of Hearing Loss Support Specialists is a new online educational program from Hearing Loss Association of America. The Academy provides education and oversight for the Certificate in Hearing Loss Support. This program establishes a set of core knowledge and understanding for individuals who work with, or wish to work with, people affected by hearing loss.
- Southeast Regional Institute on Deafness (SERID): This Institute provides educational and professional development for individuals who work with consumers who are deaf, hard of hearing, deaf-blind, and late deafened. The goal of this conference is to promote collaboration between service providers and communities serving these consumers within the region. It also provides an avenue for recruiting new staff for vacant positions as well as a way for rewarding current staff for the good work they are doing. (www.serid.org/about.html)
- PEPNet, the Postsecondary Education Programs Network, is the national collaboration of four regional centers that assist educational institutions in more effectively addressing the postsecondary, vocational, technical, continuing, and adult education needs of individuals with deafness, including those who are deaf with co-occurring disabilities. Each Center provides technical assistance and dissemination activities, personnel development activities, and technology use activities. The Centers are supported by contracts with the U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs. (www.pepnet.org/)

- Northern Illinois University's Department of Communicative Disorders, housed within the College of Health and Human Sciences, offers a unique program designed to provide quality continuing education to the rehabilitation professional who wishes to enhance his or her skills in providing quality services to persons who are deaf-blind. This program is funded by the U.S. Department of Education, Rehabilitation Services Administration. Participants may earn 15 semester hours of academic credit at either the undergraduate or graduate level. Training begins with an intensive three-week institute on the Northern Illinois University campus. (www.chhs.niu.edu/comd/iod/deafblind.asp)
- “On the Job With Hearing Loss” by Rebecca Morris: a Web site offering effective communication solutions. (www.beyondhearingaids.com)
- Sam Trychin, an online training program: a product of 22 years of experience working directly with hundreds of people who are hard of hearing and their family members. (www.trychin.com/)

CHAPTER FOUR

TRANSITION SERVICES

Transition services are vital to the success of students who are deaf, deaf-blind, or hard of hearing, exiting from the schools for the deaf and mainstream programs. Most schools for the deaf existing in the first half of the last century enjoyed an era of flowering and growth for deaf education in America. Instruction was in sign language, with the goals of imparting literacy, training for productive labor, and the cultivation of deaf culture. The latter half of the nineteenth century witnessed the rise of oral theories of deaf education. Although there are a variety of these theories, they have in common an emphasis on the importance of oral skills (speech-reading and speech) in the education of deaf children. As the oral/manual dispute has waned, a new philosophical division has appeared; the mainstreaming debate. Public Law 94-142 mandates that each child be taught in the "least restrictive environment" possible, and this has been widely interpreted to mean the local public school. The mainstreaming, or "inclusionist," movement has led to a decline in the proportion of deaf, deaf-blind and hard of hearing students attending state-supported schools for the deaf.

Without going into detail, it is fair to say that this contemporary debate shares some features with the oral/manual debate of 100 years ago. Success in a mainstream setting is very dependent upon degree of hearing loss and degree of oral skill. Deafness is a very low-incidence condition, and very few public schools have more than a small number of deaf, deaf-blind or hard of hearing students within their districts. It can also be very restrictive to be blocked from equal access of communicating with classmates and teachers, from participating in sports or from normal social interaction without the need for an interpreter.

Students with varying degrees of hearing loss have unique communication and related needs. The major barriers to learning associated with deafness relate to language and communication, which, in turn, profoundly affect most aspects of the educational process. The reading skills of deaf children reflect perhaps the most momentous and dismal affect of the disability and of the education system's struggle to effectively teach deaf children: many of the students "level off" in their reading comprehension achievement at about the third grade level.

Compounding the manifest educational considerations, the communication nature of the disability is inherently isolating, with considerable effect on the interaction with peers and teachers that make up the educational process. This interaction, for the purpose of transmitting knowledge and developing the child's self-esteem and identity, is dependent upon direct communication. Yet, communication is the area most hampered between a deaf, deaf-blind or hard of hearing child and his or her hearing peers and teachers. Even the availability of interpreter services in the educational setting may not address these children's needs for direct and meaningful communication with peers and teachers.

Students with all levels of hearing loss will need a more comprehensive transition program to include, but not limited to: joint planning and coordination of the IEP/ITP/IPE; academic and vocational guidance; career exploration and vocational preparation; assessment of communication skills, social skills, and accommodation needs; self advocacy and self-determination; independent living skills; support systems and access to adult services; job seeking and placement; and follow-up and follow-along. Together, these components appear to provide students with hearing loss a set of key services and experiences needed to successfully transition from secondary/postsecondary education to employment and adult life.

Joint Planning and coordination of the IEP/ITP/IPE

Individuals with Disabilities Education Act Amendments of 1997 (IDEA) and the 1998 Amendments to the Rehabilitation Act of 1973 encourage the joint development of an Individualized Education Program (IEP), Individualized Transition Plan (ITP), and an Individualized Plan for Employment (IPE) prior to the student exiting high school. The purpose of coordinating these plans is to improve the effectiveness of services authorized under the 1973 Amendments to the Rehabilitation Act and to assure that students with disabilities have a smooth transition from school to work and to the community. Under Definitions, in Section 7(39) of the Rehabilitation Act, as amended in 1998, transition services are defined as:

A coordinated set of activities for a student, designed within an outcome-oriented process that promotes movement from school to post-school activities, including post secondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation. The coordinated set of services shall be based upon the individual student's needs, taking into account the student's preferences and interests, and shall include instruction, community experiences, the development of employment and other post-school adult living objectives, and when appropriate, acquisition of daily living skills and functional evaluation.

Prior to this legislation, transition had been described within the special education process, but it had never been defined in terms of who should participate, when they should participate, and who would provide the services. P.L. 101-476 mandated transition services for students with severe disabilities to include "community experiences, the development of employment, and other post-school adult living objectives." In addition, a transition plan must be developed for a student no later than age 16 and, in some cases, at age 14 or younger.

At age 16, or younger, if appropriate, the student with a hearing loss must be invited along with representatives of any other agency that is likely to be responsible for providing or paying for transition services. Wehmeyer and Ward (1995) describe student involvement in the transition process as the heart of good transition services. The

involvement of students increases ownership of their plans and responsibilities for carrying out their own wishes and dreams. Many of the current educational reform initiatives focus on outcome-oriented results, and literature supports the evidence that youth who are actively engaged and feel a sense of control over their lives have better outcomes as adults (Field, Martin, Miller, Ward, & Wehmeyer, 1998). Families may invite an advocate from an advocacy organization to assist them with understanding information and follow along.

Critical to the process of transition is the ubiquitous fact that students with hearing loss do not think and act alike no matter how similar they might be with respect to academic levels, communication style, family environment, degree of hearing loss, and other bio-demographic characteristics (Stewart & Klumin, 2001). One logical beginning point for the transition component is with the team reaching agreement about the **individual student's needs** with regard to the three mandated areas of:

- (a) instruction;
- (b) community experiences; and
- (c) employment and other post-school living objectives.

Academic and vocational guidance

There are many factors affecting a student's path upon leaving school. The transition team should help students with hearing loss develop an adequate picture of themselves and of their role in the world of work. Vocational guidance is the process of helping individuals to know themselves; their interests; and abilities and the world of work and its demands and to be able to reach a mature career decision. Vocational guidance refers to the services that assist individuals of any age and at any point throughout their lives, to make educational, training and occupational choices and to manage their careers.

Process of Vocational Guidance

Vocational Guidance helps individuals to acquire knowledge in self awareness, exploration of the world of work, and mature decision making.

1. *Self awareness*: is the process of gathering information about one's interests, abilities and values. It helps one to answer such questions as:
 - What kind of person I am?
 - What type of work do I enjoy doing?
 - What are my interests and abilities?
 - What kinds of skills do I possess?
 - How can I make a decision regarding my future career?
 - How can you know yourself?
 - What self-interest inventories help you to know better your interests, values and skills?
 - In looking at your academic background and other achievements, what school subjects were you good at and what subjects were difficult for you?

- How do you spend your leisure time?
- What skills are you highly motivated to use?.
- Write a summary about yourself and identify themes that point to who you are
- Write your personal objectives and identify who you want to be and what you want to achieve in your life.

2. *World of work exploration*: this involves gathering information about the different careers that might fit your interests, values and abilities. It helps you find answers to the following questions:

- What kind of education or training is required in each?
- What are the pros and cons of each job you think of?
- What are the working conditions in the different types of careers?
- What does a certain career look like?
- What are the job requirements?
- What is the financial output?

To be able to answer such questions:

- Get to know more about these careers.
- Meet people who work in these careers and ask them questions like the followings:
 - What are your responsibilities in a typical working day?
 - Did you work in other jobs?
 - What is the required background (education, training, experience)
 - What do you like and dislike in your work?
 - What are the skills and the abilities required in you job?
 - What are the future trends that you see for this type of job?
 - What is the organizational structure within your institution?
 - How does your department fit within this structure?
 - What is your advice to person who is looking for training in this field?

3. *Mature decision making*: is the process of exploring the different alternatives, narrowing down the possibilities and then choosing the right alternative. To ensure a mature career decision do the followings:

- Look at the different possibilities and ask yourself whether there could be other ways that could help you in solving this problem?
- Think of your decision. Can you deal with it in another way
- Listen to others.
- Weigh the advantages and disadvantages for the different alternatives when you narrow down your choices.

Students have to decide at an early age if they will take the college track or the vocational track. Students with hearing loss may have no idea what type of work they would like to

do. If the student is considering the option of going on for post secondary education, consideration must be given for entrance examinations that might be required for entry to a postsecondary educational or technical institution. Likewise, vocational testing may be required for a career option that a student might be interested in. Therefore, students with hearing loss will need a lot of academic and vocational guidance to successfully transition from school to work.

C. Career exploration and vocational preparation

With respect to transition, exploration for students with a hearing loss takes on a serious meaning as it requires students to develop a sound understanding of why people work, how they get jobs, what they do with the money they earn, what they do to advance in a job (e.g., continuing education), and their career hopes. It is at this point that the student should be thinking about the types of work that are and are not of interest to them and explore reasons why this is the case. Also the transition team should develop effective strategies to assist the student in achieving their goals by exploring summer transition education programs such as those available at Gallaudet University and the National Technical Institute for the Deaf.

Community-based assessment is a great resource to assist students with hearing loss in their efforts to become employable—get people working in their own communities and provide them with relevant skills for the future. This is individually focused training rooted in the community in which the student lives. It's flexible, culturally sensitive and cost-effective for all. Unfortunately these community based training opportunities have to be developed for students with hearing loss and staff have to be trained on how to appropriately serve this population.

Community-based assessment and services may include but not be limited to:

- individual vocational and career assessment,
- individual and group skill training,
- language instruction,
- academic upgrading,
- literacy and numeric training,
- employment preparedness and readiness training,
- work experiences,
- employment placement,
- job support and maintenance,
- life/transition skill training,
- individual and group counseling,
- individual and group advocacy,
- income maintenance, and
- crisis support as required.

Communication skills, social skills, and accommodation needs

Another critical point in the transition process is assessing the communication needs of the students. Assess all aspects of communication, such as reading, writing, interpersonal communication, signing, speaking, and so forth. Does the student have the communication skills needed to perform the essential functions of a job? Can the student use an interpreter or a job coach effectively? How long will an interpreter be needed before the student can use his or her own communication skills to interact with fellow employees?

Determine if your students are comfortable interacting with hearing people. Have they been exposed to situations at school, at work, or in the community that have helped them learn how to behave socially among strangers? Can they initiate a request for help if they come across a difficult task on the job? Do they know how to handle conflict?

If the student has other physical and medical condition that will affect his or her performance on a job, what accommodations will be needed on the job? Can the student use public transportation to get to work everyday? The list of questions might appear endless but you must probe until you are satisfied that you have all of the information you need to place a student on a job (Stewart & Klumin, 2001).

Self Advocacy and self-determination

One of the most important additional skills needed by many students with hearing loss is **self-advocacy**. The student must be apprised of his or her role in making decisions in the IEP meetings and encouraged to be actively involved not only in making the decisions but in following up on them. The student's presentation of his or her needs at the IEP meeting may itself provide one opportunity to assess and discuss self-advocacy skills. When students are involved, they have opportunities to learn about their strengths and skills, as well as their disabilities and how they can impact learning, careers, relationships, and independence. They can also learn about the accommodations they will need at a job, in further education, in relationships, and more. Speaking up for themselves is vital for success in adult environments.

In order for adults to fully engage students with hearing loss in the assessment, planning, and the follow-through process, students must believe that they are heard, that adults will respect them and have high expectations for them, that they will support their needs and let them take risks and fail, and that they will look at them as people in multiple environments. Student will benefit from classes in student-led IEPs or self-determination, but they must also have experiences and opportunities in many settings that allow them this leadership role.

Independent Living Skills

See Chapter Eight on Independent Living

Support systems and access to adult services

The transition team meetings should include key players that are involved in the student's life. It is strongly encouraged that state agencies get involved with this population early, if only to provide information or be a consultant to the educational staff about community resources. Under current federal requirements, all interested partners in the transition planning process should include, but not be limited to: parents or guardian, student, school transition coordinator, vocational rehabilitation counselor for the deaf, assistive technology specialist for the deaf, Transition Employment Specialist, job coach, and other pertinent community providers.

Outside agency representatives who could be invited to the IEP meeting may include:

- group home worker
- county social worker or case manager
- mental health counselor
- employment agency staff (day training)
- independent living center staff
- disability support staff from a postsecondary educational or technical school
- person knowledgeable about financial benefits such as Supplemental Security Income (SSI) and Medicaid or Medical Assistance (MA)
- personal care or health care providers, including mental health care providers
- probation officer or teacher from a juvenile justice center
- community park and recreation staff, and
- transportation agency staff (van pool)

During the transition team meetings, the team should discuss the difference between entitlement and eligibility programs in order for students with hearing loss to understand the benefits of each program and apply for services before they graduate. Each agency or service provider generally has a different set of criteria for eligibility and may have a waiting list for services. Families can become overwhelmed with the amount of information and paperwork required for application and follow-through. Part of transition planning can address those issues and identify who families can call on for support and coordination. It can be very beneficial to the whole team if one person is identified as the single point of contact and service coordinator for the family and other team members. It is also important for the professionals to coordinate services to eliminate the duplication of services and identify any gaps in services that the students may need.

The identification of natural supports is important to the success of the student with hearing loss and their family. Natural supports can be any assistance, relationships or interactions that allow a student to secure, maintain and advance in the community of his/her choosing in ways that correspond to the typical routines and social actions of other people and that enhance the individual's relationships. The use of natural supports involves assisting the student to develop a sense of social belonging, dignity, and self-esteem. Natural supports can be friends, family members, neighbors, acquaintances, co-

workers, volunteers, peers, and/or church members. Natural supports can be used to involve the student in community programs, activities, and projects; volunteer experience; involvement in competitive employment; and promote social contact with one's immediate family, relatives, and neighbors.

Job seeking and placement

It is important for teachers to know that the new Rehabilitation Amendments are guided by the presumption of ability. **This presumption holds that a person with a disability, regardless of the severity of the disability, can achieve employment and other rehabilitation goals, if the appropriate services and supports are made available.** The transition provisions added to the Act do not shift the burden for transition planning from education to rehabilitation. Instead, they promote coordination and collaboration between the two systems so there will be no gap in service for eligible students.

In the early nineteenth century, it was not unusual for most schools for the deaf to have a print shop as part of their vocational education program. These schools also taught farming, shoe repair, carpentry, sewing, barbering, metal work, welding, automotive repair, and many other types of manual labor jobs. The schools for the deaf tended to teach skills that matched the jobs that were available in the community.

Today's labor market has been shaped by significant technological changes that have occurred over the past thirty years. The market is highly diversified, and it's virtually impossible for a school to prepare these students with the skills needed to immediately obtain employment in the way they used to do it. The nature of the jobs is changing too - as computers are displacing workers in many industries - and the service industry has become one of the fastest-growing industries, offering many different types of career opportunities. Another trend is that more and more jobs require a high school diploma or education and training beyond high school.

In order to help students with hearing loss transition from school to work, the school system will need to investigate the availability of work experience opportunities in the school and in the community. Transition Coordinators will also need to ask: What work experience opportunities are compatible with a student's interest and skills? Is the community workplace sensitive to the communication needs of a deaf student? Do businesses in the community have prior experience hiring deaf students for their work force? Are workplaces willing to make accommodations for deaf employees such as installing safety equipment, providing pagers, or providing interpreters for meetings? (Stewart & Klumin, 2001)

For students who are low functioning deaf with other disabling condition, the transition team is encouraged to explore the possibility of supported employment services. Supported employment services allow the student to obtain job-site training with a job coach that can lead to full/part-time work with hourly wages in an integrated work setting.

Follow-up and follow-along services

It is important for students with hearing loss to maintain regular contact with their VR counselors while receiving state VR services. Regular contact varies from state to state but students should contact their counselor if there is a change in job choice, problems on the job site, or anything that becomes a barrier to obtaining or maintaining employment. Counselors may visit the students at the school, on the job site, or at their home to discuss progress towards achieving their job choice. Students that are receiving supported employment will need on-going support from another state agency, a private non-profit organization or any other appropriate resources other than VR, after the individual has achieved successful employment outcome. This approach is predicated on the belief that students with hearing loss should be given the chance to succeed.

State VR agencies are using a variety of administrative approaches to accomplish systems change designed to improve youth transition. These approaches could include:

- Mentoring youth and young adults,
- Building partnerships with local educational agencies, community colleges and four-year institutions of higher education,
- Providing training and technical assistance to local educational agencies, community colleges, and four-year institutions of higher education,
- Embedding VR counselors in the high schools,
- Conducting resource mapping across agencies,
- Providing user-friendly, practical information to students, families, and other stakeholders, and
- Supporting career and employment initiatives in high school/high tech programs.

Transition Model (Recommended activities and the grade/age level for implementation)

8th grade or age 14:

The school system should:

- Invite appropriate Rehabilitation Counselor(s) for the Deaf, Deaf-Blind and/or Hard of Hearing to the annual IEP meeting for informational purposes and to provide vocational input. These counselors can provide specific information about VR services to parent and student at this meeting and obtains release to receive student records.
- The school system should administer formal career assessment (such as SAGE)
- The school system should provide teacher training on transition services for students with hearing loss
- The school system should explain the differences between academic or career track to parents
- The school system should provide parent education & list of responsibilities

The student should participate in:

- Functional field trips – Tours of companies/restaurants/library
- Career exploration
- VR Orientation for students (groups)
- Interest inventory – Vocational evaluation
- Independent Living skills development in classroom & dorm
- Introduction to Computer skills
- Identify students with secondary disabilities early
- Teach vocabulary (work related terms)
- Vocational activities should be connected year after year

9th grade or age 15:

If the VR counselor did not participate in 8th grade meeting, then he or she are invited again to the annual IEP meeting for informational purposes and to provide vocational input. Counselors can provide specific information about VR services to parent and student at this meeting and obtains release to receive student records.

The student should participate in:

- Student understanding of hours required to graduate
- Work place tours and informational interviews
- Application for services to obtain work permits
- Parent involvement with vocational opportunities
- Website search for job related information, positions, duties & job description
- Learn application process for obtaining employment
- Career exploration – informed choice, realistic Voc goal
- IL skill development in classroom & dorm
- Contact youth employment agencies
- Preparation for Employment Security Commission – Registration
- Computer skills
- Interpreting use & policy/
- Self - advocacy
- Vocational evaluation – follow-up each year with students

10th grade or age 16:

- Counselor(s) are invited and should attend annual IEP meeting to provide vocational input.
- Counselor(s) completes application for VR services for students identified for community based work transition program

The student should participate in:

- Partnership with VR – consumer’s responsibility
- Career exploration – realistic Voc goal, Gallaudet/NTID
- Vocational evaluation

- Employment Marketing Skills training (bring applications to school/VR)
- Summer employment
- School based training – job matching with student’s knowledge, skills & abilities and variety of work experience
- In-school work adjustment
- IL skill development in classroom & dorm
- Computer skills
- IEP meeting/consultation/parent education

11th grade or age 17:

The student should participate in:

- Partnership with VR – consumer’s responsibilities
- Employment Marketing Skills training (bring applications to school/VR)
- Mobility – encourage Driver’s Ed/driving classes for students
- Career exploration – realistic Voc goal, Gallaudet/NTID
- Community based training – job matching with student’s knowledge, skills & abilities and variety of work experience
- IL skill development in classroom & dorm
- Summer employment & process
- Computer skills
- VR Day – Meet Juniors & Seniors
- IEP meeting – provide transition & employment services

12th grade or age 18 – 21

The student should participate in:

- Partnership with VR
- Career exploration – realistic Voc goal
- Apply for Pell Grant before March
- Employment Marketing Skills training
- Paid employment experience while in high school
- Job matching with student’s knowledge, skills & abilities
- Transition services from school to work in the community
- Independent Living Skills development - hands on experience – application to real life
- Computer skills
- VR Day – Meet Juniors & Seniors
- Parent’s Day
- Attend IEP meetings
- Self Advocacy (Legal rights, entitlement versus eligibility, assertiveness training, ADA)
- Accessing adult programs

CHAPTER FIVE

COMMUNICATION ACCESS

It is important to know that not all deaf, deaf-blind, hard of hearing or late deafened consumers communicate in the same way. This chapter describes various communication needs of consumers. Web links for additional resources are provided at the end of the chapter.

Consistent with the provisions of the regulations of the Rehabilitation Act, the counselor is responsible for determining the client's preferred language and mode of communication and making necessary arrangements to provide services using these preferences in advance. This can include providing a qualified interpreter/translator at the earliest opportunity before or after the initial contact with VR. Agencies are required by the Rehabilitation Act to ensure, to the maximum extent feasible, that providers of vocational rehabilitation services are trained to communicate in the native language or mode of communication of an applicant or eligible individual. (See Federal Regulations 34 CFR 361.38; 362.50; 361.51; Rehabilitation Act).

An assessment of each individual consumer is necessary to determine his or her preferred mode of communication and the accommodation requirements to meet individual needs. Some communication needs will vary based on the situation. It is imperative that VR staff understand the consumer's preferences and attempt to communicate using the method that works best for each individual consumer. This understanding of consumer preference is the basis for and demonstrates the highly-valued "consumer choice" principal. It is also mandated that programs serve consumers in their preferred language. In order to meet this goal, VR staff must apply knowledge of local marketplace resources in working with interpreter referral agencies, educational institutions, other human service agencies and technology resources. Regardless of preference for communication, direct communication between skilled professionals and consumers is considered most effective.

Modes of Communication

Individuals who are deaf, deaf-blind, hard of hearing and late deafened use a variety of communication methods and sometimes a combination of modes. It is important to obtain feedback from the consumer on their preferred mode of communication and adapt the VR program to meet their particular needs. Below is a list of various communication modes.

- American Sign Language (ASL) - used by some culturally deaf consumers
- English Based Signing Systems – used by consumers who are deaf who prefer a manual form of English
- Tactile Communication – Used by some consumers who have a dual sensory loss of both hearing and vision. This communication method is

based on a standard manual sign system in which the receiver's hand(s) is placed lightly upon the hand(s) of the signer to perceive the signs. (e.g., Tactile communication, Tracking, Tactile fingerspelling.)

- Print on Palm – Used by some deaf-blind consumers. This method includes print of block letters on an individual's palm to spell out each word.
- Close Vision Interpreting/Transliterating – Used by some consumers who are both deaf and visually impaired
- Sign Supported Speech - used by some consumers who prefer an English sign system together with strong oral features
- Contact Language Varieties (CLV) formerly known as Pidgin Signed English, used by consumers who prefer a blend of signed English and ASL
- Speech to text services, Computer Aided Real Time Captioning (CART), C-Print, and Typewell. These are a variety of systems providing printed access to speech through technology.
- Speechreading –used by persons who are deaf, hard of hearing and late deafened, who prefer written or oral communication.
- Residual hearing/speaking – involves relying on existing hearing ability via technology such as hearing aids coupled with assistive listening devices (ALDs) or stand alone ALDs.
- Cued Speech – a method of making English more visible through the use of eight handshapes in four positions distinguishing among different speech sounds that look similar on the lips. Cued Speech assists in processing auditory information by visually representing the sounds of spoken language there by improving speech discrimination.
- Oral Transliteration – used by persons who are deaf and rely on speech and speechreading to communicate. These speechreaders may or may not also know or use sign language.

Communication Access for Signing Consumers

To ensure quality communication access with consumers and staff who prefer sign language as their primary mode of communication, state agencies should hire qualified rehabilitation counselors whose skill set includes proven competence in American Sign Language (e.g., as demonstrated by an assessment tool such as the Sign Language Proficiency Interview – SLPI. Prior to June 2006 - known as the Sign Communication Proficiency Interview or SCPI). Counselors must also have sufficient knowledge of hearing loss and its impact on the vocational rehabilitation process.

These tools (such as the SLPI) assess American Sign Language (ASL) as it is used among skilled sign language communicators. Best practice models recommend a level of

‘Intermediate’ or higher on the system used. For more information see: <http://www.rit.edu/~fccncr/slpi/history.html>

If VR counselors working with this population do not possess the minimum skills, a development plan should be written so that they can gain/possess those skills within a specific period of time. To ensure effective communication, these VR counselors must work with a qualified interpreter when seeing consumers until sign language proficiency is achieved.

Qualified Interpreters

Interpreters facilitate communication between persons who are deaf, deaf-blind and hard of hearing and persons who are hearing. Interpreters are educated, credentialed professionals fluent in two (or more) languages, Deaf Culture and one (or more) hearing cultures, and are experienced in providing services in a variety of settings and with a variety of consumers. Interpreting services provide accessibility to programs and services to ensure effective communication. It is important for state VR agencies to employ or hire **only** qualified interpreters to serve in this role.

The term, “qualified interpreter” has not been definitively defined. Qualified interpreters may be hearing or deaf. Some states define “qualified” as “nationally or state certified,” “state credentialed,” or “state licensed.” According to the American’s with Disabilities Act, the definition of “qualified” is “the ability to perform the tasks of interpretation appropriately and accurately in a given situation.” (<http://www.usdoj.gov/crt/ada/cohenjaffe.htm> - Jurisdiction/Applicable Law 28 CFR)

This definition requires that interpreters be fluent in the two languages being used, that they understand the role of the interpreter, and that they be able to perform in a situationally-appropriate manner. The ability to use sign language, even fluently, does not in and of itself make for a qualified or effective interpreter. While an extensive knowledge of sign language is required to be an interpreter, many other factors are involved in finding an interpreter who will meet the counselor’s needs, the consumer’s needs, and the needs of the agency. For this reason, some state VR agencies have chosen to employ staff interpreters. These staff interpreters may become more adept and knowledgeable about VR services and programs, and thus more effective interpreting in these settings. If no information is available to determine the consumer’s language preferences or needs, the best avenue to ensure effective services is to provide for or hire a credentialed interpreter.

All professional interpreters follow a strict code of ethical conduct, which guides and protects both interpreters and the consumers they serve. While codes may vary slightly with differing state screening tests and state certification exams, the basic tenets of all interpreter codes of conduct are remarkably similar. The RID “Code of Professional Conduct” is the set of guidelines for all nationally certified interpreters, and is recognized as the overarching ethical guide for all interpreter behavior. More information on this

code and interpreter qualifications can be found at the Registry of Interpreters for the Deaf website: www.rid.org and <http://www.rid.org/ethics/code/index.cfm>

Interpreters

Sign Language Interpreter: Sign language interpreters who are hearing provide spoken English to ASL interpretation and/or spoken English to signed English transliteration. Services may be provided consecutively (First the consumer speaks/signs a message while the interpreter receives and understands the message, then the interpreter renders the message to the second consumer. This continues in a consecutive manner). This form works well for one-on-one interviews, in medical settings, and anytime that it is imperative to understand the full message before beginning to interpret. Interpreting services may also be provided simultaneously, where the interpreter interprets the message at the same time the message is provided, generally staying a phrase to a sentence behind the speaker. This form of interpreting is most commonly used in group settings such as educational settings or meetings, but may also be used in one-on-one situations.

Certified Deaf Interpreter: A Certified Deaf Interpreter (CDI) is an interpreter who is deaf and certified by the Registry of Interpreters for the Deaf. These interpreters have native or near-native ASL fluency, excellent interpreting skills, expertise and experience to interpret for unique and routine interpreting situations. CDIs may work alone or work as a team with a hearing interpreter. CDI's are experienced in providing interpreting services with consumers whose communication needs cannot be adequately met by a hearing interpreter alone, or with consumers who use non-standard signs or gestures, consumers with limited language skills or who use regional signs or foreign sign languages. CDI's also work with hearing interpreters to provide interpreting services to consumers who are deaf-blind. For more information, see the RID web page information at: <http://www.rid.org/education/testing/index.cfm/AID/89>

Oral Transliterator: Oral Transliterators, also called oral interpreters, facilitate spoken communication between individuals who are deaf or hard of hearing and individuals who are not. Oral consumers use speech and speechreading as their primary mode of communication and may or may not know or use manual communication modes or sign language. Such individuals have specific preferences for successful communication, thereby requiring transliterators to provide a continuum of services. Oral transliteration does not usually include the use of formal sign language. However, transliterators may meet individual requests to add natural gestures, fingerspell particular words, write numbers or the beginning letter of a word that is easily misread in the air and/or use signs to support words on the mouth. Oral transliterators may also "voice" for consumers, especially those who do not use their own voices or have voices that are difficult to understand. Transliterators who are qualified, trained professionals should provide oral transliteration.

Interpreter for Deaf Blind Consumers: Interpreters who serve Deaf-Blind consumers also have a number of specific skills. According to the RID Standard Practice Paper on Deaf-Blind Interpreting, such professionals should be prepared to provide appropriate accommodations for three groups of individuals.

Accommodations for Sign Language Users:

- Low vision
- Reduced Peripheral Fields
- Tracking
- Tactile Sign Language (one and two handed)
- Tactile fingerspelling

Accommodations for Oral Deaf-Blind communicators:

- Voice-over
- Keyboarding skills (C-Print)
- Printing/use of written materials for communication support

Accommodations for All Deaf-Blind communicators:

- Print-on-Palm (POP)
- Environmental information pertinent to the message
- Basic sighted guide techniques
- Awareness of Deaf-Blind Culture and Etiquette
- Reading/Interpreting written material
- Team interpreting

For more information on Deaf-Blind interpreting see: “Interpreting for Individuals who are Deaf-Blind” in the Attachment.

Interpreter Certification and Credentialing

The Registry of Interpreters for the Deaf (RID) is the primary national body that certifies interpreters. More information on the many different types of Certification offered (CSC, CI, CT, IC, TC, CDI, OTC, NAD, NIC, and EIPA) is available at: http://www.rid.org/education/edu_certification/index.cfm/AID/45 ; http://www.rid.org/education/edu_certification/index.cfm/AID/46 ; and <http://rid.org/UserFiles/File/pdfs/120.pdf>

In addition to this national resource, some states also have certification, licensure, and screening systems that are only recognized within the specific state. One example of this is the Mid America Quality Assurance Screening Test (QAST) consisting of five levels (5 highest to 1 lowest). State screening tests generally are a stepping-stone toward full national certification. Other states may have state certification such as Texas (Board of Evaluation of Interpreters – BEI, <http://www.dars.state.tx.us/dhhs/bei.shtml>), Oklahoma (Quality Assurance Screening Test – QAST <http://www.okrid.org/QAST.shtml>) or Missouri (Missouri Interpreter Certification System - (MICS) which can be reached at <http://www.mcdhh.mo.gov/servicesprograms/terpcertification.htm>). Several states also

have licensure laws. For information on a particular state, contact the nearest state affiliate chapter of RID. (http://rid.org/member_center/chapters/index.cfm)

Hiring a Qualified Interpreter

When hiring an interpreter, it is recommended that contact be made through a reputable interpreter referral service agency. States may also maintain an updated list of qualified interpreters. Interpreter referral agencies are skilled in knowing the skill, experience, and availability of qualified interpreters in the area. It is important to ask an interpreter to provide proof of his/her certification verification. Certification shows that the interpreter has passed the appropriate skills test and has knowledge in the languages (English and American Sign Language) and cultures (Hearing and Deaf). Continuing education units are required by most certification bodies so that skills and knowledge of the field are kept current.

LFD: It is important to consider the language level of the consumer when providing an interpreter. Some “low functioning deaf” (LFD), Deaf-at-Risk, or minimal-language deaf individuals may require the use of Certified Deaf Interpreters in order to more adequately participate in the VR program. For more information on Low Functioning Deaf consumers and their service needs see: <http://www.gwu.edu/~iri/publications.htm> or related web pages such as <http://www.uark.edu/depts/rehabres/publications.html>.

Video Interpreting

With advances in technology, many signing deaf consumers communicate easily through the use of videophones or web cameras. Many state VR programs are now using Video Remote Interpreting (VRI) and Video Relay Services (VRS) to meet the communication needs of staff and consumers. This is especially important in rural areas where there are few, if any, qualified interpreters. This method of providing interpreter services has been proven to save state service dollars in reduced staff and interpreter travel expenses. Counselors should also be skilled in using Video Relay Services (VRS) to contact persons who are deaf by telephone or internet. For more information about Video Remote interpreting and Video Relay services see the Council of State Administrators for VR Video Interpreting White paper which the reader can access by going to the following: http://www.rehabnetwork.org/position_papers/whitepaper/White%20PaperUPDATE%20final%205-8-07.pdf

Qualified Providers

Serving Deaf, Deaf-Blind, Hard of Hearing, Late Deafened, and Low Functioning Deaf VR consumers is often a challenge. In addition to having qualified professionals within the VR agencies and qualified interpreters, it is crucial to provide assurance that other professionals working with VR consumers who are deaf. (i.e. job coaches, vocational evaluators, psychologists, educators, etc.) are also skilled signers. Staff who work with counselors and may have direct contact with persons who are deaf (i.e. support staff, employment specialists, etc.) should also be knowledgeable of Deaf culture and be skilled

in various modes of communication and/or understand how to work with a professional interpreter. Hearing professionals with little or no knowledge about deafness, communication and challenges related to language acquisition, do not possess the tools necessary to appropriately assess and/or provide services to these consumers. Every effort should be made to locate service providers with the needed skills and expertise. Use of the SLPI and/or other assessment tools should verify that providers possess the required skills.

Communication Access for Non-Signing Consumers

Most individuals who are hard of hearing and late deafened do not understand nor communicate via sign language. Although hearing aids and assistive technology assist them to varying degrees, effective communication for these persons involves much more.

The quality of communication is determined by the interaction between: characteristics of the individual's hearing loss, communication requirements of the situation, and characteristics of the environment in which the communication takes place.

When communication problems occur, the specific behavioral responses of people who are hard of hearing and late deafened also make understanding what is being said more difficult. For example, if an individual becomes anxious when he misunderstands something that has been said, the anxiety may decrease his ability to pay attention, and in turn, increases the likelihood of further misunderstanding.

Communication barriers resulting from hearing loss affect both the listener who has a hearing loss and the speaker. Successful communication is therefore the joint responsibility of both the speaker and the listener.

Many persons effectively use speech reading, despite the fact that only 30-40% of the phonemes are visible on the lips. Most of the time, speech reading involves combining contextual information, visual clues from facial expression and gestures, and auditory information from spoken words. Therefore, the less a person hears, the less useful speech reading is for most. The accuracy of speech reading may be further diminished if the speaker does not articulate clearly, covers the mouth, wears a moustache or beard, or is some distance away. Speech reading may not be possible if an individual has visual problems in addition to hearing loss, or has difficulty in paying attention.

Problem Situations

It is important to know the kinds of situations that produce problems for people who are hard of hearing and late deafened in order to develop strategies to prevent or reduce communication problems in classrooms, work areas, counseling sessions, meetings, and other situations.

A number of factors occur within situations that may interfere with effective communication for people who are hard of hearing or late deafened. These factors may include:

- Background noise-other people talking, public address systems interference on telephone line, ringing telephones, dogs barking, motor and traffic noise, background music, air conditioning and heating units, vacuum cleaners and other equipment.
- Visual distractions-people walking in sight line, curtains blowing, facial tics, flickering lights, hand movements
- Poor room acoustics
- Distance from source of sound
- Poor lighting conditions
- Objects interfering with line of vision
- Poor angle of vision
- Seating arrangements prevents seeing speaker's face(s)
- Not getting the listener's attention before starting to talk.
- Listener did not know the topic- or change of topic
- Trying to focus on more than one thing at a time.
- Inability to see speaker's face or face is too far away or not facing listener
- Several people speaking at the same time.
- Speakers not all positioned so each is clearly seen by the person with a hearing loss.
- Lack of note taking/ captioning system
- Small type on a display
- Lack of assistive listening system
- Illegible visual aids

Once potential barriers have been identified, ways to remove or reduce them can be found.

Reactions to Communication Problems

Reactions to communication problems frequently serve to worsen the communication situation and may in some cases contribute as much or more to communication than the hearing loss itself. People who are hard of hearing or late deafened, themselves, often are not aware of the connection between their hearing loss and some of the negative reactions they may be experiencing.

- Physical-fatigue, increased muscle tension, eye strain.
- Behavioral-bluffing in hopes the speaker will think they understood, avoidance, withdrawal, controlling the conversation to preclude the need to listen.
- Emotional-anxiety, depression, anger, guilt.
- Cognitive-difficulty thinking, difficulty concentrating or focusing attention.
- Interpersonal-showing frustration, making demands, making other person feel guilty, putting other person down, dominating conversation.

Tips for Speaker Behavior

Speaker behavior can greatly influence the quality of communication.

- Get the person’s attention before you speak
- Do not put obstacles in front of your face
- Do not have objects in your mouth such as gum, cigarette, or food
- Speak clearly and at a moderate pace
- Use facial expression and gestures
- Give clues when changing the subject
- Rephrase when you are not understood
- Don’t shout
- Avoid noisy background situations
- Be patient, positive, and relaxed
- Talk TO a person with a hearing loss, not ABOUT him
- When in doubt, ASK the person who has a hearing loss for suggestions to improve communication.

For effective communication with non-signing consumers with hearing loss, state agencies must ensure rehabilitation counselors assigned to serve this population have been specifically trained to recognize communication problems identified above. These counselors should demonstrate competency in utilizing appropriate communication strategies and hearing assistive technology to resolve communication barriers and create successful communication interaction with consumers. Counselors must also have sufficient knowledge of how hearing loss impacts major life activities and be prepared to address identified limitations. As stated previously in Chapter 3, formal training is currently very limited and state agencies may have to establish and implement internal training resources to address these skills.

More information on the various technology used by individuals with hearing loss can be found in Chapter 6 on “Technology and Accommodations.”

Attachment 5.1

A. RID Standard Practice Papers:

<http://rid.org/interpreting/overview/index.cfm/AID/59#spp>

Topics:

Professional Sign Language Interpreting

Use of Certified Deaf Interpreter

Oral Transliteration

Interpreting for Individuals who are Deaf-Blind

Video Relay Service

B. Hiring a Qualified Interpreter:

http://www.netac.rit.edu/downloads/TPSHT_Hire_Qual_Interp.pdf

C. Cued Speech: www.cuedspeech.com

D. Communication Resources:

http://www.answerpoint.org/columns2.asp?column_id=204&column_type=webliography

<http://www.hei.org/education/health/commun.htm>

<http://www.hearingloss.org/index.asp>

<http://trychin.com/>

www.beyondhearingaids.com

www.pepnet.org

CHAPTER SIX

TECHNOLOGY and ACCOMMODATIONS

The explosion of technological advances in recent years has had a profound impact on the lives of persons with disabilities. This is especially true for persons who are deaf, deaf – blind, hard of hearing and late deafened. Especially, in the areas of assistive listening, telecommunication access, interpreting services, and home and workplace communication and adaptive equipment. The specific technology and needed accommodations are highly individualized and vary across situations for specific individuals. Most persons with hearing loss have the need and can benefit from technology in some aspects of their lives.

This chapter focuses on Hearing Assistive Technology and accommodations that may benefit these individuals. Note, however, that in light of the rapidly changing nature of technology, it is critical for users to keep up-to-date on the availability of new technologies. This chapter includes various web resources that maintain up-to-date information.

Rehabilitation and Hearing Assistive technology can make a substantial impact on persons who have hearing loss. It can allow individuals to overcome obstacles that once seemed overwhelming. The use of technology will offer the VR counselor more options for training and future employment for these consumers. Most importantly, proper technology and training can help to decrease the feeling of isolation experienced by persons with hearing loss, especially those who are deaf-blind. (Belanich & Bhattacharyya, 2006)

Rehabilitation technology can be provided at any stage in the rehabilitation process. Therefore, it is important that the rehabilitation counselor continuously consider the need for and provision of technology to help the person with a hearing loss to participate in their rehabilitation program, participate in services and eventually be successful in employment.

Assessments (formal and informal) are crucial to find out what are the issues and challenges the individual faces as a result of the hearing loss. Do not assume that the person with a hearing loss is fully aware of these issues or can identify and explain difficulties they experience. Consumers may need tools such as a structured communication assessment form or questions to help them explore possible problem areas and begin to think about technological solutions. Resources for assessments are listed in the Attachment for this chapter.

Use a variety of methods and assessments to explore barriers the person with hearing loss may experience. Also, look at the essential functions of the job and the communication demands of the job, including all settings, situations and environments for communication. It is important to consider the communication “atmosphere” in

workplace interactions. Consider key workplace situations that go beyond the primary location where the individual works such as break room, training, or other company functions. Technology can also assist in reducing the isolation the person may face in their workplace. Explore the communication and other equipment that is used for work to determine if any accommodation or technology is needed for these functions.

It is important to look at the “big picture” when determining technology needed to be sure that devices work in conjunction with each other or interface correctly, such as using hearing aids with assistive listening devices, telephones and cell phones. Also, remember that while one type of technology or accommodation may be used in one situation, a different device or multiple accommodations may be appropriate in another environment.

Patience and encouragement are often important to help individuals become comfortable and proficient in using technology. This can especially be true with persons learning to use hearing aids for the first time. Assessments and tools to explore problems with hearing aid use are available to help improve this functioning. Multiple adjustments over a period of time may be necessary to address listening problems.

Often the vocational rehabilitation counselor is the person to put all of this information together and help the consumer to learn about and use available technology.

Best Practice Principles

Using technology should be based upon key principles of best practice.

- Conduct and utilize assessments to determine the areas for which technology or accommodations are needed.
- Ask consumers what works best from their experience.
- Realize the consumer may not be aware of or familiar with appropriate technology.
- When purchasing new equipment, try to first borrow and test the equipment or make sure the vendor will permit a trial period of at least 30 days. Encourage the user to test the equipment in a variety of situations during the trial period.
- Make sure the end-user knows how to independently use, maintain and troubleshoot the equipment.

Amplification Devices/Assistive Listening Devices

- **Personal Amplification Devices:**
 - **Hearing Aids** - electronic, battery-operated devices that amplify and changes sound to allow for improved communication. Hearing aids receive sound through a microphone, which then converts the sound waves to electrical signals. The amplifier increases the loudness of the signals and then sends the sound to the ear through a speaker. While the use of aids results in a clear benefit to many users, hearing aids do not

totally correct or restore normal hearing. In fact, the success of use often depends on the specific situation in which the device is used.

- **Cochlear Implants** – a small, complex electronic device that can help to provide a sense of sound to a person who is profoundly deaf or severely hard-of-hearing. The implant consists of an external portion that sits behind the ear and a second portion that is surgically placed under the skin. An implant has the following parts:
 - A microphone, which picks up sound from the environment.
 - A speech processor, which selects and arranges sounds picked up by the microphone.
 - A transmitter and receiver/stimulator, which receive signals from the speech processor and convert them into electric impulses.
 - An electrode array, which is a group of electrodes that collects the impulses from the stimulator and sends them to different regions of the auditory nerve.

An implant does not restore hearing to normal. Instead, it can give the user access to a useful representation of sound and help to understand speech. (<http://www.nidcd.nih.gov/health/hearing/coch.htm#a>)

- **Assistive Listening Devices – these devices can work in conjunction with personal amplification devices via some type of interface or coupling accessory. They are used to overcome background noise, reverberation, or distance from the sound source and the user.**
 - **FM Systems** - allow individuals to speak into a hand-held microphone, which transmits the sound of the speaker's voice directly to a deaf or hard of hearing individual's hearing aid. This transmission happens on reserved radio spectrum 216-217 MHz. Many retailers of products for deaf and hard of hearing people carry personal FM systems. Many of these systems are designed to work with the consumer's hearing aid and can attach directly to the hearing aid.
 - **Infrared Listening Systems** – use an infrared light to send transmit a sound signal to a receiver worn by the listener. Sound is picked up using a microphone or line input, transmitted to a receiver, and then output to a headphone or induction loop to the user. Infrared systems may also be used for audio portions of television or computers.
 - **Induction Loop Systems** - consist of a wire loop that can be permanently installed around the perimeter of a room and connected to the PA system. Portable units are also available. The speaker(s) must use a microphone and that signal is fed the loop. (www.HearingLoop.org) The loop sends a sound signal directly to the telecoil on the user's hearing aid

Telephone Access

There are several general means of enabling telephone communication, depending on the type of hearing loss. Many states have a telecommunication equipment distribution program (EDPs) where qualified individuals can obtain a wide variety of specialized equipment to assist those who have difficulty in using a standard telephone. This program was set up and is managed by the Federal Communication Commission (FCC). EDPs assist consumers with disabilities with obtaining telecommunications equipment. For more information contact the Telecommunications Equipment Distribution Program Association (TEDPA) at www.tedpa.org/tedpainfo/stateprograms.html.

- **Amplified Telephones**

- **Amplification/Clarification technology:** If the individual benefits from sound amplification, a wide range of options are available. Amplification can be provided through the handset, headset, in-line, portable additions and complete phone systems. For some people, the problem is not that they need sounds to be louder--they need them to be clearer. Clarity can be achieved by adjusting the frequency of the incoming voice when listening on the telephone. A number of complete telephone systems and in-line devices allow the user to adjust voice frequency.
- **Telecoil technology (also called a T-coil or T-switch):** Some individuals who wear T-coil equipped hearing aids may be able to use the T-coil to improve audio from a compatible telephone.

- **Text Telephones**

- **Text telephone equipment:** A teletypewriter or TTY (also known as a TDD, or telecommunications device for the deaf) is used when amplifying speech is not enough. The TTY consists of a keyboard and electronic display; it converts typed messages into electronic tones which are sent over a standard phone line, much like a fax machine. Communication is direct with anyone who has a similar device, or the Telecommunications Relay System can be used as a medium for communication.

For deaf-blind consumers, two modifications have been made. The first involves a Braille display, so that the person using the TTY can also access what the other person has typed using refreshable Braille. The second type of modification provides a large visual display (LVD) which is connected to the TTY. A TTY-LVD may have the large visual display as part of the TTY case or the TTY unit may be connected to a secondary display. A few relay services have special numbers designed for deaf-blind users who can not read incoming messages at the normal typing speed. The operators are trained to type slower and make necessary accommodations to meet the needs of these callers.

- **CapTel** is a telephone that displays text captioning of the speaker's words. The person with hearing loss use both hearing and speech to communicate. A relay service provides text of all words spoken by the other party to enhance comprehension. This text is viewed on a small screen built into the CapTel phone.
- **Voice Carry Over (VCO)** is a relay service that allows a person with hearing loss to use their own voice on the telephone, while receiving the other party's communication via the relay center in text. VCO required a special VCO phone, a VCO/TTY combination, or a VCO adapter for the telephone.
- **Cell Phones**
 - **Hearing aid compatible cell phones.** Federal Communication Commission (FCC) rulings require that cell phone manufacturers make at least two models with telecoils built in. The telecoils should make the phone more compatible with hearing aids or cochlear devices with telecoils.
(www.hearingloss.org/hat/TipsWirelessPhones.htm)
- **Computer Telecommunication**
 - **IP Relay** - IP Relay allows people who have difficulty hearing or speaking to communicate with anyone in the world through an Internet connection. IP Relay is accessed using a computer and the Internet, rather than a TTY and a telephone. So individuals who use IP Relay do not need to invest in a TTY; they simply use the computer to communicate. When conversing over IP Relay, people who are deaf, hard of hearing, or have difficulty speaking can participate in a conference call or go online while holding a conversation.
 - Unlike traditional TRS, where a TTY user contacts a relay provider via telephone lines and the communication assistant (CA) at the TRS center calls the receiving party via voice telephone, the first leg of an IP Relay call goes from the caller's computer, or other Web-enabled device, to the IP Relay Center via the Internet. The IP Relay Center is usually accessed via a Web page. The second leg of the call, as with traditional TRS, is from the CA to the receiving party via voice telephone through the public switched telephone network. The CA can also accept IP relay calls from persons with hard-to-understand speech and repeat the calls in an easily understandable form for the called party.
 - Deaf-blind consumers can use computers and Braille note taking devices to make phone calls via the Internet. There are three available options: 1) via a website, 2) via an instant messaging program and 3) via a stand-alone software program called NexTalk Service (NTS)
 - NTS is a free program available from www.nextalk.net where an individual with a hearing loss can register a user name and password and then download the software. After installation, a screen with three options is displayed; 1) text call, 2) relay call and 3) send a message. The text call option allows the caller to make a direct TTY call to another person who has a TTY. The Relay call option connects to the relay service

communication assistant (operator) and the system works the same way as a regular TTY. Finally the 'send a message' option enables the caller to send a message to another NTS user who is either online or offline.

- There are no additional costs to consumers for IP Relay beyond a computer or other Web-capable device and an Internet connection. All IP Relay service providers' costs are recoverable from the interstate TRS Fund. (<http://www.fcc.gov/cgb/consumerfacts/iprelay.html>)
- **Text Messaging** using a variety of strategies such as instant messaging or various text pagers enables written communication at distance.
- **Two-way text pagers** are a communication alternative for people unable to hear on the cellular phone. They are used to reach anyone, anytime, from almost anywhere. They communicate to other pagers, computers or through IP Relay to telephones. A vibrator alerts the user when a message arrives. Some pagers have extra service features such as sending fax, live TTY chat, instant message chat, voice to text or text to voice, web access, etc.
- **Video Communication**
 - **Video relay services** allow signing deaf and hard of hearing individuals to have easier access to the phone communication. This process is similar to the text relay system but instead of a typist (communication assistant) to relay the message, there is a sign language interpreter to relay the phone communication between hearing parties and the deaf or hard of hearing party.
 - **Videophones.** Deaf, hard of hearing, and deaf-blind with useable vision can use videophones for direct communication with one another without going through a VRS interpreter. However, for those who are fully deaf and blind, there is the option of an Internet-based chat program with a webcam for the deaf-blind to sign to the other party and receive responses on a computer with a Braille display. While MSN Messenger and AOL Instant Messenger are used with webcams, incoming responses come in after the other party has finished typing rather than in a real-time manner. For example, Sorenson VRS Ensemble SL software allows a deaf-blind individual to receive incoming responses in real-time. Ensemble SL is free to download. However, the consumer must purchase a specific webcam listed on Sorenson's support list. (Belanich & Bhattacharyya 2006). A list of VRS providers is included on the FCC website:

http://www.fcc.gov/cgb/dro/trs_providers.html

- **Voice Mail**
 - **Voice Mail Transcription Services** is a service that retrieves and transcribes voice mail messages, forwarding a text version of the message via e-mail. The e-mail message may be received on a computer or by two-way text pager. www.phonewire.com/voicemail/ or www.dictomail.com

Alerting Systems:

- **Alarm Clocks** – are adapted to provide loud audible alerts as well as vibrating alerts which go under the pillow or mattress.
- **Alerting systems** - There are a variety of systems used for notification and safety purposes. They include devices that notify individuals with a hearing loss when someone is knocking on their door or when their phone rings. They may also be used to supplement emergency alarms for fires or tornados.

Service Dogs:

- **Hearing Service Dogs** are specially trained dogs that alert a person with hearing loss to sounds in the environment. Dogs and owners must complete training and be certified for use in public places. Dogs are trained to alert users to key sounds such as fire alarms, telephones, door bells, knocks, or baby cries.

www.pawswithacause.org

Face to Face Communication

There are many possible strategies that may be used in face to face communication situations between a deaf or hard-of-hearing person and hearing persons:

- **Handwritten notes** are an option for Deaf and hard of hearing individuals who have English reading and writing skills.
- **Lipreading/speechreading** is an option when the consumer has the skill and the hearing person is speech-readable
- **A computer terminal** (take turns typing at the same computer)
- **Assistive listening devices** (ALDS, as these devices are known, operate on FM frequencies or use infrared or induction loop technology; the speaker uses a microphone or transmitter and the listener uses either a hearing aid switch or wears a companion receiver.)
- **Interpreters** (using various modes: ASL, Tactile, Close Vision, Lipreading/oral, Contact Signing, (also know as Pidgin Signed English) etc, are used to facilitate communication between hearing coworkers/employers and the signing consumers.
- **A communication board** connected to two TTYs (text-telephone devices) minus telephones
- **Augmented Communication Device** Augmentative and alternative communication (AAC) refers to ways (other than speech) that are used to send a message from one person to another. People with severe speech or language problems must rely quite heavily on these standard techniques as well as on special augmentative techniques that have been specifically developed for them. Some techniques use communication aids, such as charts, bracelets and language boards. On aids such as these, objects may be represented by pictures, drawings, letters, words, sentences, special symbols, or any combination thereof.

Electronic devices are available that can speak in response to entries on a keyboard or other methods of input. Input can come from any number of different switches that are controlled with motions as simple as a push of a button, a puff of air, or the wrinkle of an eyebrow. The possibilities increase virtually every day! When speech is used with standard and special augmentative communication, not only does communication increase, but so do social interactions, school performance, feelings of self-worth, and job opportunities. (<http://www.abilityhub.com/aac/aac-devices.htm>)

- **Sign language:** coworkers may choose to learn basic sign language as a means of communicating with a colleague
- **Braille Note** and **PacMate** are devices with refreshable Braille that can be used to communicate with deaf-blind Braille readers.

Technology can help a deaf-blind person communicate with another person who does not have a common mode of communication. Face-to-face communication aids can act as ‘interpreters’ or communication translators, enabling these two people to communicate directly with one another.

These include print-Braille, Braille-voice and print-voice devices. In addition, the use of enlarged or magnified text allows individuals with poor visual acuity to use this form of communication. A deaf-blind person can now use a Braille notetaker with wireless Bluetooth capability and use basically any bluetooth-enabled personal digital assistant (PDAs) to launch a face-to face communication system. When communicating wirelessly, the Bluetooth technology allows both the deaf-blind person and another party to sit up to 30 feet apart. In addition, the deaf-blind person can also converse with another blind person using his/her own notetaker wirelessly. Computers have become a means of removing barriers for deaf-blind individuals. Thru the use of Screen magnification, Braille displays and Voice output, deaf-blind individuals have better access to information and independence.

Communicating in the Work Place

Successful communication in work situations may be enhanced by providing agendas or text materials prior to meetings or training courses to allow additional preparation time. After each meeting, distribute written meeting minutes. Consider environmental factors in group communication situations, and try to be aware of background noise, lighting, seating and positioning. Ensure accessibility of information on all videos used for employees.

- **Noise considerations:** Hold meetings in a room that is carpeted, free of office machines and away from paths of heavy traffic (people and vehicles).
- **Sightlines:** Use a round table (rather than square or rectangular) to open up sightlines for people who might lip read.
- **Distance issues:** Allow the deaf or hard-of-hearing person to sit where they are comfortable, depending on their needs and the position of the interpreter or

speaker. Deaf-blind individuals, with varying vision limitations may need the set closer in order to properly communicate. Some deaf-blind individuals, with Retinitis Pigmentosa (RP), may need to sit farther away in order to take full advantage of their residual sight.

- **Video:** Videos used for various purposes should be captioned; preferably using open captioning that appears onscreen and does not require special viewing equipment. Employers can send training or initiation videos to a *captioning service* or purchase its own in-house captioning equipment. A cheaper alternative is to use a transcript. (This option is less desirable, but if used, transcripts should be provided in advance.)
- **Speech to text Accommodations** convert spoken communication into readable text within moments of the utterance. The text is displayed for the user to read. The two primary forms of speech-to-text accommodations are Communication Assisted Real-time Transcription (also known as Computer Aided Real-time Transcription or CART) and C-Print. (For additional information: www.stsn.org)
 - **CART** is a service provided by a court reporter using a stenographic machine linked to a computer.
 - **C-Print** and similar speech-to-text accommodations seek to provide a meaning-for-meaning transcript of spoken communication. These systems were designed to meet the needs of deaf and hard of hearing students in educational settings. As such, they provided additional features and services such as voicing for the user, study aids and two-way communication between the captionists and the user. Some C-Print captionists use automatic speech recognition (ASR) with a dictation mask to augment typing. C-Print does not attempt to provide a verbatim transcription.
 - **TypeWell** - is a meaning-for-meaning summary translation of spoken English onto a laptop computer, which is then sent to a second computer that is placed in front of the person with hearing loss. The set up time is minimal. The person with a hearing loss is able to take notes on the laptop as the transcriber is typing. He/she can also type on the computer, after which the transcriber then voices for the individual, allowing for more interactive communication.

TypeWell can be used with up to five individuals at one time during the same session. TypeWell transcribers can provide the person with a hearing loss with copies of the notes that were taken, which could eliminate the need for a note taker in the classroom setting.

Since a transcriber is typing meaning-for-meaning instead of word-per-word, the transcriber could lose the intended meaning or misinterpret part of a lecture. Some TypeWell transcribers do transcribe nearly word-per-word.

- **Interactive writing** is writing a word, phrase, or complete sentences on paper or a computer may be used to facilitate communication with a person who is deaf or hard of hearing.

Assistance can also be provided through interpreters or interpretive devices, including:

- **Sign language interpreters:** A qualified language interpreter is one who can both *sign* what is said to the individual and *voice* to the hearing person what is signed. The communication must be conveyed in an accurate, effective, impartial manner. In addition, qualified interpreters must be familiar with any specialized vocabulary used during communication. (For best results, make sure the interpreter is positioned against a dark, solid-color background with adequate lighting.)
- **Video Remote Interpreting (VRI)** is where a videophone, attached to a TV set or a Webcam attached to a computer is used to communicate where both the deaf and hearing consumers are in the same room and the interpreter is in a remote location.
- **Computer-assisted note taking (CAN)** - involves using a personal computer (and possibly a projector). A clerical support person sits in on the group activity, typing summaries of the communication taking place. The deaf or hard-of-hearing person can either watch the computer monitor or view text projected on a wall. (The drawback with CAN is that information provided is not word for word.)
- **Communication access real-time transcription (CART)** - uses a stenographic keyboard attached to a computer, with special software that translates phonetic symbols into English. Viewing options are similar to CAN, and the advantage of CART is that it offers word-for-word translation. However, it is generally more expensive than CAN, and requires someone who is trained in the use of stenographic equipment.
- **Voice Recognition**– is a system of training special voice recognition software to recognize a speaker’s voice and then convert speech into text. This may one day substitute for captioning services as advances continue to be made in the field. However, with today's technology, the speaker must speak slowly and with a distinct pace, tone and manner of speaking. Only one person may speak at a time and those who do speak into the voice recognition software would need to be trained and take time to learn the voice recognition software, which can make it difficult for this type of software to be effective when used in the classroom. <http://www.disabilityresource.uic.edu/viewer.asp?tab=2&label=Captioning%20Services>
- **Note Takers** may be of great assistance to a person with hearing loss in any type of group meeting. Because it is difficult to watch a speaker or interpreter and write at the same time, the person with a hearing loss will need to rely on the notes taken for a record of the meeting or class. (www.pepnet.org/train.asp)

Global Positioning System (GPS)

This system enables deaf-blind individuals to travel more freely and independently. The device tells the user where they are, how to get where they want to go and also give directions and explanations about all types of surroundings. The GPS can give a deaf-blind person a list of all bus and train stops within a designated range. Presently, two Braille note takers, **Braille Note** from Humanware and **Pac Mate** from Freedom Scientific have support for GPS. In order to use GPS successfully, a deaf-blind person needs to have adequate training both in using the equipment and travel with the equipment in operation for accurate information.

Responsibilities for VR

It is important for vocational rehabilitation counselors to understand the technology needs of consumers with hearing loss and dual sensory loss. Proper assessments are needed, by individuals who are familiar with the unique needs of this population to determine the best practices approach to determine services and proper job placement.

VR counselors, serving consumers who are deaf, deaf-blind, hard of hearing, and late-deafened need to always be knowledgeable about new tools to be used to assist our consumers to be successful in their VR program and employment.

Funding Sources

In some cases, educational institutions or employers will be required to pay for equipment that is required for accessibility and that will not become the user's personal equipment. Many states have an Assistive Technology Loan Fund programs which provides low cost loans for hearing assistive technology and other technological accommodations. For more information go to <http://www.resna.org/AFTAP/state/index.html>. Often local civic organizations and technology grants are available to provide support for the purchase of needed technology. Finally, Vocational Rehabilitation in states may provide assistive technology to support the consumers they serve.

Attachment 6.1

Resources:

Assessment:

Morris R. (2007). *“On the Job with Hearing Loss, Hidden Challenges, Successful Solutions”*. (Morgan-James, NY 2007)

- www.onthejobwithhearingloss.com . A free communication assessment form can also be found on this website.
- www.beyondhearingaids.com which contains a resource section just for VR counselors.

Trychin, S. (2002). *How’s Your Work Life?*, Hearing Loss magazine, Nov./Dec. 2002, p. 16-21.

Workplace Assessment for Individuals with Hearing Loss – Michigan Division on Deaf and HH.
www.mcddc-dodhh.org

Watson, D., Schroedel, J., KOlwitz, M., DeCaro, J. and Kavin, D. (2007). Hard of hearing students in postsecondary settings: A guide for Service Providers. PEPNet:
<http://prcorder.csun.edu/media/1219Hard%20of%20Hearing%20Students%20in%20Postsecondary%20Settings.pdf> Chapters 5 and 8 deal specifically with technology and accommodation needs of individuals who are hard of hearing.

Accommodate: Communication Accommodations at work: A Resource for Workers who are Deaf or Hard of Hearing (2000). University of Arkansas RRTC for Persons who are Deaf or hard of Hearing.

Hearing Assisted Technology Guide:

http://www.michdhh.org/assistive_devices/doc/HATOnLine.pdf

Hearing Assisted Technology Devices:

www.beyondhearingaids.com

www.harriscomm.com

<http://www.adcohearing.com/>

<http://soundclarity.com/>

General Technology information about Hearing Loss

Hearing Loss Help: <http://www.hearing-loss-help-co.com/>

Deafness Disability Resources: <http://www.disabilityresources.org/AT-DEAF.html>

Advancing Educational Opportunities for Deaf and Hard of Hearing: <http://pepnet.org>

Hard of Hearing Student in Postsecondary Settings:
<http://prcorder.csun.edu/media/1219hh-students/index.html>

Remote captioning:
<http://www.disabilityresource.uic.edu/viewer.asp?tab=2&label=Captioning%20Services>

CHAPTER SEVEN

PARTNERSHIPS AND INTERAGENCY AGREEMENTS

Introduction

Interagency Agreements (IAs) and Memorandum of Understanding (MOUs) serve as critical linchpins for the success of state VR agencies and other programs serving persons with disabilities. State agencies and private programs have become increasingly interdependent, both for purposes of survival, and as a mechanism to thrive in challenging times. The following discussion identifies several useful categories of Interagency Agreements and Memorandum of Understanding. Both may be used as tools to provide better services, increase shared understanding of services offered, elimination of duplicated services, and for identifying service gaps.

MOUs can be used as a tool by SCDs to establish formal working relationships with organizations and community groups within their states. The MOUs can serve as a resource to providing information, training, support, referrals, and exchange of services. The Council of State Administrators of Vocational Rehabilitation (CSAVR) has MOUs with national organizations (NAD, HLAA, ALDA) and three federally funded programs (Gallaudet University, National Technical Institute for the Deaf, and Helen Keller National Center) which are posted on their Web site. These MOUs can be used as a model for the state organizations or programs which are affiliates of the national ones. A prototype is included as Attachment 7.1.

Change -- often resulting from having to do more with less -- has been the constant companion and a recurring reality for professionals working in state General and Blind VR programs. The full range of sharing public and private resources -- both human and capital -- must be explored, with formal working agreements developed whenever and wherever possible. For consumers, this era of change has provided myriad challenges to securing meaningful employment. For service providers, Interagency Agreements can help to maximize efforts to achieve successful rehabilitation outcomes.

The chronological age of the state VR programs serves as both blessing and bane, with many points of reference highlighting miraculous growth and progress, while many consumers with disabilities continue to be left behind. In the earliest days, VR programs were often by default the central entry point for access to services. State VR agencies have undergone numerous incarnations and reincarnations, with congressional funding of many state VR agencies remaining flat in recent years. State Vocational Rehabilitation agencies have historically been the first point of contact in many states for consumers seeking a wide range of assistance, including many services which are non-VR related.

Two changes in recent years are noteworthy: 1) the period beginning in the middle 1980s was remarkable for the proliferation of state commissions dedicated to serving persons with hearing loss; 2) the 1990s brought focused efforts to make postsecondary training more generally accessible to persons with disabilities as state and local governments

(including VR agencies) responded to mandates of the Americans with Disabilities Act (ADA) and the dismantling of the Federal Regional Education Programs for the Deaf to make our society more inclusive, and its many programs and services accessible to persons with disabilities. Each is addressed below.

State Commissions serving Individuals who are Deaf, Deaf-Blind, Hard of Hearing and Late Deafened

Many states have statewide commissions which serve the same population of persons with hearing loss as the state VR agencies. Often these commissions are charged with specific responsibilities which can greatly assist the state VR agency in serving consumers. Commissions may be responsible for the certification or licensure and provision of interpreters, employment services, advocacy, telecommunications access program, and related legislation. These programs and services can prove to be beneficial to SCDs, RCDs, and the consumers they serve. An MOU between the state VR agency and the state commission would specify their respective roles, functions and responsibilities, including shared referral and eligibility processes.

Interagency Agreements (IAs) with Colleges and Universities (Institutions of Higher Education, IHEs)

The Rehabilitation Act of 1973, as revised in the 1998 Workforce Investment Act (WIA), mandated that state VR programs work in collaboration with Institutions of Higher Education (IHEs) to assure that access to postsecondary education and training would remain available and accessible. As one of many VR services, it is critical that this access be provided in timely fashion to individuals who are deaf, deaf-blind, hard of hearing and late deafened. As mentioned above, the implementation of the ADA and the dismantling of the Federal Regional Education Programs for the Deaf resulted in more postsecondary education options for consumers of VR. But this has resulted in challenges by all involved to meet their access needs. A common issue is the provision of interpreting, CART, C-Print, and other auxiliary aids and services for effective communication; cost of such accommodations fluctuate due to varying number of individuals enrolling in the IHEs each year; forecasting annual student needs, budgeting departmental and institutional expenditures and securing staff present major challenges for IHE and the collaborating VR agency.

In September 30, 2007, RSA reported that 76 of 80 state VR agencies have completed Interagency Agreements (IA) between VR and IHEs (Personal Communication, David Esquith as provided to George Kosovich, RSA, October 10, 2007). Each IA is written specifically to the needs and programs in each state. As a result, there are variations from state to state as to what services and responsibilities each one has in the IA. In some states the VR agency carries full responsibility for interpreting services and other auxiliary aids for effective communication in the IHEs in that state. In others, the VR agency is responsible only for their consumer's interpreting needs, while the IHE is responsible for all others. In some states (e.g., California and Minnesota), the IHEs have taken the full responsibility for interpreting services. The IAs are critical documents for the VR agencies and IHEs to ensure that there is a shared, streamlined process for getting services from both for individuals with disabilities. Most IAs spell out how to access

those services so that all parties are clear on the referral, application and service delivery, as well as a dispute resolution process.

One Stop Centers

Although One Stops are touted as a successful model of access to a wide range of training and employment services, deaf, deaf-blind, hard of hearing and late deafened consumers continue to encounter communication and attitudinal barriers when attempting to access “universal customer” services. Typically, the individual with hearing loss is referred to the state VR agency, whether or not they have requested auxiliary aids and services for effective communication. State VR agencies must develop and implement agreements with the local Workforce Investment Boards, outlining plans to overcome traditional program boundaries and unnecessary, inappropriate deflection of consumer requests for equal treatment and program access. As with the Institutions of Higher Education, often the biggest barrier is securing and paying for interpreting and CART services. The majority of accommodation needs for individuals with disabilities entail a one-time cost which can fluctuate based on frequency and duration of need, as well as on local market rates. Interpreting and CART services often are unpredictable in the amount of usage and time needed.

Many One Stops have a limited accommodations budget and once it is exhausted, they struggle to identify additional funds to pay for those services. At that point they will often refer the consumer to VR agencies even though the consumer may only need one of the services available at the One Stops. Many VR agencies have either co-located staff or entire offices within a One Stop and this often leads to improved collaboration between the two. But the interpreting costs often continue to be an ongoing issue. In most One Stops it is rare to find a staff member who is proficient in American Sign Language or possessing other necessary skills to work effectively with the deaf, deaf-blind and hard of hearing populations.

Community Rehabilitation Providers (CRPs)

CRPs often are the lifeblood of the state VR agencies. CRPs range from specialized programs serving individuals who are deaf, deaf-blind, hard of hearing, or late deafened to those who serve a large spectrum of individuals with disabilities. CRPs provide a wide range of services which RCDs depend on to meet the employment needs of agency consumers. These programs and services may be available at no cost, or they may be paid for by the state VR agency through contracts or fee for service arrangements. Individualized services range from skills training, independent living skills, assistive technology assessment, job seeking skills, job placement, job coaching, and interpreter supports. State VR agencies typically have their own internal process for reviewing and approving CRPs for use by the RCDs for their consumers and the establishment of a mechanism for payment for CRP services. These agreements are critical to the successful IPEs of the consumers served by the state VR agency.

Mental Health Services

One of the largest gaps in services is in the area of accessible mental health for individuals who are deaf, deaf-blind, hard of hearing, and late deafened. This includes short term crisis counseling to long term hospitalization, drug and alcohol counseling and treatment and monitoring of medications, and may include other ancillary services such as home visits. Without these services many of VR consumers are unable to fully participate in employment services and programs and often become repeat consumers due to their inability to stabilize their lives.

Some states (e.g., Kansas and Alabama) have specialized state programs providing mental health services to the deaf, deaf-blind, hard of hearing, and late deafened. Others rely on local or county programs to administer mental health services. Many state VR agencies have agreements with their state mental health agency. SCDs should explore the development of an Interagency Agreement specific to the population they serve at the state level, either in conjunction with the master agreement or separately. The agreement should specify how RCDs can secure accessible mental health services for VR consumers and the responsibilities of each for providing access to those services.

General/Blind Agency Agreements for Consumers who are Deaf-Blind

The Rehabilitation Act allows states to establish a combined agency serving all individuals with disabilities or a separate general agency and a blind agency. As a result, there is confusion within some states as to who will serve the consumers who are deaf-blind. Kentucky is one state which has established a formal agreement between the general VR agency and the blind agency to serve this population. There is a need for state VR agencies whether combined or separate to establish a formal means of serving this population's unique communication and service needs. In addition, SCDs should explore setting up formal agreements for support from their regional representative of the Helen Keller National Center (HKNC). Oftentimes the HKNC Regional Representatives are a wealth of information, resources, and opportunities for training for staff.

Interpreter Training Programs

Interpreter Training Programs (ITPs) offer opportunities to SCDs for recruiting new interpreters entering the field to work with VR consumers and staff as well as training opportunities for staff interpreters. In addition, SCDs can arrange supervised internships for the ITP students in their field offices so that the students can be exposed to a wide range of new experiences with VR staff and consumers. With the ongoing interpreter shortage and the increasing need for interpreting services for all aspects of VR, it is critical for the SCD and RCDs to have a positive and cooperative working relationship with the ITPs.

Public Education

Most state VR agencies have working agreements with the public education systems in their states. These agreements often are designed to identify individuals with disabilities so that a smooth transition can be made from school to VR and then on to training and employment. Some states have included services which are provided via collaboration between the high schools and local VR offices such as career exploration and assessment, on-campus and off-campus work experiences, mentoring and job shadowing, and other

services to help the individuals with disabilities make the transition after high school. Due to the changes in federal and state laws (e.g., IDEA, No Child Left Behind) related to education, individuals who are deaf, deaf-blind, hard of hearing and late deafened are more likely to be mainstreamed into regular school programs while receiving support services. As a result, there may be large groups which are easily identified to individual students in a large number of schools. It is important for the ongoing referral of future consumers who are deaf, deaf-blind, hard of hearing and late deafened that the SCDs and RCDs work closely at the state and local levels with local high school transition programs to ensure that there is language that specifically addresses services, programs, and communication access for our population included in the agreements as well as a mechanism for referrals to the RCDs.

Chambers of Commerce, Business Leadership Network and The National VR Network

Most states have a statewide organization for the Chambers of Commerce and local Chambers. The membership is made up of small and large businesses which are often an excellent resource for possible employment opportunities for VR consumers. By having the SCDs and RCDs involved on the state and local levels there will be an ongoing exchange of information, resources, and training for all. The Chambers are an excellent resource of employer issues, labor market trends, training needs, and opportunities. SCDs should explore how to establish a formal working relationship at the state level with provisions for RCDs to do likewise at their level with the local Chambers.

Second, a key innovation is the establishment and growth of the U.S. Business Leadership Network (USBLN). The USBLN has state affiliate chapters active in approximately three-fifths of the United States, including the District of Columbia, and is an endeavor supported by the U.S. Chamber of Commerce. BLN employer members follow a “business to business” strategy to promote the business imperative of including people with disabilities in the workforce. In addition to hosting national conferences (which now include a Disability Mentoring Day for postsecondary students), USBLN and state affiliate chapters work closely with state VR agencies.

Local service organization meetings present still other opportunities to network with business leaders who represent groups such as SERTOMA (SERvice TO MAnkind) and Rotary International. SERTOMA’s mission is hearing and speech health; Rotary offers Four Avenues of Service, one of which is vocational service.

The CSAVR National VR Business Network is a “one company” approach to serving business customers through a national VR team that specializes in employer development, business consulting, and corporate relations. It has three customers: business (public, private, and non-profit employers); state VR agencies; and VR consumers. Each state VR agency has a designated point of contact who serves as a central point of contact. This designated point of contact has expertise and experience in establishing relationships with business/ industry and organizations and coordinates VR-business partnerships within the VR agency and partner agencies. Through this network, business has direct access to qualified candidates and support services provided by state VR agencies on a national basis, and state VR agencies have a national system for sharing employment resources, best practices, and business connections. Detailed

information is available in the 32nd Institute on Rehabilitation Issues- “The VR-Business Network: Charting Your Course”.

Summary

In closing, it is important for state VR agencies to explore collaborative opportunities such as the establishment of Interagency Agreements and MOUs as these serve as a shared reference point for responsibilities, roles and services to be provided. As the cycles of change continue, these agreements and MOUs (see Appendices for references and sample MOU) will allow the next generation of staff to continue the collaborative efforts, and to minimize lapses in programs or services for VR consumers.

From the USBLN website, www.usbln.org

- The BLN Chapter shall include a Lead Employer or Lead Employer Chair and a steering committee.
- The BLN Chapter membership shall contain a majority of employer chapter members.
- If incorporated, the BLN Chapter shall be a "not for profit" (501c3 preferred) organization.
- The BLN Chapter shall provide education and outreach to employers.
- The BLN Chapter shall serve as an employer resource clearinghouse.
- The BLN Chapter shall seek alignment with VR and service providers.
- The BLN Chapter shall measure its effectiveness through employer chapter member expansion.
- The BLN Chapter shall file an annual activity update with the USBLN® so best practices may be shared among chapters.

The BLN Chapter shall provide an annual membership contact list.

ATTACHMENT 7.1

MEMORANDUM OF UNDERSTANDING Developed by the CSAVR Committee on Services to Individuals who are Deaf, Deaf-Blind, Hard of Hearing and Late Deafened

STATE AGENCY

AND

NAME OF ORGANIZATION

The sample MOU presented below provides a model which can be used by SCDs as needed to develop their own MOUs:

PURPOSE

In order to advance, improve and expand employment outcomes for people with hearing loss, the NAME OF STATE VR AGENCY and NAME OF ORGANIZATION, herein commit themselves to work cooperatively in implementing the objectives set forth in this Agreement.

The STATE AGENCY, INSERT BRIEF DESCRIPTION OF STATE VR AGENCY HERE

BRIEF DESCRIPTION OF STATE ORGANIZATION, HISTORY, AND GOALS

Statement of Need

The STATE AGENCY and ORGANIZATION believe that quality employment outcomes for people with hearing loss can be substantially increased and improved through a closer working relationship between the State Vocational Rehabilitation Agency (VR) and ORGANIZATION

It is projected that the number of people disabled by hearing loss will continue to increase in proportion to the total population of the country due to the aging of our society and ongoing exposure to harmful noise. The “Baby Boomer” population, consisting of individuals born during the 20 years following the end of World War II in 1945, is now rapidly moving into the age group where hearing loss becomes considerably more prevalent.

With this, there needs to be a growing awareness of the multitude of variables which impact on the functional communication capabilities of those persons disabled by hearing impairment. The general community, as well as rehabilitation professionals and consumers themselves, need to understand the ramifications of this insidious condition, especially as it relates to employment issues at all levels.

The ongoing creation and development of new technological devices and systems which can be used for improved communication access can play a major role in improved rehabilitation services to people with hearing loss. However, a greater focus must be placed on how to best encourage people, consumers and professionals alike, to fully utilize these products. The willingness to use available assistive technology is an integral part of effective coping strategies, and unfortunately this is a quality that is much too often not found within this population. Adjustment to the communication obstacles and related problems can be the most difficult part of rehabilitation.

Terms of Cooperative Agreement

The STATE AGENCY and ORGANIZATION will communicate to their respective networks the desire for the State agencies and local chapters to establish agreements and the intended outcome of such agreements. To encourage a better understanding of hearing loss and how it can affect people, STATE AGENCY and ORGANIZATION will work together as outlined within this agreement in order to STATE GOAL OF AGREEMENT HERE.

STATE HERE HOW THE TWO ORGANIZATIONS WILL WORK TOGETHER TO ACHIEVE THE GOALS OF THE AGREEMENT

Throughout the life of the Agreement, Organization will undertake to:

1. Establish and maintain ongoing channels of communication with appropriate staff and administrators of STATE AGENCY, addressing specific rehabilitation needs and concerns of individuals with significant hearing disabilities, as well as providing those hard of hearing consumers with relevant information regarding the availability of the various rehabilitation resources in their communities;
2. Encourage ORGANIZATION members at the state and local chapter levels to establish and maintain close working relationships with State VR agencies, including local offices, engaging in mutual referral activities that will result in the provision of increased service delivery to individuals who previously would not have been able to access services on their own for a variety of reasons;
3. Encourage ORGANIZATION members at all levels to participate in the State Rehabilitation Council activities as members of the Council or attendees at the SRC meetings, offering meaningful input towards the improvement and increase of appropriate VR and related services leading to more successful employment outcomes.

Authority

This agreement does not in itself authorize the expenditure or reimbursement of any funds. Nothing in this agreement shall obligate the parties to expend appropriations or other monies, or to enter into any contract or other obligation

CHAPTER EIGHT

INDEPENDENT LIVING SKILLS

Introduction

Rehabilitation professionals tend to focus our attention on employment services and outcomes of the consumers we serve. Although employment is the ultimate goal of the public rehabilitation program, the rehabilitation counselor for the deaf, deaf-blind, hard of hearing, and late-deafened must view the individual with a hearing loss from a holistic approach which includes biological, chemical, social (leisure, family and independent living), economic, mental, and linguistic aspects. Independent living is defined as a well-organized movement among people with disabilities to enhance self-esteem and self-determination, as well as the socio-economic resources available to choose and maintain individual, independent lifestyles. Although there is currently no known definition of life skills, life skills, in addition to essential literacy and numeric skills, could encompass the ability to build sound, harmonious relationships with self, others and the environment; the ability to act responsibly and safely; the ability to survive under a variety of conditions; and the ability to solve problems.

The Rehabilitation Act Amendments of 1978, called for the inclusion of a broad new spectrum of services aimed to more fully address the comprehensive needs of people with severe disabilities. Title VII of the 1978 amendments paved the way for provision of independent living services (ILS) and defined individuals with severe disabilities as any individual whose ability to function independently in family or community, or whose ability to engage or continue in employment is so limited by the severity of his/her physical or mental disability that ILS are required in order to achieve a greater level of independence in functioning in family or community or engaging or continuing in employment. (Federal Register; Vol. 46, No. 12; January 19, 1981; p. 5546)

Independent living skills training is an important part of the rehabilitation process for anyone with a disability. Independent living has to do with self-determination. It is having the right and the opportunity to pursue a course of action. And, it is having the freedom to fail - and to learn from one's failures, just as non-disabled people do. For an individual who is severely disabled, independence at home, in the community and in the workplace is crucial. This is equally true for individuals with significant hearing loss to have equal access to independent living skills and life skills training to improve their quality of life.

Independent Living Skills (ILS) Training means a continuum of functional skills training that adult consumers need to secure or maintain a self-sustaining level of independence in the parental home or in an independent living situation in the community. ILS training

focuses on teaching functional skills to adult consumers who generally have acquired basic self-help skills or who have attendant care and require additional skills to maintain themselves in their chosen living arrangement. The delivery of independent living skills training to persons who are culturally deaf, individuals who are late deafened, hard of hearing or deaf-blind varies between states.

Independent living skills or life skills training may include, home management, homemaking skills, parenting, health care and safety, community inclusion training, budgeting and money management, socialization skills/leisure activities, time management, transportation, clothing maintenance, personal hygiene, sexuality training, self advocacy, and community resource awareness (for example, police, fire, and other emergency help).

Background

Since publication of the 1990 edition of the model state plan for services to individuals who are deaf (Watson, 1990), the needs of consumers who are Deaf have changed dramatically in the area of independent living. The demographics of an aging population, a diverse population and rapidly changing technology have created a new or modified array of issues that public rehabilitation programs are expected to address. Independent Living Skills training should address the needs for adults and youth who are not only Deaf, but those who are “low functioning deaf,” significantly hard of hearing, late deafened, and deaf-blind.

Since some hearing loss is associated with aging, many people who have always operated in the hearing world and do not have a cultural or language connection to the Deaf Community are now coping personally with a hearing loss. Also, many people have other disabling conditions such as vision loss, mental illness, substance abuse, or physical impairments along with hearing loss. Multiple disabilities, severe educational, learning, and functional deficits characterize the population and emphasize the need for independent living skills.

The ethnic and racial makeup of the United States, medical research, and advancements in early identification of co-existing disabilities has increased the demand for independent living services to a more diverse population. These consumers with hearing loss have unique independent living needs such as literacy, money management/credit problems, legal issues, immigration concerns, housing, lack of health care, parenting and family issues, mental health and substance abuse and transportation. The Rehabilitation Counselor for the Deaf has to find ways to work collaboratively with other professionals in the independent living programs and centers.

At one time, citizens who are deaf tended to live in close-knit communities within an urban environment. Often those areas were near a state school for the deaf, but as the general population moves outward, so has the Deaf Community. As citizens who are deaf branch out to other neighborhoods, some of the characteristics of the close-knit community have been weakened and contact has been less frequent, therefore the consumer has access to natural supports.

Technology is another factor changing the needs of this population. Improved medical care of infants, improvements in the technology of hearing aids, and the increasing number of cochlear implants are changing the functional limitations of consumers with hearing loss. For those who are culturally deaf, technology is making communication with the “hearing world” more accessible, for example, the videophone and video relay services.

These factors are increasing the number of people receiving services from state rehabilitation and independent living programs. Independent Living Skills training is one of the most logical choices for many who are hard of hearing, late deafened or culturally deaf.

When people are confronted with a hearing loss, simple tasks, such as adjusting the way they access the telephone, requires assistance and training. Culturally deaf people are also in need of independent living skills assistance as technology offers new and different approaches to communication and living independently.

Independent living skills training may be provided in a variety of settings with methods varied depending on the type of hearing loss and the needs of the individual. The following is a list of service providers that may be available in each state to address the need for independent living skills services for individuals who are deaf, deaf-blind, hard of hearing, or late deafened. It is important to remember that to successfully serve this population; a service provider must recognize the uniqueness of the disability and provide specialized staff.

Independent Living Centers

Independent Living Centers nationwide receive state and federal funding and are intended to aid and empower people with disabilities to live independently. What makes Independent Living centers very different from other organizations is that these centers have substantial involvement of people with disabilities making policy decisions and delivering services. Why this emphasis on control by people with disabilities? The basic idea behind Independent Living Centers is that the ones who know best what services people with disabilities need in order to live independently are disabled people themselves. However, in order for the ILC to serve people with significant hearing loss that uses different modes of communication, the ILC would need to (1) become knowledgeable about the population and their communication needs, (2) hire staff who are deaf and hard of hearing or bring deaf and hard of hearing mentors from the community to facilitate effective communication and service delivery, and (3) recruit people with hearing loss to serve on the local or state advisory councils.

Most of the staff of ILC are generalists, have limited knowledge and skills in the area of hearing loss, limited knowledge of deaf culture, and do not know American Sign Language. The philosophy of “one size fits all” should not apply for individuals with hearing loss due to several factors such as age of onset, degree of hearing loss, residual

hearing, preferred mode of communication, and the integration of assistive technology into the home and work environment.

Independent Living Centers may offer a wide variety of services, including:

- *Information and referral:* Centers maintain comprehensive information files on availability in their communities of accessible housing; transportation; employment opportunities; rosters of persons available to serve as personal assistants, interpreters for people who are deaf or deaf-blind, or readers for people who are blind or visually impaired; and many other services.
- *Independent living skills training:* Centers provide training courses to help people with disabilities gain skills that would enable them to live more independently; courses may include using various public transportation systems, managing a personal budget, dealing with intensive and discriminatory behavior by members of the general public, and many other subjects.
- *Peer counseling:* Centers offer a service in which a person with a disability can work with other persons who have disabilities and who are living independently in the community. The objective is to explore options and to solve problems that sometimes occur for people with disabilities, for example, making adjustments to a newly acquired disability, experiencing changes in living arrangements, or learning to use community services more effectively.
- *Advocacy:* Centers provide two kinds of advocacy: 1) consumer advocacy, which involves center staff working with persons with disabilities to obtain necessary support services from other agencies in the community and 2) community advocacy, which involves center staff, board members, and volunteers initiating activities to make changes in the community that make it easier for all persons with disabilities to live more independently.
- *Other services:* Centers also offer a number of other services, generally depending on specific needs of their consumers and lack of availability elsewhere in the community. Among the most frequently provided services are community education and other public education services, equipment repair, recreational activities, and home modifications.

Deaf/Hard of Hearing Service Centers

Most Deaf/Hard of Hearing Service Centers were established as a link between the deaf and hearing community. This vital link offers services to help the individual who is deaf or hard of hearing live as independently as possible. The Service Centers are usually private, non-profit social service agencies that serve individuals who are deaf, deaf-blind, hard of hearing and late-deafened, their families, and community providers. The mission is to empower deaf and hard of hearing individuals to advocate, seek equality and promote self-determination through empowerment for those who seek the assistance; and to enhance the awareness and understanding of Deaf Culture and the unique communication needs of Deaf and Hard of Hearing

individuals. Service Centers are locations that provide a central point of contact for people to come to receive help with problems that accompany hearing losses.

- Video phones are a recent advancement in communication options for individuals who are Deaf. Since Video Phones are not available to all people, service centers can provide a location for people to use a Video Phone and this can serve as an important tool in developing independence.
- Technology is rapidly changing and Service Centers can be a place that Deaf/Hard of Hearing consumers can go to learn about the newest innovations and receive training on how to access services or utilize technology.
- Centers that provide recreational services have evolved from offering primarily recreational activities to educational, social, cultural, and recreational services. In addition to specialized activities, recreational services provide opportunities for individuals with disabilities to become integrated into programs that are available for the general public. An Adaptive Recreation Program provides a comprehensive program for individuals with mental and/or physical disability. This program strives to provide its participants with skills needed to successfully participate in community-based recreation programs and encourages them to pursue available opportunities. Activities have included: weekly bike rides, picnics and parties, Open Swim at the City Pool, Open Basketball, Downhill Ski Lessons, Low Impact aerobics, Water Aerobics, Family Open Gym, bowling, and much more. These services should be fully accessible for individuals with hearing loss. One model Adaptive Recreation Program is with Communication Services for the Deaf – Minnesota (CSD-MN) to provide recreation opportunities for Deaf and Hard of Hearing individuals.
<http://www.stpaul.gov/depts/park/adaptiverecreation/deaf.html>

Deaf/Hard of Hearing Commissions

In some states, Commissions for the Deaf and Hard of Hearing were created by state legislation to advocate, strengthen and implement state policies affecting deaf and hard of hearing individuals and their relationship to the public, industry, health care, and educational opportunities. Depending on the state, there may be both Service Centers and Commissions for individuals who are deaf and hard of hearing providing services.

Community Rehabilitation Programs

Community Rehabilitation Programs may have specialized staff that can provide independent living skills or life skills training to individuals who are deaf, deaf-blind, hard of hearing, or late deafened. The vocational rehabilitation programs may provide

communication skills assessments, communication skills training, vocational evaluations, transportation services, work adjustment, job training and other vocational rehabilitation services along with individualized independent living skills training.

Accessibility Issues

Regardless of the service provider, communication access is the key to providing appropriate independent living services to individuals who are deaf, deaf-blind, hard of hearing or late deafened.

Sign Language interpreting services for Deaf and Deaf-Blind consumers is an essential part of an independent living services program. Funds should be allocated specifically for interpreting services and captioning. Advances in technology are offering new ways to provide interpreting services such as video remote interpreting.

State Independent Living Councils

Each state is required by law to establish a state independent living council (SILC). The focus of the SILC is to maximize opportunity and to incorporate people with disabilities into all walks of life through empowering them to take control of their lives. This council is expected to have representation of individuals with varying degrees of disabilities. Often individuals with a hearing loss are not included on the council. It is important that each state have representation by a person who is deaf, deaf-blind, hard of hearing or late deafened, in order to gain perspective on hearing loss issues as they relate to independent living skills.

Independent Living Curriculums

Independent Living Skills or Life Skills curriculums vary from an intense, comprehensive curriculum to an individualized training on identified areas of weakness. Attachment 8.1 outlines a sample curriculum that may be used in developing independent living skills training for individuals who are deaf, deaf-blind, hard of hearing or late deafened.

ATTACHMENT 8.1

A Sample Life Skills Curriculum

The following curriculum can be integrated into a Service or Rehabilitation Center:

Social Skills/Leisure Activities

- anger management
- self advocacy
- conflict resolution
- fire, home, and personal safety
- managing and maintaining relationships
- social appropriate behavior
- recreational and leisure activities
- community resource awareness

Communication Skills

- gestures and home signs
- visual cues and materials
- using an interpreter, captioning, etc
- instant messaging
- e-mail etiquette and communication
- telephone skills
 - obtaining phone numbers,
 - getting information over the phone,
 - using proper phone manners when looking for a job and while on the job
 - video phones
 - video relay interpreting

Technology/Home Management

- assessing the assistive technology needs
- training the consumer on the technology used in the home and at work
- home and workplace modifications
- identifying other technological aids and devices needed for the home or workplace

Decision-Making Skills

- problem-solving techniques
- decision-making skills
- time management skills

Literacy Services

- Individual and small group tutoring focusing on the specific needs of the learner.
- A community literacy program for individuals who read or write below the 9th grade level.
- A family literacy program designed to instill the love of reading in both parents and children.
- Literacy services for individuals, including new mothers, dealing with alcohol and drug recovery issues.

Employability

- job seeking skills classes
- retaining a job (development of soft and hard skills)
 - work attendance
 - understanding work procedures
 - wearing proper attire
 - relationships with co-workers
 - expectations of employers
 - workplace safety and productivity
- supported employment and long term follow up support
- workplace accommodations

Money Management

- basic money handling skills (paying bills)
- understanding the benefits of the job
- budgeting
- using a bank i.e. savings or checking account,
- using credit
- protecting your money and staying out of debt
- paying taxes
- homemaking skills

Transportation

- taking a driver's education class
- obtaining a driver's license
- travel training how to get from home to work
- riding a bus or public transportation (bus or train tickets)
- buying a car or bike
- getting car insurance, inspection, and tag

Health

- case management to coordinate services from various agencies
- personal development such as assertiveness, manners, positive self-image, stress management, etc
- maintaining a healthy lifestyle
 - physical fitness,
 - nutrition,
 - clothing maintenance
 - personal hygiene
 - the problems of drug and alcohol use related to the job,
 - accessing and using medical services appropriately
 - how to use sick leave benefits
 - when to take vacation and how to request leave
 - sexuality training

Family Responsibilities

- securing child care
- parenting skills
- how to balance working with the responsibilities of caring for a sick, elderly, or disabled family member.
- Marriage and family counseling
- understanding domestic violence and how to access services

Housing Options

- understanding what is available in the community (group homes for the deaf, apartment or house, supervised apartments, nursing homes for the deaf, roommate, etc)
- understanding rental versus ownership
- learning how to live independently

Basic Understanding of the Law

- understanding basic laws such as drinking and driving, trespassing, stealing, etc.
- hiring a lawyer
- understanding and using the laws of the Americans with Disabilities Act to receive necessary accommodations at work, in public buildings, and while using public transportation.

CHAPTER NINE

FUTURE DIRECTIONS

The Challenge

The future of specialized vocational rehabilitation programs for consumers with hearing loss is dependent on a multitude of challenges currently facing programs dedicated to serving discrete disability groups. Increases in basic funding are not anticipated beyond mandated levels. Funding of specialized vocational rehabilitation counseling programs is decreasing, as are grants that target consumers with hearing loss for research, vocational rehabilitation staff training, and interpreter training programs. Our federal partner, the Rehabilitation Services Administration (RSA) has centralized its services, resulting in a diminished ability of SCDs to network within regions, and the elimination of valued technical assistance from regional RSA staff specialists in deafness and hearing loss. The RSA central office appears to have a generalist philosophy, and has eliminated offices dedicated to specific disability groups.

A whole generation of SCDs, educators, researchers, and trainers in the field of deafness rehabilitation are reaching retirement age. The field is therefore faced with the challenge of mentoring “younger” professionals to understand the history and maintain the momentum. New leaders must emerge nationally, prepared to advocate for and maintain cutting edge services that keep pace with rapidly changing technology, medical and communication advances, population shifts, and bureaucratic changes.

It is left to the State Administrator to recognize the challenges facing the agency in serving these populations of consumers with hearing loss. The administrators must take necessary steps to ensure that specialized programs and staff are maintained to keep pace with emerging populations and medical and technological advances.

The History

Since the 1970s, most state vocational rehabilitation agencies have had specialized programs in place to serve individuals with hearing loss. For the most part, these programs were developed to meet the unique needs of consumers who are culturally deaf and whose primary mode of communication is American Sign Language. In some states, special programs have also long been in place for consumers who are deaf-blind.

Since the mid 1980s, there has been a growing awareness that consumers who are hard of hearing and late deafened have very different communication and employment service needs from those who are culturally deaf and that there is a need to develop specialized VR services for those populations. States increasingly recognize the need to expand their scope of services to include consumers who are hard of hearing, late-deafened, and cochlear implanted, along with the need to train staff to recognize and provide services which are often different from services to those who are culturally deaf.

As a function of this expanded population, agencies are therefore realizing that there is a need to redefine their approach to serving these diverse populations. This fundamental redefinition calls for a reexamination of: program structure, staff roles and skill requirements, needed technology, and needed staff training to best accommodate and serve the diverse populations within the broad spectrum of hearing impairment.

At the individual state level, the challenge for the future is how to provide quality services to an increasing number of consumers in times of level funding. It is time to think differently -- to find creative ways to do things differently, not more costly, while increasing the quality of services to an emerging and increased consumer base. Agencies must reassess their services and be accessible to the subgroups in the population.

Why is it important to reassess your program and services for these populations?

- The Rehabilitation Act Amendments place an emphasis on client informed choice, active participation in plan development, and qualified personnel to facilitate the accomplishment of employment goals and objectives. For persons with hearing loss, this means receipt of information about technological, medical, psychosocial, training, employment, and service options available to them in their preferred mode of communication.
- RCDs and specialized services already in place may not meet the communication needs of consumers who are hard of hearing, late deafened, and deaf-blind who do not use sign language for communication.
- RCDs, general counselors, and hard of hearing, late deafened, and deaf-blind consumers themselves, generally have little knowledge of the service needs and communication options available for persons who are hard of hearing or late deafened.
- Hard of hearing consumers, traditionally reluctant to self-disclose, are starting to seek assistance from VR.
- Numbers of persons with hearing loss are increasing with the aging “baby boomers” and as the general population is living longer.
- Cochlear implants are increasing and will require new expertise.
- Technology is exploding beyond the ability of counselors to keep up.
- Mainstreaming is effecting all subpopulations.
- The increase in the number of states entering an Order of Selection for Services requires full understanding of functional limitations- especially of consumers who are hard of hearing in order to accurately determine “Priority” assignment.

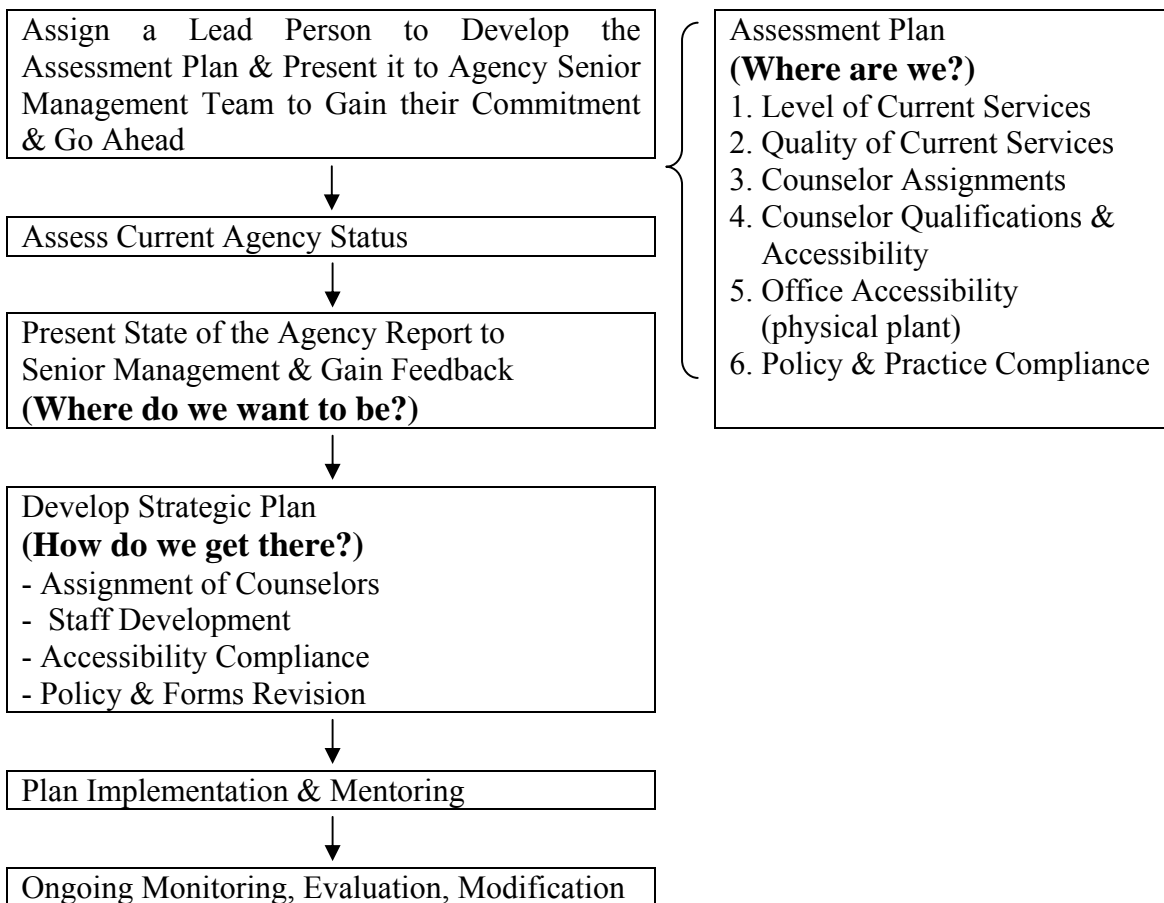
Strategies for Program Reassessment

In reassessing your program for individuals who are deaf, deaf-blind, hard of hearing, and late-deafened, it is necessary to look at your current level of service delivery to these consumers and to develop a strategic plan for provision of quality services to existing, unidentified, and emerging populations. In order to determine how to structure or restructure your program, you must know where you are currently, where the gaps are,

and what is the ultimate outcome you would want in a perfect world. Based on this information, priorities and goals can be set in an orderly and realistic way -- short and long range planning rather than stop-gap measures to put out fires. This section presents a strategy that VR agencies might use to assess the quantitative and qualitative impact of their program on the needs of the entire spectrum of hearing losses (deaf, deaf-blind, late deafened, and hard of hearing). The following model might be used by state agencies to conduct such an assessment, develop recommendations, and a strategic plan . This model is designed to answer:

- **WHERE ARE WE?**
- **WHERE DO WE WANT TO BE?**
- **HOW DO WE GET THERE?**

Assessment Strategy



A detailed description of each step in the above chart follows.

Assign Lead Person and Gain Senior Management Commitment

The SCD is the logical person to be assigned to lead, and keep on track, this assessment and strategic plan development. If the state does not have a SCD on staff, another administrative office staff person, perhaps from the evaluation unit, would be appropriate. However, this must be an administrative priority in which senior management is actively involved and who communicate the priority to all levels of staff. Reports of the assessment must be fully understood by senior management and recommendations for program enhancement discussed, modified, and approved by them prior to strategic plan development. Senior management must commitment to the finalized strategic plan and implementation steps, persons responsible, and anticipated time frames and communicate their desire for full cooperation in assessments and strategic plan implementation to all levels of statewide staff.

What activities will the assessment include?

- Analysis of current counselor assignments to target populations.
- Analysis of counselor accessibility
- Analysis of physical plant accessibility.
- Analysis of RSA-911 data.
- Random, targeted case reviews.
- Policy/ practice analysis.
- Staff interviews.
- SRC surveys (if specialized populations included)
- Statewide needs assessment (pertaining to consumers with hearing loss)
- Interviews with community rehabilitation programs, consumer organizations, and others serving the target populations.

Conducting the Assessment- (WHERE ARE WE?)

For the purposes of this assessment, use RSA codes in the following groupings to identify the following four distinct subpopulations:

Deaf= 03

Hard of Hearing= 05, 06, & 07

Late Deafened & Oral Deaf= 04

Deaf Blind= 08

(See Chapter One for code definitions)

1. Analysis of RSA- 911 data

Collect and analyze state RSA-911 data to determine trends in services to the target subpopulations: referrals; client demographics (age, education, ethnicity, secondary disability); number/ percent eligible; number/ percent competitively employed at application; number/ percent closed 28/ 30/ 26; services provided; job categories at

closure; salary range at closure; number of months between acceptance and closure; pre and post effects of Order of Selection imposition- if applicable.

Look at RSA-911 national trends to determine if your state is consistent in numbers served, successful employment outcomes, cost of services, etc. Refer to Chapter One for national data that will be useful in making such state comparisons. When comparing data, remember that disability codes were changed in 2003. Numbers before and after that change may not be comparable. However, it appears that the percent of consumers coded hard of hearing and late deafened continue to increase in comparison to deaf, deaf-blind, and total (all disabilities) rehabilitations.

2. Analysis of Current Counselor Assignments

Using your data system, determine which counselors are currently serving deaf, deaf-blind, hard of hearing, and late deafened consumers. In most state vocational rehabilitation agencies, RCDBs serve deaf-blind clients, RCDs serve signing “Deaf” clients, while both RCDs and “general” counselors serve non-signing clients who have a hearing loss. Some states have specialized counselors serving hard of hearing and late-deafened consumers called “Communication Specialists.” A few states are using “Dual Counselors” serving deaf-blind consumers- where two counselors, one from the general agency and one from the blind agency, work together serving one deaf-blind consumer.

Questions to ask:

- How many cases in each hearing loss coded category have been served, by office, in the past year?
- How many cases, by office, in each category, were served by RCDs?
- How many cases, by office, in each category were served by general counselors?
- How many offices have clerical or other support staff skilled in serving these populations?

3. Analysis of Counselor Accessibility

Survey staff accessibility to determine individual counselor ability to communicate with clients with all levels of hearing loss and differing modes of communication.

- Sign Language competency
- Oral/ visual/ speech communication techniques competency
- Assistive technology/ visual display knowledge and use

4. Analysis of Office Accessibility

Survey field offices to determine accessibility to clients with all levels of hearing loss.

- Do counselors know rules of communication?
- Are telephones equipped with amplifiers/ TTYs/ VRS/ CapTel?
- Are there visual/ vibro tactile warning devices?
- Does office staff know how to use the available technology?

- Are interview and counseling rooms well lit, free from background noise and other distractions?
- Is furniture moveable to facilitate the best communication environment?
- Are personal listening systems, interpreters, CART, C-Print used for group or training situations?

5. Individual Case Analysis (targeted case reviews)

To answer questions that will be raised in the study of your data, an in-depth case review should be conducted. You will want a random sample of your field offices with both general and deaf specialist counselors represented (and identified as such) in the sample.

Questions to ask:

- Did counselors gather sufficient information to code cases consistently and to ensure that data retrieval is meaningful?
- What services were actually provided? (i.e.- 4-year college, rather than “16”)
- How well were the clients’ total employment situation and needs assessed and addressed?
- How well were the clients’ receptive communication skill assessed and accommodated?
- How well were clients’ ability to benefit from the use of assistive technology assessed and addressed?
- How well were clients’ ability to cope with stresses related to the hearing loss assessed and dealt with?
- Are the IPE services and employment goal consistent with the outcome achieved?

6. Analysis of Policy, Interpretation, and Practice

Review administrative and casework policy, practice, and fee schedule relative to services for target subpopulations to determine compliance with both the letter and intent of the law as applied to individuals with hearing loss.

Possible areas to look at include but are not limited to:

- Staff and vendor sign language competency assessment system
- Audiologic and hearing aid policies and fees
- CART and C-Print policies and fees
- Cochlear implant policies and fees
- Policies and procedures regarding training or other means of ensuring consistency among counselors.
- Cooperative agreements with higher education addressing interpreters, CART, C-Print, and assistive technology.

7. Staff Interviews

Obtain RCD/DB/HH/LD, first-line supervisor, field office manager, and administrator input to gain their perceptions of what is working and what needs work. Focus groups, by title, are suggested for the following areas: staffing; office accessibility; policy, practice and fees; service provision and issues; staff training issues and needs.

8. Consumer Input

Obtain input from the State Rehabilitation Council to determine if there is existing consumer satisfaction or input reflected in the “Consumer Satisfaction Survey,” “Statewide Needs Assessment” or input from consumers with hearing loss from other sources. Determine if the target consumer groups are represented on the Council. Consider holding consumer focus groups- separate groups for each: deaf, deaf-blind, late-deafened, and hard of hearing because of differing communication accommodations needed and differing issues. Input from consumer organizations is helpful to gain their perceptions of available VR services.

Present State of the State Report to Senior Management Team and Gain Feedback (WHERE DO WE WANT TO BE?)

Submit the completed State-of-the-State Report, with Recommendations for program modification and follow-up, to the senior management team prior to meeting with them. This will give them time to review and formulate questions and opinions prior to meeting.

It is suggested that the following information be included in the report, as appropriate to the agency:

- Introduction and definition of terms used, especially: deaf, deaf-blind, hard of hearing, and late deafened.
- Estimated state population (deaf, deaf-blind, hard of hearing, late deafened)
- Client characteristics (age, education, ethnicity)
- Number with secondary disabilities
- National 26-Closure trends vs. state
- Numbers currently served by categories: deaf, hard of hearing, late deafened, and deaf-blind vs. total served.
- Number of successful closures vs. total closed.
- Average cost per case vs. total served.
- Number of hearing aids purchased. Were they single-service cases?
- Caseload size and composition by office.
- Communication access and technology use/ provision.
- Staff input by title (See #7) addressing:
 - Staffing
 - Caseloads
 - Policy and fees
 - Accessibility
 - Services
 - Training/ meetings

Discuss the assessment findings and recommendations with the senior management team and get feedback and direction for future program and staffing structure and activities. Be certain that they are committed to the activities and structures they recommend for the follow-up strategic plan.

Develop The Strategic Plan (HOW DO WE GET THERE?)

Develop a Strategic Plan that includes short and long-range plans to achieve agreed upon staff and program modifications, additions, and deletions. Set goals and anticipated outcomes with activities, personnel responsible, and targeted time frames.

The assessment and feedback discussions should provide ample information and data to develop the Strategic Plan. Prior to implementation, the finalized Strategic Plan must have the understanding, approval, and commitment from the top of the agency- through all levels- to the counselor. If only counselors are oriented, uninformed supervisors, with different interpretations and opinions, may undermine the new paradigm.

The Strategic Plan may include, but is not limited to:

Staffing Structure (or restructure)

- Role of SCD/HH/LD, SCD/DB
- Counselor assignments to accommodate all four subpopulations appropriately
- Consideration of staff C-Print Clericals
- Consideration of staff interpreters.
- Other

Human Resource Development

Annual training plan by job title: SCD/HH/LD/DB, RCD/HH/LD/DB, General Counselors, Bilingual Counselors, Clericals, Receptionists, supervisors.

- In-service training
- Out-service training
- Meetings
- Networking strategies

Policy, Practices, Fees, Forms

Needed changes in:

- Sign Language proficiency assessment of staff and vendors who serve consumers for whom sign is the preferred mode of communication.
- Interpreter fees, procedures, and referral agencies.
- CART fees, procedures, and referral agencies.
- C-Print fees, procedures and referral agencies.
- Audiological and hearing aid evaluation procedures, fees, and forms.

- Cooperative agreement updates (Blind Agency, Higher Ed, Deaf/ Hard of Hearing Office, etc.)
- Post Employment Services
- Other

Accessibility

- Individual needs of staff who are hearing impaired
- Need for large area assistive listening systems
- Communication accessibility of interview/ counseling rooms
- Available technology demonstration and loan programs
- Alternative communication technology (Captel, VRS, VRI, etc.)
- Visual safety technology.

Programs to be piloted

- Activities to be developed in conjunction with other VR units (transitioning, remediation, work site assessment, community rehab programs, marketing materials, One-Stops, CILs, etc)

Plan Implementation, Monitoring, and Evaluation

The person appointed as Strategic Plan lead, must be totally immersed in the rationale and details of the Strategic Plan and committed to achievement of the desired outcomes. He or she must have an extensive background in vocational rehabilitation of consumers who are deaf, deaf-blind, hard of hearing, and late-deafened, and be committed to quality services for each. He or she must report to a person with sufficient authority to ensure that Strategic Plan goals and activities are not undermined.

The Strategic Plan, when finalized and approved for implementation, must be clearly communicated to all levels of staff. Everyone, regardless of perceived level of involvement, must understand what the desired outcome(s) are, the rationale, and the individual staff and field office expectations.

It is important that the Strategic Plan be monitored regularly to ensure that it is on track. If not on track, the reason for delay can be determined. Persons critical to movement may need mentoring or encouragement. Circumstances may not permit progress as originally planned and a planned activity might need modification to achieve the desired outcome.

Regular progress reports (verbal and written) up and down the line are critical to keep the initiative at the forefront and on track.

A Strategic Plan must be a living document.
Evaluate regularly-
Revise as needed-
Document progress, problems, and NEXT STEPS!!!!

Driving Force

Retention or establishment of a State Coordinator for the Deaf and Hard of Hearing (SCD/HH or D/B) is critical to the future of vocational rehabilitation programs for consumers with hearing loss. The SCD concept and role was developed in the initial Model State Plan and has been the driving force in retaining an equal playing field for consumers with hearing loss for the past thirty plus years. Regardless of organizational structure, *this is the person* whose leadership keeps the unique and changing complexion of the target population at the forefront with cutting edge services. *This is the person* who keeps up to date on technology explosion and how it relates to the vocational rehabilitation clientele. *This is the person* who identifies the emerging and changing populations and recommends associated policy and practice modifications. *This is the person* who provides support, training, and networking opportunities to RCDs and support staff who are usually isolated in separate offices.

The SCDs must be retained, valued, and supported. They must be placed in the agency at a level that they have a strong voice in policy, staffing, and service delivery. They must be encouraged and trained to do environmental scanning- to network with other SCDs nationally, to be involved in state and national organizations for the deaf, deaf-blind, hard of hearing, and late-deafened, and to be constantly open to new ideas and paradigms.

The charge for the future is to find creative ways to turn challenges into opportunities for continued quality and growth of vocational rehabilitation program excellence for consumers who are deaf, deaf-blind, hard of hearing, and late-deafened.

REFERENCES

- A Model for a National Collaborative Service Delivery System Serving Individuals who are Low Functioning Deaf*, (2005). LFD Strategic Workgroup. PEPNet.
- Allen, T.T., Rawlings, B.W., & Schildroth, A.E. (1989). Deaf students and the school-to-work transition. Baltimore, MD: Paul H. Brookes
- American School for the Deaf. *History of Deaf Education in America*.
www.asd-1817.org/history/history-deafed.html
- An American Definition of Independent Living:
<http://akmhweb.org/recovery/Independentliving.html>
- Americans with Disabilities Act
- Anderson, G. B., & McGee, S. (1996). Helping minority individuals navigate through successful school and work transitions. In M. Kolvitz (Ed.), Proceedings of the 1996 regional postsecondary education conference for individuals who are deaf or hard of hearing (pp.181-193). Knoxville: University of Tennessee.
- Anderson, G.B, & Watson, D. (Eds.) (1993). The Black deaf experience: Excellence and equity. Little Rock: University of Arkansas, Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing.
- Bateman, Barbara D. [Legal Requirements for Transition Components of the IEP](#).
- Boone, S., Watson, D., & Bagley, M. (Eds.). (1998). *The challenge to independence: Vision and hearing loss among older adults: Proceedings of the 2nd National Conference* (2nded.). Little Rock: University of Arkansas, Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing.
- Boone, S.E. & Long, G. (1988). Employability enhancement needs of deaf persons. In S.Boone & G. Long (Eds.). Enhancing the employability of deaf persons: Model interventions. Charles C. Thomas.
- Brennan, Doris. *Linking Employment, Abilities and Potential (LEAP) – IL History*.
Cleveland, Ohio: Doris Brennan Center for Disability Education and Advocacy
- Cohen,G.P., Fischgrund, J.E., & Redding, R. (1990). Deaf children from ethnic, linguistic and racial minority backgrounds: An overview. *American Annals of the Deaf*, 135 (2), 67-73.
- Commission on Education of the Deaf (1988). Toward equality: Education of the deaf. Washington, DC: U.S. Government Printing Office.

Complying With New Standards for People Who are Deaf or Hard of Hearing: Key Points for Providers to Remember, (2003) Alabama Department of Mental Health and Mental Retardation Office of Deaf Services;

www.mh.state.al.us/admin/downloads/DeafServices/ODS_KeyPointsForProviders.pdf

Cooperative Agreements between State Vocational Rehabilitation Agencies and Institutions for Higher Education: Responsibility for Funding Auxiliary Aids.

Danek, Marita M. (1993). *Rehabilitation Act Amendments and the Helen Keller National Center Act of 199: Implications for consumers with hearing loss.* *American Rehabilitation*, Winter, 1993.

Danek, M. & Busby, H. (1997). Concepts and premises in transition planning and programming: Empowerment through partnership. Unpublished paper, Gallaudet University.

Danek, M. & McCrone, W.(1989). The mandate for transition services: Myth or reality? In T. E. Allen, B. Rawlings and A. Schildroth (Eds.). *Deaf students and the school-to-work transition* (pp. 1-30). Baltimore: Paul H. Brookes Publishing Co.

Deaf and Hard of Hearing Service Centers, Inc:

<http://www.dhhsc.org/ABOUTUS.html>

Definition of Independent Living: http://en.wikipedia.org/wiki/Independent_living

Dew, D., Lucas, L. H., & Tomlinson, P.A. (1999, December), *The 25th institute on rehabilitation issues: Serving individuals who are low-functioning Deaf.* George Washington University, Regional Rehabilitation Continuing Education Program.

Dwyer, C., Holmes, V. (2003) White Paper, CSAVR Subcommittee on Services for Deaf, Hard of Hearing and Deaf-Blind Persons

Faulkner, G., Harmon, M., Johnson, L., Knopf, E., Latz, R., Parnes, A., Currie-Richardson, D., Sligar, S., (2004). *Strategies for community rehabilitation programs to serve consumers who are deaf, hard of hearing, late deafened or deaf-blind.* Midwest Center for Postsecondary Outreach (MCPO) St. Paul College – A Community & Technical College

Field, S., Martin, J. Miller, R., Ward, M., & Wehmeyer, M. (1998). *A practical guide for teaching self-determination.* Reston, VA: Council for Exceptional Children.

Field, S., Martin, J., Miller, R., Ward, M., & Wehmeyer, M. (1998). Self-determination for persons with disabilities: A position statement of the Division on Career Development and Transition, The Council for Exceptional Children. *Career Development for Exceptional Individuals*, 21(2), 113-128.

Foster, S. B. (1992). *Working with deaf people: Accessibility and accommodation in the workplace*. Springfield, IL: Charles C. Thomas.

Furney & Salembier, (2000). *How to help students lead their IEP meetings*. TEACHING Exceptional Children.

Hetu, R., & Getty, L. (1992). Overcoming difficulties experienced in the work place by employees with occupational hearing loss. *The Volta Review*, 95 (4), 391-402.

Hotchkiss, D. (1989). *Demographic aspects of hearing impairment: Questions and answers* (2nd Ed.). Washington, DC: Gallaudet University Center for Assessment and Demographic Studies.

Howe, M. (1993-1994). Meeting the needs of late-deafened adults. *American Rehabilitation*. Winter, 25-29.

Hurwitz, T. A. (1989). Task force on deaf adults with severe disabling conditions who are low functioning. Unpublished report, Rochester, NY: Rochester Institute of Technology, National Technical Institute for the Deaf.

IDEA Parent Guide, National Center for Learning Disabilities, April 2006. URL: http://www.ncl.org/images/stories/downloads/parent_center/idea2004parentguide.pdf, Retrieved June 16, 2007

Independent Living Skills Training Policy. California: San Andreas Regional Center. www.sarc.org

Independent Living Services – Rehabilitation Act Amendments of 1978
Federal Register; Vol. 46, No. 12; January 19, 1981; p. 5546)

Individuals with Disabilities Education Act : A Legislative History of Public Law 101-476 As Amended by Public Law 102-119 (Set) William S. Hein & Co., Inc., 1994.

Kochkin, S. (2007). Impact of hearing loss on household income. (Retrieved on May 15, 2007 from: <http://www.betterhearing.org>).

Latz, R., & Lundquist, K. (2003) *Community rehabilitation programs (CRPs) and limited use vendors (LUVs): Responsibilities for program access – auxiliary aids and services for effective communication guiding principles*; Minnesota Department of Economic Security / Rehabilitation Services Branch, Strategic Planning and Program Development Unit

Life Skills (Curriculum) for Vocational Success (Developed by Workshops, Inc. and a grant through Alabama Department of Rehabilitation Services).

- Long, G., Long, N., & Ouellette, S. (1993). Service provision issues with traditionally underserved deaf. In O. Welch (Ed.), *Research and practice in deafness*. Springfield, IL: Charles E. Thomas.
- Long, N.M., Ouellette, S. E., Long, G., & Dolan, K. (1993). Historical overview of services to traditionally underserved persons who are deaf. *American Rehabilitation, Winter, 1993*.
- MacLeod-Gallinger, J. (1993;). Deaf ethnic minorities: Have they a double liability? Rochester, NY: NTID Office of Postsecondary Career Studies in Deafness.
- Mathey, G.A., & Lafayette, R.H. (1990). Low achieving deaf adults: An interview survey of service providers. *Journal of the American Deafness and Rehabilitation Association. 24 (1), 23-32*.
- McNeil, J. (1993). Americans with disabilities: 1991-92. Data from the survey of income and program participation. Washington, DC: US Department of Commerce, Bureau of the Census.
- Miller, J., Baker, S., & Tomlinson, P. (1997). Determination of service needs of persons with severe speech & hearing disabilities in the state of Oklahoma: Final report. Hot Springs: Region VI Rehabilitation Continuing Education Program, University of Arkansas.
- Mowry, R.L. (1987). Vocational and socioeconomic characteristics of hearing-impaired former clients of a state VR agency. *Journal of Rehabilitation, 53 (3), 58-62*.
- Mitchell, R.E. & Karchmer, M.A. (2006). Demographics of deaf education: More students in more places, *American Annals of the Deaf, 151, 2, 95-104*.
- National Health Interview Survey, 2006.
- Region VI Rehabilitation Continuing Education Program, University of Arkansas, 1993). *Rehabilitation of individuals who are hard of hearing and late deafened: A guide for rehabilitation practitioners*. Region VI Rehabilitation Continuing Education Program, University of Arkansas.
- Reid, C., & Nunez, P. (July, 2007). Exploring test equity issues for the CRC examination. CRCC Deafness Advisory Panel..
- Ries, P.W. (1985). The demography of hearing loss. In H. Orlans (Ed). *Adjustment to adult hearing loss*. San Diego: College University Press, 2-21.

Ries, P.W. (1994). Prevalence and characteristics of persons with hearing trouble: United States, 1990-1991. *Vital and Health Statistics, 10(188)*. Hyattsville, MD: National Center for Health Statistics.

Ross, M. (1996) *Deaf and hard of hearing: Making distinctions*. Washington, D. C: Rehabilitation Engineering Research Center on Hearing Enhancement.

Rotary International, www.rotary.org

Schein, J.D. & Delk, M.T. (1974). *The deaf population of the United States*. Silver Spring, MD: National Association of the Deaf.

Schein, J. (1980). The model state plan for vocational rehabilitation of deaf clients: Second revision. New York University: Deafness Research & Training Center.

Schein, J.D. (1987). Hearing impaired people in the workplace. *SHHH Journal, 8(3)*, 8-12.

Scherich, D. L. (1996). Job accommodations in the workplace for persons who are deaf or hard of hearing: Current practices and recommendations. *Journal of Rehabilitation, 62 (2)*, 27-35.

Schildroth, A. & Hotto, S. (1995). Race and ethnic background in the annual survey of deaf and hard of hearing children and youth. *American Annals of the Deaf 140(2)*, 96-99.

Schiller, Ellen, Fran O'Reilly, and Tom Fiore. Marking the Progress of IDEA Implementation, published by the Office of Special Education Programs. URL: http://nclid.unco.edu/Resources/IDEA_Progress.pdf, Retrieved June 26, 2007

Schroedel, J., & Watson, D. (Eds.) (1993). Pursuing the American dream: How hearing-impaired workers advance in their careers. *Volta Review*, Washington, DC: Alexander Graham Bell.

Schroedel, J. G., & Watson, D. (1991) Enhancing opportunities in postsecondary education for deaf students. Little Rock: University of Arkansas, Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing.

Schroedel, J.G. (2006). Estimating the number of hard of hearing and late deafened students: Implications for service delivery and job opportunities. In D. Watson, J. Schroedel, M. Kolvitz, J. DeCaro, and D. Kavin (Eds.). *Hard of hearing students in postsecondary settings: A guide for service providers*. Knoxville, TN: University of Tennessee.

SERTOMA, www.sertoma.org

Stauffer, L., & Boone, S.E. (2007). Survey of state staffing patterns, issues, CSPD, and related outcomes for consumers who are deaf, deaf-blind, hard of hearing and late deafened. <http://www.rehabnetwork.org/committees/07/January2007CSAVRTechnicalReport-2.pdf:CSAVR>.

Stewart & Klumin (2001). *Teaching deaf and hard of hearing students: content, strategies, and curriculum*. Boston: Allyn & Bacon.

Stewart, L. (1979). *Hearing-impaired developmentally disabled persons: A challenge to the helping professionals*. Tucson, AZ: College of Education.

Stone, R., & Fennell, D. (1990). Rehabilitation services for hard-of-hearing persons. In D. Watson (Ed.). *Model state plan for rehabilitation of individuals who are deaf and hard of hearing*. Little Rock: University of Arkansas, Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing (pp. 75-94).

Thirty-Second Institute on Rehabilitation Issues: The VR-Business Network. (2006). University of Arkansas CURRENTS, www.rcep6.org

Tomlinson, P. A. (1992) Rehabilitation of individuals who are hard of hearing and late deafened: A guide for administrators. Region VI Rehabilitation Continuing Education Program: University of Arkansas.

Tomlinson, P. A. (2003). Strategic plan: New Jersey division of vocational rehabilitation services program for consumers who are Deaf, hard of hearing, & late-deafened, Mandalay, New Jersey.

The Rehabilitation Act Amendments of 1973. www.access-board.gov/enforcement/Rehab-Act-text/intro.html

United States Business Leadership Network, www.usbln.org

U.S. Department of Education, Office for Civil Rights. (March 16, 2007). Transition of Students with Disabilities to Postsecondary Education: A Guide for High School Educators. <http://www.ed.gov/about/offices/list/ocr/transitionguide.html>

U.S. Department of Education, Office of Special Education and Rehabilitative Services, [*A Guide to the Individualized Education Program*](#), July 2000.

Vocational Guidance www.tvet-pal.org/counseling/intro.html -

Watson, D., Schroedel, J., Kolvitz, M., DeCaro, J., & Kavin, D. (Eds.). *Hard of hearing students in postsecondary settings: A guide for service providers*. Knoxville, TN: University of Tennessee.

Watson, D. & Taff-Watson, M. (1995). Deafness and hearing impairment in the United States. In A. Dell Orto and R.P. Marinelli (Eds.). *Encyclopedia of Disability and Rehabilitation*. New York: MacMillan Publishing Company, 239-247.

Watson, D. (1993). Empowerment of adults with deaf-blindness. In J. Reiman (Ed.), *National symposium on children and youth with deaf-blindness*. Monmouth: Western Oregon State, Teaching Research Division.

Watson, D., & Taff-Watson, M. (Eds.) (1993). *A model service delivery system for persons who are deaf-blind*. Little Rock: University of Arkansas, Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing.

Watson, D. (1990). *Model state plan for rehabilitation of individuals who are deaf and hard of hearing*. Little Rock: University of Arkansas, Rehabilitation Research and Training Center for Persons who are Deaf or Hard of Hearing.

Watson, D., Taff-Watson, M., & Barrett, S. (1985). Research priorities in deaf-blind rehabilitation: Demographic characteristics of the population. In J. Stahlecker, L. Glass, & S. Machalow (Eds.), *State of the art: A conference on research in deaf-blindness*. San Francisco: University of California Center on Deafness.

Watson, D., Barrett, S., & Brown, R. (Eds.). (1984). *A model for the delivery of services to deaf-blind persons*. Little Rock: University of Arkansas, Rehabilitation Research and Training Center on Deafness and Hearing Impairment.

Wehmeyer and Ward (1995, Spring). The Spirit of the IDEA Mandate: Student Involvement in Transition Planning. *Journal for Vocational Special Needs Education*, v17 n3 p108-11.

Wehmeyer, Agran, & Hughes, 1998). The U.S. Department of Education subsequently funded numerous projects to develop methods, materials, and strategies to promote self-determination (Sands & Wehmeyer, 1996; Ward & Kohler, 1996) and active student involvement in transition planning (Wehmeyer & Sands, 1998).

What is an Independent Living Center?

<http://www.ilusa.com/links/ilcenters.htm>

Workforce Investment Act (Rehabilitation Act of 1973, as amended in 1998), section 01(a) (8) (B)

Zigmond, N., (1990). Rethinking secondary school programs for students with learning disabilities. *Focus on Exceptional Children*, 23, 1, 1-22.