

CHAPTER 13: REHABILITATION TECHNOLOGY

Chapter 13

REHABILITATION TECHNOLOGY

	Page
Section 1: Definitions	2
Section 2: General Guidance	2 - 4
Section 3: Provision of Equipment	4 - 8
Section 4: Spending and Related Guidelines	8

2014

SECTION 1: DEFINITIONS

Rehabilitation engineering means the systematic application of engineering sciences to design, develop, adapt, test, evaluate, apply, and distribute technological solutions to problems confronted by individuals with disabilities in functional areas, such as mobility, communications, hearing, vision, and cognition, and in activities associated with employment, independent living, education, and integration into the community.

Rehabilitation technology means the systematic application of technology, engineering methodologies, or scientific principles to meet the needs of, and address the barriers confronted by, individuals with disabilities in areas that include education, rehabilitation, employment, transportation, independent living, and recreation. The term includes rehabilitation engineering, assistive technology devices, and assistive technology services. The federal definition also includes vehicular modification, telecommunications, sensory, and other technological aids and devices.

Adaptive equipment / assistive technology (AT) will be provided on the basis of reasonable accommodation needs and includes equipment, devices and software that translate text into large print, speech and braille. Replacement and repairs are addressed in the equipment agreement. Examples include:

- CCTV
- Digital Devices
- Adaptive Software
- Electronic Magnifiers
- Note Takers
- Daisy Book Players
- Scanners
- Braille Embossers

SECTION 2: GENERAL GUIDANCE

Rehabilitation technology can be used by individuals to compensate for visual loss (e.g., synthetic speech devices) or enhance visual functioning (e.g., CCTVs). Rehabilitation engineering may include the analysis and re-design of a job site, principles of ergonomics, work area modifications, etc. Such services may be very useful for persons with multiple disabilities, e.g., deaf/blind, blind and cognitively impaired, etc. Rehabilitation engineering, rehabilitation technology and related services may be made at any stage in the rehabilitation process including:

1. Determination of eligibility;
2. A trial work experience to determine whether an individual may benefit from vocational rehabilitation services in terms of an employment outcome due to the severity of the disability;
3. As part of an Individualized Plan for Employment;
4. In an annual review when the case was closed in extended employment or as not able to benefit in terms of an employment outcome due to the severe nature of the disability(ies);
5. As a post-employment service.

The Rehabilitation Technology Specialist used by DBVI maintains a list of regional and national organizations providing technical assistance and information regarding rehabilitation technology and engineering, including vendors of a variety of adaptive equipment. Additionally, DBVI employs an Adaptive Technology Trainer to teach individuals how to use technology. The Rehabilitation Technology Specialist may use the Adaptive Technology Trainer to provide additional training and follow-up services after initial assessment and service provision.

A. Rehabilitation Technology Specialist

As DBVI serves individuals whose disability is visual loss, most referrals will be made to a Rehabilitation Technology Specialist who may perform, as needed by the individual's situation, the following functions:

1. Conduct a job analysis.
2. Provide job modification information to the individual, counselor, and employer.
3. Make recommendations for high- and low-tech adaptive aids and equipment.

4. Provide on-site training in the use of adaptive equipment and software.

Assessment and training may be done at the person's home, at a work-site, or at one of DBVI's Technology Assessment Centers which house a variety of technology devices for individuals who are blind or visually impaired, including various hardware, software, and CCTVs.

B. Resources for Blind:

With regard to job modifications, job re-structuring, and the application of high technology in a vocational setting the Rehabilitation Technology Specialist may consult with the following resources:

1. American Foundation for the Blind's Job Index.
2. The President's Committee on Employment of Persons with Disabilities Job Accommodation Network.
3. The engineering staff at Projects with Industry at Perkins School for the Blind.
4. Low Vision Specialist and Adaptive Computer Technicians at the Carroll Center for the Blind.

C. Resources for Other Disabilities:

For other disabilities (e.g., orthopedic, hearing, cognitive), consultation with resources such as the following may be useful to better identify and coordinate rehabilitation technology and engineering possibilities from pertinent disciplines:

1. The Vermont Center for Independent Living for access to the ABLEDATA Network.
2. Assistive Technology Grant Rehabilitation Engineer for consultation regarding communication devices and mobility aids for neurological and orthopedic conditions.
3. Division of Vocational Rehabilitation's Accessibility Services Coordinator regarding environmental modifications and compliance concerns.

SECTION 3: PROVISION of EQUIPMENT and TRAINING

Who Gets Equipment?

Consumers with an IPE who require technology to function effectively will qualify for Equipment.

1. Individuals who are employed or self employed

- DBVI will encourage employers to provide AT whenever possible.
- DBVI and Employer may negotiate/share responsibility for AT.
- When AT is not considered a reasonable accommodation for the employer to provide, DBVI will be responsible for it.
- When the consumer's employment may be jeopardized by asking the employer to provide AT, DBVI will provide the accommodation.
- AT will be provided for short-term employment and volunteer activity (6 months or less) on the basis of a loan, when existing equipment is available.
NOTE: In all cases equipment will be returned.
- AT will be provided for an approved job training opportunity when it is expected to lead to employment.
- When the consumer has a change in employment the existing AT will be utilized whenever possible.
- Regular seasonal employment will be treated in the same manner as full year employment.

2. College Students

- DBVI will encourage all students to secure computers at home. DBVI will provide information regarding available resources within the community (i.e., Resource / Gibney Fund).
- A full time college student, taking nine credits or more, will be expected to notify their DBVI VR Counselor of their intent to attend college three months prior to their first class. This will allow DBVI time to evaluate, purchase, install and train in the appropriate AT.
- Students who do not return to college after the first academic year will return their technology to DBVI. Extenuating circumstances will be considered on an individual basis.
- A part time college student, taking less than nine credits per semester, will be loaned existing technology when available until the successful completion of three classes (nine credit hours). If the part time student enrolls in a certification or degree program after completion of the initial nine credits, technology policy will be the same as a full time student.

- Students who are currently enrolled and taking courses that require additional AT, are expected to discuss their plans with a DBVI counselor at least three months prior to taking the class. (This allows time to secure, install and train on the AT).
- A replacement computer can be considered when the current computer is over four years old and the current system no longer meets academic requirements associated with the vocational goal.

3. Individuals who have an approved self-employment plan

- Where the primary means of support is their self-employment.
- Where the vision impairment, after remediation, prevents them from performing the essential functions of their business.
- Where low vision optometry and LV teaching have not ameliorated the functional limitation.
- The counselor will provide information to the AT specialist pertinent to visual functioning and perceived functional limitations as available.
- The AT specialist will evaluate the need, type of equipment, and training necessary to perform the duties of the work activity.
- Consumers will be expected to have a plan for repairs and their own computer repair person when problems are not related to AT.
- The technology team will purchase, install and provide training to consumers.

4. High School Students

- High School students who plan to attend a post-secondary educational institution will be identified in their junior year to ensure proficiency with equipment after graduation.
- High School seniors will be evaluated in the fall. Appropriate technology will be issued during spring semester.
- High School students whose needs require the use of a computer at home will be expected to secure this technology through their school.
- DBVI may furnish a CCTV for home use to students who are currently using one in school. The unit provided will either match the one currently being used or a DBVI evaluation will be provided to determine the appropriate device.

- The fluent use of technology is essential to the success of every student with a visual impairment. Therefore, DBVI will assist all students to secure computers at home at as early an age as appropriate. DBVI will provide information regarding available resources within the community (i.e., Resource / Gibney fund).
- It is expected that the school will be responsible for the provision of technology and training except when provided by DBVI during the last semester of the senior year. Exceptions will be at the discretion of DBVI.

5. Homemakers (whose independence is dependent on technology)

- Homemakers will be expected to have had a recent optometric LV exam.
- Homemakers will have received services through the LV Teacher.
- Results of LV exams will be provided to the AT specialist.
- AT and adaptive computer software will be considered when essential homemaker activities cannot be performed by any other means.
- Homemakers will have a computer that meets the minimum requirements of the adaptive software.
- Homemakers will have basic keyboarding skills and will have demonstrated the potential for follow through.
- Replacement and repairs will be provided per the DBVI Equipment Agreement.
- Typical training consists of three visits and further sessions are at the discretion of the AT Trainer.

Who Gets Training?

- All individuals who receive AT will receive training.
 - Individuals who purchase their own equipment will be trained in the use of the adaptive component.
 - Training in the use of programs will be provided when adaptive skills are required to run equipment
 - Specialized programs – development of skills beyond those necessary to perform employment related tasks will be the responsibility of the consumer.
 - Training in keyboarding, spreadsheets, and word-processing will be the responsibility of the consumer unless adaptive skills are required to run the equipment.

Levels of Priority for Training

1. Consumers who are employed and who are unable to perform their tasks as a result of visual loss or failure
2. Consumers who are starting a new job
3. Consumers who are attending training or educational programs
4. Consumers with an approved self-employment plan
5. Homemakers as specified in the DBVI Homemaker Policy
6. Cases that are closed and whose needs are not vocationally related.

Persons who require technology on the job and at home will be provided the appropriate accommodations.

SECTION 4: SPENDING AND RELATED GUIDELINES

If there is reason for rehabilitation technology services beyond the expertise of the Rehabilitation Technology Specialist and the anticipated cost exceeds \$2,000 per case, approval of the Director (or designee) is required. The Director (or designee) must also approve rehabilitation engineering services purchased out-of-state. Rehabilitation Technology Services shall be provided to consumers pursuing full time or part time work and/or full time and part time education and training as deemed appropriate and necessary by the Rehabilitation Technology Specialist, Consumer, and Vocational Rehabilitation Counselor.

Although rehabilitation technology services are exempt from the determination of the availability of comparable services and benefits, such comparable services and benefits shall be used if such determination will not interfere with the person's progress toward employment and if the person agrees. See Chapter 19, "Comparable Services and Benefits."

The spending and related guidelines in this chapter will be reviewed by DBVI every three years with input of the State Rehabilitation Council.