

Assistive Technology: An Essential Component of Health Care Reform

(Written for the Colorado Assistive Technology Coalition- the advisory council for the Assistive Technology Program of Colorado, a federally funded program under the Assistive Technology Act of 1998, P.L. 105-394, March 2011)

Assistive technology (AT) is an essential part of any health care program, because access to these tools, both low tech and high tech devices and equipment, can result in improved health and quality of life for the recipient and ultimately, significant savings in health care costs. For multiple reasons, people do not always get the technology they need. If a person does not have access to the needed technology, they are often dependent on others including paid professionals to care for them. In many cases this care is only available in a nursing home, hospital, or other health care facility at increased overall costs. The cost of providing care to someone in a nursing home is five times the cost of providing that same level of care in a person's home.

Many organizations and agencies are faced with the implementation of Health Care Reform and find themselves on a sharp learning curve to understand how the use of technology can benefit people with disabilities and the aging population as well as serve as a cost effective measure for delivering services. The more independent a person is in meeting their own health care needs, the less costly it is for the health care agencies. Technology allows individuals to be more independent in their homes, or in health care facilities. Devices as simple as a reminder to take medications, dressing aids, or activity monitoring promote independence. More complex devices such as computer programs that support communication for someone unable to type or speak increase independence as well. Daily, the technology that is available grows exponentially. It is difficult for any individual or entity to stay current on all that is available at any given time. Costs for some of the unique new technologies can appear prohibitive in these times of reduced resources and yet, costs for some of the more mainstream devices are coming down as the demands for them increase. The challenge is how every entity delivering health care benefits can know the most appropriate, yet most cost effective technology option, for each individual they serve.

Unfortunately, it is often the "person who writes the check" who makes the decision about what technology a consumer can have. In other words, the third party payer has a pool of devices that are considered appropriate for people with a specific diagnosis. One example of the ineffectiveness of using an approved list is a 12 year old who came to the Assistive Technology Partners Clinic in Denver, Colorado. He had a speech and language disability and was referred for an evaluation to determine if technology could help him communicate. It was determined that he could benefit from the use of an iPod Touch and some other software and devices totaling less than \$3,000. When this was submitted to his insurance, it was denied with the recommendation, per their policies, that another device costing \$6-8,000 would be more appropriate. This more costly device would only meet part of his needs and the young boy was too embarrassed to use it. This illustrates that a newer and less expensive technology was the most appropriate, but because it was not on the approved list, it could not be funded.

Assistive technology can minimize long term health care costs in the provision of adaptations or specialized tools for daily living which permit an individual to independently perform personal care activities, prepare meals, and take medications, relieving high-cost care givers from those duties. Mobility aids and devices to allow for independent movement and travel decreases the need

for others to assist an individual as he/she moves around a home, the office, or in the community. Because of rapidly changing technology, maintaining an approved list of devices for which a consumer is eligible is not effective for determining what is appropriate for an individual. Additionally, the Medicaid rule around technology being specific to a 'designated user' is no longer relevant given the concept of 'social' media. Many of the available technology options today that are designed to be used as a social connection tool also happen to be an effective communication device for someone with a disability.

Assistive technology provides the tool(s) that an individual needs to function independently at work, school, or in an independent living environment. Devices can be as simple as a specialized pencil grip for someone unable to write with a typical pen or pencil or as complex as uniquely developed switches to allow a person with significant physical or communication disabilities to use a computer for research or communication. Assistive Technology is defined in law as "*any item, piece of equipment or product system whether acquired commercially off the shelf, modified, or customized that is used to increase, maintain or improve functional capabilities of individuals...*" and "*any service that directly assist an individual with a disability in the selection, acquisition or use of an assistive technology device.*" (The Assistive Technology Act was first passed by Congress and signed by the President as the Technology-Related Assistance Act of 1988 (P.L. 100-407). It's often called the Tech Act for short and has been reauthorized in 1994, 1998, and 2004.)

Durable medical equipment (DME) is also considered to be assistive technology. Each state defines what is considered DME for their Medicare program. For example, in Colorado, *DME is defined as equipment which is suitable for use outside of a medical facility, which can withstand repeated use, which has a medical purpose, and which would not be useful to the client in the absence of illness, injury or disability* [1]. Augmentative Communication Devices for people who are non-speaking are considered DME in Colorado because they are considered medically necessary to maintain the health and safety of the individual. These regulations vary from state-to-state.

Assistive technology is not disability specific. It is a tool to meet the functional need(s) of a person, allowing for increased independence. For example, two individuals with similar visual impairments might choose two very different options to meet their needs. One might need the more expensive text-magnifying device and the other might prefer a bright light and a simple hand held magnifier, depending on their lifestyles and visual needs.

The issues faced by national and state entities regarding assistive technology are threefold. How does one find the most appropriate technology? How do the individuals and their caretakers learn to use it? And how do they pay for it? Research has shown that AT usage is most effective when the consumer is part of the selection process and that they have a chance to try the technology out for a period of time prior to making a decision. Often costly technology is discontinued or abandoned, if the user is not involved [2-5]. Therefore, a successful outcome is more likely, if the AT user has access to a trained assistive technology specialist who can assess their needs, identify appropriate technology for them to try out and work with them so they can make an informed decision. Ultimately, with access to current information, training, and consumer involvement, costs savings and less abandonment of expensive devices can be realized.

Trained assistive technology specialists who understand the range of available technology are not always readily available. The field is relatively new. However, every state has a statewide

assistive technology program funded by the US Department of Education. Under the Tech Act, Congress authorized grants to support state and territorial efforts to improve the provision of assistive technology to individuals with disabilities of all ages through comprehensive, statewide programs that are consumer responsive. These statewide programs assure that assistive technology devices and services are accessible and available to individuals with disabilities and their families. The program provides one grant to each of the states, the District of Columbia, Puerto Rico, and outlying areas. Primary goals of the statewide programs are:

- to demonstrate assistive technology for users,
- to make referrals to appropriate resources for individuals to get evaluations or to purchase technology, and
- to assist individuals to find funding for their technology.

It is important to note that not every clinician or technology vendor is qualified to make appropriate recommendations for assistive technology. In addition to their professional license, it is recommended that clinicians have accreditation through RESNA (Rehabilitation Engineering and Assistive Technology Society of North America) as an Assistive Technology Practitioner (ATP). The statewide assistive technology programs are the most current resource on finding qualified evaluators and resources for acquiring technology and can be accessed directly by any individual or organization.

Additionally, the statewide programs have the expertise to help health care providers and others who serve people with disabilities to expand their capacity for understanding assistive technology and how it can benefit those they serve. Because the AT programs serve all ages from birth through the aging population, and all disabilities, training and technical assistance can be tailored to the needs of those served to a specific organization or agency whether it be medical facilities, Area Agencies on Aging, Independent Living Centers, schools, early intervention programs, employment programs, or health benefit programs. Greater awareness about assistive technology among the professionals brings more opportunities to those they serve.

Assistive technology must be considered when planning for transition from hospital to nursing home or a nursing home to living independently. It can mean the difference between completing tasks of daily living independently or needing help from another individual. Or, technology can be the means for communication for someone who cannot speak for themselves. Technology can allow a person to feel safe in their own home. Studies have shown that states save significant Medicaid dollars when they use the funds to support people in their own homes rather than paying for the high costs of nursing homes. In addition, once an individual is in their own home, with the appropriate technology, the need for costly home services and/or attendant care can be reduced.

On the preventative side, assistive technology can provide the essential tools to keep people with disabilities or the aging population safe and more independent in their homes. Through home accessibility assessments and the application of appropriate technology, people with chronic conditions can remain independent and safe from accidents or deprivation, resulting in improved health. Augmentative and alternative communication devices are available to keep them connected to the world outside their homes. Moreover, maintaining an independent high quality life staves off depression. “Depression increases the risk of disability from all other causes in the elderly” [6]. Clearly, the multiple benefits of keeping the aging population in their own homes are more than just an argument for cost savings. It is an issue of safety and improved quality of life.

With the potential of the Money Follows the Person grant in Colorado as well as the Olmstead decision, it becomes more critical that supports exist in the community and individual homes, as an option to nursing homes. As Centers for Medicaid and Medicare Services move to level the playing field of the institutional bias in their funding, the use of technology can be of great benefit to access supports on an individual basis in non-institutional settings.

For more information about assistive technology, contact a statewide AT Program.

<http://resnaprojects.org/scripts/contacts.pl>

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