
A Commentary from a Rehabilitation Perspective

The Value of Re/hab Technology Services



by Pat Aydelott

Before discussing the value of re/hab technology services, one must understand the definition as defined in the Re/hab Accreditation Project of 2000. This project was taken on by a number of industry leaders to create an accreditation exclusively for Re/hab Technology Companies. A true definition of the services provided by these companies was the first order of business and was defined as:

Rehabilitation technology services are defined as the application of enabling technology systems designed to meet the needs of a specific person experiencing any permanent or long-term loss or abnormality of physical or anatomical structure or function.

These services, prescribed by a physician, primarily address wheeled mobility, seating and alternative positioning, ambulation support and equipment, environmental controls and other equipment and services that assist the person in performing their activities of daily living. Re/habilitation

technology services facilitate and/or enhance access and independence thereby improving the person's quality of life.

Re/habilitation technology services are supplied by a rehabilitation technology supplier (RTS) working for a Re/habilitation Technology Company (RTC). The process of providing re/habilitation technology services includes, at a minimum, the RTS working closely with other allied health professionals to:

- complete a comprehensive evaluation of the consumer's needs and requirements
- specify and select appropriate technology and products
- assemble, fit, adjust and deliver the selected technology to the consumer
- provide all necessary short and long-term follow-up, training, re-evaluation, re-adjustments and service

Now that a formal definition of these services has been created, how can we justify the value that these services create for the consumers and most importantly, the funding sources that pay for them? After all, aren't these services quite expensive to provide? Not necessarily, especially when considering the cost without the intervention. A good example of a simple, cost-effective intervention of re/hab technology would be that of a wheelchair cushion that assists in the prevention of skin breakdown. Spending a few hundred dollars on the proper cushion upfront can save the funding source many thousands of dollars ▶

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Throughout this article, the words re/habilitation and re/hab are written to denote both the rehabilitation (changing state) and habilitation (maintaining status) resulting from the use of technology services.

when treating a resultant decubitus ulcer due to use of a 'budget-saving' cushion.

Many products fall under the auspices of re/hab technology. The most commonly utilized are those that create the highest level of independence to those who have lost their ability to be mobile without the use of some type of a wheeled mobility device, also referred to as a wheelchair. A wheelchair is not just a wheelchair. There are literally hundreds of styles of wheelchairs and thousands of combinations when considering accessories. These variations depend on the person's disability, physical size, mobility goals, the clinicians' goals, the environment, the caregiver's needs, and vocational/educational needs. The proper seating integrated within these devices is imperative to positive outcomes and independence. If someone cannot be comfortable in his wheelchair, he can hardly be expected to spend a great deal of time in it.

The value of re/hab technology services has been overlooked. Dispersing funds effectively can be a great challenge for a case manager. The constant pressures to reduce cost from the companies they represent make it difficult to match the consumer's needs with available funding. However, there must be a balance between cost savings and compromising the consumer's independence or function. Creating independence reduces health care cost. It has always been the goal of re/hab technology companies to achieve the highest levels of independence and function for the consumers they service.

Real Life Proof of the Value of Re/hab Technology

Ms. R was referred to me by the Office of Vocational Rehabilitation for an assistive technology assessment. She presented as a 47-year-old female C4 quadriplegic post-automobile accident. She spent six weeks in an acute care hospital before being discharged to a

rehab hospital where she resided another 18 weeks. She was discharged to home with family care until the loss of her husband several years later. Due to her dependence, she was admitted to a nursing home where she resided for five years. She was then discharged to another family member's home and was dependent on 12-hour daily home care nursing. During this period, her equipment consisted of a manual reclining wheelchair, foam cushion and

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semi-electric hospital bed. She had three hospital admissions in three years for pneumonia, skin flap surgery to repair a decubitus ulcer and a fractured femur.

The funding source approved a new powered wheelchair with a power tilt and recline system, powered elevating leg rest, low pressure cushion, and specialty controls to allow for independent weight shifts, mobility and access to an environmental control system (ECU). The ECU was computer based and gave her control over her lights, climate, doors, appliances, telephone, bed, curtains, and even an automatic drink dispenser. Through the use of voice recognition software, she was able to access email and computer software programs that gave her endless capabilities.

The cost of this technology seemed exorbitant, nearly \$40,000, but in comparison to the dollars spent for her care since her nursing home admission, over \$500,000, it is easy to see the value if she had access to this technology earlier. By the way, since receiving this heightened level of independence, her home care nursing has been reduced to four hours per day, there have been no hospital readmissions,

her medications have been reduced or entirely eliminated, she is working part time out of her home, and her quality of life has improved significantly.

A similar cost saving example is one of trying to cut the cost of a power wheelchair repair. A bid was sent out to several providers looking for the best price for a pair of deep cycle batteries. The same applies to batteries as does wheelchairs, a battery is not a battery. Unfortunately, the provider selected to complete the repair due to price used the wrong type of battery and installed them incorrectly, causing major electronic failure in the wheelchair. The cost to repair exceeded \$1,500 compared to the correct battery price of \$250.

Selecting the right re/hab technology company can be a challenge for a case manager. The number of companies that claim they are re/hab equipment providers can be overwhelming. The fact is that there are fewer than 500 companies nationally that provide quality re/hab services. The best resource for finding these qualified individuals is National Registry of Rehabilitation Technology Suppliers (NRRTS). This registry was founded in 1992 and is comprised of 670 members who are employed by rehab technology companies throughout the United States. Each of these individuals must complete a minimum number of continuing education hours annually to maintain their membership. Over 300 of these individuals are certified by successfully completing an exam administered by Rehabilitation Engineering Society of North America (RESNA).

At a minimum, case managers should look for companies that have a history of providing re/hab equipment, those with experienced staff members and little turnover. A quality assurance program should be in place, but if the provider is not accredited, it does not necessarily mean that they are not qualified to provide the services needed. Currently, there is not an

Internet Resources

www.resna.org

Rehabilitation Engineering and Assistive Technology Society of North America (*RESNA*).

RESNA is an interdisciplinary association of people with a common interest in technology and disability. Its purpose is to improve the potential of people with disabilities to achieve their goals through the use of technology.

www.nrrts.org

National Registry of Rehabilitation Technology Suppliers (NRRTS)

NRRTS is dedicated to ensuring the provision of high quality rehabilitation technology and related services to people with disabilities. Thus, it has created a listing of experienced rehabilitation technology suppliers available to consumers rehab professionals and payer sources worldwide.

appropriate accrediting agency specifically for rehab technology companies. However, many of these companies have chosen JCAHO, ACHC or CHAPS accreditations to meet the requirements of many insurance companies and funding agencies. Other qualities that should be considered when looking for a provider are:

- **Staff Education:** Are they staying on top with the latest technologies and applications?
- **Evaluations:** Are they willing to provide you with a detailed evaluation and assessment of your client? Expect a complete report and detailed cost with justifications. Don't expect to get this without cost. Detailed evaluations take time and should be reimbursed. If the evaluator supplies the equipment, many times they will include that in their final cost.
- **Plan of Service:** The provider should have a defined order process. How long should you expect the entire process to take from evaluation to final fitting? Communication is very important as well. Does your provider have a method for which they keep

you and the family apprised to the progress of the order?

- **Support Services:** The provider must be able to assure you that they can service what they sell. This service should include follow-ups for adjustments and quick response in the case of an equipment failure. Because these clients depend so much on this equipment, prompt attention to any malfunctions is vital.

Understanding the value of re/hab technology is of great importance to anyone involved in approving the application and justifying the cost of technology. There is always a need to keep costs down but it cannot result in a client losing function and independence. The entire team, including case managers, physicians, physical and occupational therapists, clients and their families should work collaboratively to assure positive outcomes that can ultimately reduce long term cost and enhance the quality of life.

References:

Code of Ethics and Standards of Practice of NRRTS (National Registry of Rehabilitation Suppliers); www.nrrts.org.

Standards of Practice and Protocol of the Re/hab and Assistive Technology Council of the American Association for Homecare; www.aahomecare.org.