

The AT Messenger

...bringing technology to you

Published by the Delaware Assistive Technology Initiative

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Easter Seal Society Opens SMART Center

Delawareans celebrated the establishment of a major assistive technology services program on June 2 in New Castle County. The Easter Seal Society's Seating Mobility and Rehabilitation Technology Center (SMART Center) was open to the public and showcased a variety of AT—from low-tech reachers to high-tech robotic aids—at the Easter Seal location in the New Castle Corporate Commons. The SMART Center offers assessment and training to individuals with disabilities in the areas of seating, positioning and mobility; computer access; augmentative and alternative communication; and worksite and home accommodations.

The Seating Team, comprised of the Physical Therapist, Occupational Therapist, and Rehabilitation Engineer, evaluates an individual's needs for a manual or power wheelchair. The seating simulator, called a Flamingo, and a computerized pressure mapping system are technologies that assist the team in determining optimal positioning and comfort for an individual using a wheelchair.

The SMART Center also specializes in computer assessments. These assessments involve the use of special computer hardware and software that can maximize individual capabilities and accommodate limitations.

Computer assessments are completed by Easter Seal's Occupational Therapists Patty Hove and Jill Bauder, with assistance from the Rehabilitation Engineer, Mike Meyreles. Assessments may be completed at the SMART Center or at the worksite.

Other types of worksite assessment can be performed by the SMART Center

team. The Occupational Therapist focuses on the abilities of the individual and completes a task analysis of the job. The Rehabilitation Engineer focuses on evaluating the environment's accessibility and the need for technology to bridge the gap between the individual's abilities and the task at hand.

The SMART Center also houses the latest electronic and computerized communication devices. Easter Seal's speech-language pathologists evaluate children and adults who have severe communication difficulties, giving consideration to the types of AT that could enhance their communicative effectiveness. Assessments are completed after trial use of one or more devices establishes the beneficial impact of the intervention.

Even though the SMART Center is located at the Easter Seal Rehabilitation Center in New Castle, AT assessment and training services are also provided at the Easter Seal Rehabilitation Center in Kent County. Maureen Schweitzer, Coordinator of Clinical Services for Easter Seals in New Castle and Kent Counties, states that "the services of the SMART Center are a natural outgrowth of the foundation laid by the DATI project. Proper assessment and training are critical to effective use of assistive technology." Assessments and training have been funded by Medicaid, DVR, DMR, employers, and some insurance agencies.

For further information, contact Maureen Schweitzer or Mike Meyreles at Easter Seals at (302) 324-4444.

Assistive Technology in the Workplace

Accommodations for People with Disabilities

Ed Salisbury, Technology Specialist, Kent County ATRC

Assistive Technology simply means 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 those individuals with disabilities. When many people think of assistive technology in the workplace, they think of high tech computers and robotic workstations. Although these modifications may be made for a person with a disability, most accommodations cost very little or nothing at all. As a matter of fact, everyone uses assistive technology during the course of the day without even realizing it. Simple devices like a remote control and speakerphone may be conveniences for most, but for a person with a disability, they may be necessities.

What accommodations can be made for people with physical impairments?

People with physical impairments include those who use a wheelchair or cane and those who have limited or no use of their arms, legs, and hands. For people who use wheelchairs, the installation of ramps and automatic doors is generally a necessity. These modifications are also beneficial to employees pushing carts or moving equipment, and employees—as well as customers—carrying packages and other items. Other modifications may include the raising of a desk or workstation to accommodate a wheelchair, keeping clutter out of aisles, and placing files to which the employee needs access in bottom file cabinets. People who use a cane or have weakness in their legs may require their desks to be placed close to the elevator or restroom.

Many people with physical disabilities have difficulty using the standard keyboard and mouse. The Macintosh computer has many built-in access features to control the response of the keyboard as well as movement of the mouse pointer. These include StickyKeys, MouseKeys, SlowKeys, adjustable key repeat rate, and repeat delay. The StickyKeys feature “latches” the command, shift, control, and option keys allowing the user to press multiple keys sequentially instead of simulta-

neously. MouseKeys allows the user to move the mouse pointer using the numeric keypad on the keyboard. SlowKeys increases the amount of time a key must be depressed to avoid accidental keypresses. For people using a DOS computer, these features can be obtained free of charge in a program called Access DOS. Microsoft provides a similar package for people running Windows.

For people who cannot use the standard keyboard and mouse, a variety of alternate access methods are available. Membrane keyboards may be purchased with keys as large as several inches and as small as half an inch. Another alternative would be voice access. A person can dictate commands and text to the computer at speeds of up to 200 words per minute. A person using a voice activated computer generally has little difficulty meeting data entry speed requirements. Because of the popularity of voice access for people with and without disabilities, it has also become a very affordable alternative. Mouse emulating devices such as infrared and ultrasonic head pointers, trackballs, and touch sensitive screens are also available for those unable to use a mouse.

What accommodations can be made for people with visual impairments?

Many people with low vision can be accommodated by enlarging forms on a photocopier and providing adequate lighting and a magnifying glass at the workstation. Reference materials and manuals may also need to be printed in a larger font size. For a computer user with low vision, an accommodation may be as simple as placing the monitor on a swing arm and positioning it closer to the individual. A larger monitor may also be purchased. Even a 15" monitor at 640 x 480 resolution will greatly increase the size of the characters on the screen while leaving all screen contents visible. If more magnification is required, screen magnification software programs can be installed to magnify text and graphics up to 16 times. The Macintosh computer has this feature included with its system software.

For an employee who is blind, it will be necessary to have Braille signage, especially on doors and elevators. Again, aisles must be kept clear of clutter and the blind person must be made aware of any rearranging of the office or workplace. Reference materials and manuals should be made available in alternative formats

such as Braille or audiocassette. Other employees must remember that if they borrow something from the desk or files of a blind person that they put it back exactly where they found it. It can be very frustrating for the employee who relies on memorization to find things in his or her “memorized” space disrupted. The computer user who is blind will probably require spoken output of information on the screen through the use of a speech synthesizer. Tactile output through the use of a refreshable Braille terminal is another option. The keys on the keyboard should be marked with tactile references for finger placement or a Braille keyboard overlay. A computer with voice output capabilities, a flatbed scanner, and optical character recognition software (often included with a scanner) will give the employee who is blind access to any printed material such as the newspaper and daily mail.

What accommodations can be made for a person with a hearing impairment?

People with hearing impairments include those with mild to profound hearing loss and deafness. A person with mild hearing loss will generally require an amplified telephone with an adjustable volume control. If the person wears a hearing aid, the phone needs to be compatible with his or her hearing aid for effective use. A personal amplification device may be required for large meetings and seminars where it may not be possible for the hearing impaired employee to be seated close enough to the person speaking. Employees with more severe hearing loss may require visual alerting devices such as strobe lights on fire alarms and telephones. Tactile alerting devices, such as vibrating pagers, may also be necessary. Any training videos that the employee is required to watch should be close captioned. A person who is deaf may also require an interpreter when lip reading or sign language conversation is not possible. A TDD, or Telecommunications Device for the Deaf, is also recommended as an option for phone use. Since the computer is mostly graphically oriented, little modification is necessary in most cases. One modification would be a visual alerting of the computer’s beep. This feature is built-in to Macintosh computers and may be purchased separately for IBM and compatible computers.

How can information about this technology be found? The Delaware Assistive Technology Initiative is a statewide program with Assistive Technology Resource Centers in each county. Each center houses a wide variety of equipment that can be

borrowed by a consumer, therapist, or business. The centers also contain information on where to purchase assistive technology and how to obtain funding and training. For more information, contact the ATRC closest to you—addresses and phone numbers can be found on page 15.

FINANCING ASSISTIVE TECHNOLOGY

Medicare and Equipment Suppliers... The Subtleties¹

Ron Sibert, Funding Specialist

First, let's review the basics. A person qualifies for Medicare by being at least 65 years of age, permanently disabled, or by having end-stage renal (kidney) disease. There are two types of Medicare coverage: Parts A & B. Part A coverage is automatic for all Medicare beneficiaries and pays for hospitalization. Part B, on the other hand, requires a monthly premium and an annual deductible payment. It covers in-patient and outpatient physician services as well as home health care and my own personal favorite, assistive technology.

Medicare's term for assistive technology is durable medical equipment (DME), and Part B Medicare pays for purchase or rental of DME devices and for services such as maintenance and repair as well. However, Medicare only pays 80% of what it determines or *assigns* to be the "allowable cost" of the equipment. The out-of-pocket expense to the consumer depends on whether or not the supplier "takes assignment." Assignment means that the supplier agrees to accept the Medicare allowable as payment in full. If the supplier takes assignment and you have met the annual deductible, then you (or your copay insurance) are only responsible for 20% of the allowable charge. Note that Medicare pays the same amount (80% of the allowable cost) whether or not the supplier takes assignment. This is important to know. You could pay much more if the supplier does not accept assignment because the supplier is then free to charge much more for the device. Don't be confused though. Suppliers can and do bill Medicare without accepting assignment, and may then hold the beneficiary responsible for a huge balance. In order to minimize your costs, make sure your equipment supplier accepts assignment.

The ways that Medicare and equipment suppliers treat the 20% copayment is also worth discussing. Certain unscrupulous equipment suppliers have been known to drop the copayment or to give discounts, coupons, rebates, or other “special offers” that eliminate the need for the copayment as a purchase incentive to consumers. The most common strategy is to offer equipment “at no cost to you.” Be aware that such practices are illegal. Suppliers are only permitted to waive the copayment in special hardship situations, and then only on a case-by-case basis with proper documentation of hardship from the consumer. Also note that the supplier must always bill for the copayment, even in hardship situations.

There are several other possible abuses of the Medicare system that could cost you money. Here is a short list that includes suggestions about how to address them. Suppose a supplier:

- *Accepts assignment but charges more than 20% of the Medicare allowable charge*—Whenever the supplier submits a bill to Medicare, the allowable and actual charges associated with that purchase are reflected on your Explanation of Medicare Benefits (EOMB). Multiply the allowable charge by .20 and compare the result to what the supplier has billed you or your supplemental insurance carrier. If the supplier’s amount is larger and they claim to accept assignment, something’s wrong.
- *Provides lower cost equipment while billing Medicare for higher cost equipment*—Compare the equipment description on the EOMB with the equipment you have received to be sure that you got what was actually prescribed.
- *Provides used equipment while billing Medicare for new equipment*—Check the equipment you receive for signs of wear or prior use. If there is a discrepancy, contact the supplier and notify your Medicare regional office.
- *Refuses to submit a nonassigned claim to Medicare for payment*—Notify Medicare. Suppliers are required by law to obtain the necessary paperwork from your doctor and submit DME claims on behalf of Part B Medicare beneficiaries for whom they provide equipment.

- *Refuses to pick up rental items and continue to bill Medicare after you no longer need them*—Notify Medicare.
- *Misrepresents itself as an agent or representative of Medicare*—Avoid the supplier. Medicare does not supply equipment, endorse or recommend specific suppliers, or provide beneficiaries’ names to suppliers.

Of course, once you have located a reputable supplier, be sure that the supplier has adequate local resources for repair and maintenance of equipment, and is willing to provide “loaner” equipment if and when yours needs to be taken away for repairs.

1. Several portions of this article are a synopsis of information contained in a pamphlet entitled *Consumer Fraud: Medicare & Home Medical Equipment* released by the U.S. Department of Health and Human Services, in association with the American Association of Retired Persons (AARP) and the National Association of Medical Equipment Suppliers (NAMES).

Opportunities...

Annual AAC Employment Conference

The 3rd Annual Pittsburgh Employment Conference (PEC) for Augmented Communicators will be held August 11-13 at the Sheraton Hotel, Station Square, in Pittsburgh, PA. “Success Stories: The Sociology of Employment for Augmented Communicators” will be the theme of the conference. The program will focus on augmented communicators who experience substantial cognitive impairments and sociology and group dynamics.

Topics will include communicative competence, augmentative communication in the sheltered workshop, and an employment model in person-centered planning.

The conference faculty will feature Pat Mirenda, PhD, Stephen Calculator, PhD, Diane Bryen, PhD, Richard Foulds, PhD, Peggi McNairn, PhD, CCC-SLP, Barbara Thomas, MS, CCC-SLP, Jan Young, MS, CCC-SLP, and Terri McKee, MS, CCC-SLP.

For more information, contact SHOUT, P.O. Box 9666, Pittsburgh, PA 15226; Phone (800)934-4391.

3rd Annual TARP Conference

The Third Annual TARP Conference, ASSISTIVE TECHNOLOGY: PUTTING THE PIECES TOGETHER, will be held on Saturday, September 23, 1995, at the South Jersey Expo Center in Pennsauken, NJ.

The Conference goal is to provide a hands-on and in-depth educational program for consumers with disabilities, their families, educators, and professionals. Sessions include a panel discussion on real-life funding scenarios, hands-on computer access of computer hardware and software, augmentative communication and other technology in an IEP, technology for consumers with sensory disabilities, a mini travel and recreation expo and over 25 exhibitors and product demonstrations.

For more information, contact the following numbers in New Jersey:

Phone: (609)392-4004, ext. 545
Fax: (609)392-3505
TTD: (609)392-7044

Peer Support Network Established

Do you ever wonder if anyone else has had the same questions, frustrations, and/or difficulties as you in trying to get and use assistive technology? Have you ever wanted to talk with someone else who has had experiences similar to yours? Well, now it may be possible to find others with common AT experiences and be able to talk with them.

DATI has been working for some time to establish a network of AT users who could share their insights and offer encouragement to one another. So far we have collected a group of about 70 people (both AT users and others interested in AT) who want to be part of a peer support network. For those requesting to be part of this network, a directory is being prepared that contains information

they provided on their interests and experiences with AT and how to contact them.

If you want to become part of this network, please contact Bob Piech at (302)651-6791 (voice) or (302)651-6794 (TDD) to request a registration form. You can also obtain the registration form by calling the Assistive Technology Resource Center in your county at the numbers listed on page 15 of this newsletter. A copy of the directory will be sent to you, and your contact information will be added to the directory when an update is done. We hope you will take advantage of this opportunity to learn and grow with others in your use of assistive technology.

Assistive Technology: More Power To You

September 28, 1995

8:00 am-4:30 pm

John Clayton Conference Center

University of Delaware, Newark, DE

The DATI has once again assembled a powerful line-up of session presentations, exhibitors, and networking opportunities for its 1995 annual conference. ***Assistive Technology: More Power To You*** will be held at the Clayton Hall Conference Center on the campus of the University of Delaware on Thursday, September 28, 1995 from 8:00 am until 4:30 pm.

This year's schedule promises a variety of new and practical assistive technology information, with presentations for beginners, as well as for seasoned AT users and providers. The *Assistive Technology Overview* is designed as an introduction to both low-tech to high-tech adaptive devices and their applications for individuals with disabilities. *Computer Access for Everyone—Intel-likeys, Click-It, & More* will discuss and demonstrate methods of alternative access for IBM and Macintosh computers. Sessions highlighting *AT for the Elderly* and *AT for Early Language Learners* are also on tap. A special two-

part presentation on *Wheelchair Seating & Positioning with an Emphasis on Technology & Assessment* will be featured. A panel of experts will provide an update on accessibility issues, and another session will cover the latest news on Medicaid Coverage for AT. You'll even have a chance to look ahead at the future of AT in a presentation featuring developments in rehabilitation robotics in vocational and educational settings.

The Lobby area at Clayton Hall will again be filled with exhibits from manufacturers, distributors, and providers of assistive technology products and services. The keynote presentation will feature one of Washington's "insiders" with the latest news on how the current political climate affects AT service provision.

Registration for the day-long conference, including access to sessions, the Exhibit Hall, and lunch, is \$10. Consumer scholarships are available upon request. Pre-registration is requested. Arrangements for alternate formats of materials, sign language interpreters, special dietary needs, or accessible transportation can be made by contacting the DATI Central Site office at (302)651-6790 (voice), (302)651-6794 (TDD), or (302)651-6793 (Fax).

Schedule of Conference Sessions			
8:30-9:30	Opening & Keynote Speaker		
10-11:30	AT Overview	Medicaid Coverage of AT	Accessibility Panel
11:30-1	Exhibits & Lunch Break		
1-2:30	Computer Access for Everyone	Wheelchair Seating & Positioning (I)	AT for the Elderly

Schedule of Conference Sessions

3-4:30	AT for Early Language Learners	Wheelchair Seating & Positioning (II)	Rehab Robotics Research
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HomeGrown in Delaware

The Bradley Board

*Bradley Enterprises,
Wilmington, DE*

Question: *What is lightweight, low-cost, disposable, and capable of communicating several words a minute?*

Answer: *The **Bradley Board**, developed and marketed by Bradley Enterprises in Wilmington.*

The Bradley Board is the creation of Irene Bradley-Sacher. While working as a ward clerk at St. Francis Hospital in the late 70's, Bradley-Sacher observed the frustration of many patients who were unable to communicate with family members and medical personnel because of tracheotomies and other medical procedures or conditions. While she concluded that it was "human nature not to talk to people who wouldn't talk to you," she also theorized that people got better more quickly when they took a more active role in their recuperation, and that included being able to communicate fully and effectively with the medical staff.

So she set about developing a device that would allow people to communicate via written words rather than spoken words. The device existed in several formats before its current "wipe board" configuration. It includes space for the patient to write messages as well as pictures and lists of frequently-used words that the user can point to with the hand or with eyegaze. Bradley-Sacher consulted an optometrist to make sure that the size of the words and the background color were appropriate for patients with visual limitations.

The two-sided Bradley Board has an actual size of 10-3/4" x 13-3/4". It is available for \$12 from Bradley Enterprises, 1204 Beech Street, Wilmington, DE 19805-4325. Phone orders may be placed by calling (302) 658-0203. Bradley-Sacher emphasizes that the company prides itself on a 24-hour turnaround from receipt of an order to shipping of the product, and all shipments are sent via priority mail.

Delaware Recycles AT

Devices Available:

Shower chair with toilet pail & adjustable footrests, made of PVC piping. 3 years old. \$200 or best offer.

Pace Saver +3 Scooter with 2 batteries. 1-1/2 years old. Price negotiable.

Walkers (6) and manual wheelchairs (4) of various adult sizes & styles. Free.

Outdoor stair lift to transport user up and down outdoor stairs. Free.

Tru-Scout 3-wheeled scooter. 1 year old. \$1000.

Simmons electric adjustable-position bed. No mattress. 4 years old. Free.

Adjustable position hospital beds (1 powered, 1 manual). No mattresses. Free.

DATI Throughout the State...

New Castle County

Delaware Elwyn

321 E. 11th St.

Wilmington, DE 19801-3499

(302)657-5647; (302)657-5893 (TDD)

Kent County

Easter Seal of Del-Mar

Kent County Community School

Carver Rd.

Dover, DE 19901-2716

(302)739-6885; (302)739-6886 (TDD)

Sussex County

Easter Seal of Del-Mar

Easter Seal Rehabilitation Center

600 N. DuPont Highway, Suite 100

Georgetown, DE 19947

(302)856-7946 (voice or TDD)

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Calendar of Events

Key to Sites

C = Central Site
(302)651-679)

NC = New Castle County ATRC
(302)657-564

K = Kent County ATRC
(302)739-6885

S = Sussex County ATRC
(302)856-7946

July 1995

- 5 NC Rehab Technology, Part 1 (V), 10 am
- 10 C DATI Statewide Advisory Bd., 9:30 am, A.I. duPont Institute
- 13 NC Reahb Technology, Part 2 (V), 10 am
- 17 S DynaVox, 3:30-4:30 pm
- 18 NC Failure Free Reading Program, 1-2:30 pm
- 25 NC Mobility and Accessibility, 1-2:30 pm

August 1995

- 2 NC Drivr Training (V), 10 am
- 21 S DynaVox Advance, 9-4:30
- 23 K AT for Home and Work, 9-3
- 24 NC Achieving greater mobility (V), 10 am
- 30 NC Adaptive Driving Systems, 10:30-Noon

September 1995

- 11 S DigiVox, 3:30-4:30
- 13 NC Simple Adaptations, 2-3:30 pm
- 21 NC Adaptive Toys, 10:30-Noon
- 28 C DATI Annual Statewide Conference, 8:00-4:30
- 29 NC Toys for Special Children (V), 10 am

Central Site Activities

For more details or registration information, call the DATI Central Site Office at 651-6790 (phone), 651-6794 (TDD), or 651-6793 (FAX).

Assistive Technology: More Power To You

1995 DATI Annual Conference

Thursday, September 28, 1995, 8:00-4:30

Clayton Hall Conference Center, University of Delaware, Newark, DE

Don't miss this fourth edition of Delaware's biggest annual assistive technology conference and exhibition. Keynote presentation, informational sessions, vendor and service provider exhibits, and plenty of opportunity for networking with others in the AT community! See page 7 of the newsletter for more information. Registration flyers will be mailed later this summer—be sure to return yours right away!

New Castle County ATRC Workshops

For more details or registration information, call the New Castle ATRC at 657-5647 (phone), 657-5893 (TDD), or 657-5649(FAX).

(V) indicates a Video presentation.

The NCCo ATRC is open every day for demos, tours, and hands-on experience with devices and equipment—no appointment necessary!

Adaptive Driving Systems - Moss Rehab's Program Training Coordinator, Dan Basore, will discuss adaptive driving systems available for people with severe disabilities. In addition, learn details on how to enroll in Moss Rehab's Driving School.

Adaptive Toys - An introduction to adaptive toys exploring a selection of adaptive toys available for all ages. Learn how to operate battery-powered toys with jelly bean and other single switches.

An Introduction to the Failure Free Reading Program and Little Planet Publishing - Presentation by Tom Beebe Associates.

Intro to the Dynavox - A basic presentation by Deb Bassett of Sentient Systems Technology (SST) on the operation and application of SST's Dynavox augmentative communication device.

Mobility & Accessibility - Presentation by ATRC Coordinator George Himes and Voc Rehab Engineer Griff Campbell.

Simple Adaptations - Delaware Elwyn's Rehabilitation Engineer, Robert Czetli, will demonstrate how to make simple adaptations to your computer using joysticks, computer interfaces, and more.

Kent County ATRC Workshops

For more details or registration information, call the Kent County ATRC at 739-6885(phone), 739-6886 (TDD), or 739-6887(FAX).

AT for Home and Work - Come and see what low to high technology will help at home and at the work place.

Sussex County ATRC Workshops

For more details or registration information, call the Sussex County ATRC at 856-7946 (voice or TDD), or (302)856-7296(FAX).

DynaVox - Just beginning or need brush-up tips on this augmentative communication device? This workshop will cover the basics of using and programming Sentient Systems' DynaVox.

DynaVox Advanced - Opportunity to advance from the beginners' class to a slightly more advanced level. Plus introduction to new DynaVox devices.

DigiVox - Introduction to this new and wonderful augmentative communication device from Sentient Systems.