The AT Messenger

...bringing technology to you

Published by the Delaware Assistive Technology Initiative (DATI) *Vol. 6, Issue 2 March/April 1998*

Spring Beckons—Time to Garden

Individuals with disabilities are joining other enthusiastic people in exploring the natural and health benefits of gardening throughout the year. Everyone can enjoy gardening thanks to the assistive technologies now widely available. Bertine Loop, a Master Gardener from Nebraska, offers the following tips to enhance your gardening experience.

1. ***The Growing Environment***: No matter where or what or how much you plant in your garden, you'll need to know whether plants grow in Delaware, have good soil ready, and be ready to get involved. For example, how much sun will be needed? How much sun comes into my garden and when? Consider soil mixes recommended for your site and situation.
2. ***The Right Plant For The Right Place***: Seeds for annual and perennial plants are available through stores and catalogs. Use pellet (coated) seeds, seed tapes, or place the seeds you've chosen in an old large plastic seasoning container and shake to plant. You can purchase special seeders (such as sow easy seed sowers) or you can use PVC-pipe and a funnel to drop large seeds in the furrow. The same system can be used to fertilize vegetables and flowers that need little care other than watering and weeding.

Use seeds mixed or rolled in sand to spread seeds out in the furrow. Use mulch to prevent diseases and to hold the soil moisture.

Raised beds or containers can be designed to be 18, 24, or 30 inches, or any customized height that provides you with comfortable accessibility. In general, containers and raised beds take more water because the soil warms up and freezes faster, so choose plants that are resistant to drought and dry conditions.

Vertical growing trellises are another idea and are especially good for peas, beans, and corn.

3. ***Tools 'n You***: Tools can be adapted, made by you, or ordered through catalogs. Remember to make sure the tool "fits" you. The right tool will prevent fatigue, minimize the possibility of injury, and most important, help to make gardening a positive experience for you. Buy or use baseball tape for easier gripping, reaching, lifting, and to make your tools more visible. If you stand while gardening, use longer handled tools to prevent damage to your back and spine. Hold everything close to your body and use a backpack or gardening apron to transport gardening supplies around the garden. If you kneel, use a kneeler with handles to help you get up and down.

4. ***You and a Garden Plan***: You and a plan are the cornerstones of your garden. You can grow watermelons in a basket and geraniums in a box. If you need help with a plan, contact community garden centers or your Cooperative Extension office. Network with other gardeners and use the resources available in your area.
5. ***Resources:*** Gardeners can contact the Delaware Cooperation Extension Service, which has county offices across the state. Their Master Gardeners and Horticulturists are available to talk about garden problems. They can provide advice and written materials. See Page 2 for additional ideas.

Enjoy the home gardening experience!

This article was based on from Life Begins When You Start to Garden by Bertine Loop, originally published in Bright Ideas. Content has been reproduced here with permission from the Nebraska AT Project.

Homemade Enabling Tools

Kneeling Pad: Wrap a single sheet of foam rubber about 8 & 1/2” wide, 16" long and 1 & 1/2” thick, in a plastic bag and seal the bag with water resistant tape. Old pillows or cushions may also be used if they are small enough.

No-Bend Seeder: Cut a piece of PVC pipe either 3', 4' or 5' - whatever length is comfortable. Place one end where the seed should fall and drop in a seed. The seed may be dropped through a funnel attached to the PVC pipe. Useful for planting large seeds.

Padded Plant Stakes: Cut off the foot of stockings, nylons or tights just below the heel and stuff it tightly with cut up pieces from the remainder of the stocking. Place it on the end of stakes, making sure you cannot feel the stake through the padding, tie or tape it securely to the stake. The padding decreases the likelihood of injury if someone should fall on a stake.

Planting Board: Cut a board, 4' long by 4" wide by 1" thick. Bevel one side to use in making furrows. Cut deep notches every 6" to aid visually impaired people in spacing seeds and transplants.

Plant Spacers: To aid in spacing seeds and transplants, cut a piece of 1" by 1" wood into varying lengths, i.e. 6" and 12", to use as plant spacers when planting.

Padded Tool Handles: Insert tool handles into foam rubber pipe insulation tubes. Glue foam rubber onto handles. Place crutch handle grips on small tool handles. These methods will increase gripping ability and protect sensitive hands.

Kneeling Pads: Cut two 5" by 5" pads from 1 & 1/2” thick foam rubber. Sew denim around—like a pillow. Attach velcro to each pad and to an old pair of garden jeans or pants. Attach pads to your knees with the velcro when needed.

Homemade Pellet Seed: Pick up tiny seeds with the pad of the index finger and roll it into a tiny piece of toilet paper to enlarge the seed making it easier to see and handle. The toilet paper will dissolve after the seed is planted.

Knotted Garden Line Spacer: Using nylon rope or clothesline, make a knot every 2-4” along the line. With stakes, securely place the knotted line along the row to aid visually impaired gardeners in spacing plants or seeds.

Wrist Splints: For persons who cannot grasp tools, attach small tools to the forearm and wrist with two or three long strips of velcro straps.

Information compiled by Kelly Lant, Extension Assistant-Horticulture. UNL Cooperative Extension-Platte Co. Source: Tools & Techniques for Easier Gardening, Ocone & Thabault, the National Gardening Association. Permission to reproduce by Cooperative Extension Service of Nebraska, UNL. n

Books and Other Resources

The Able Gardener: Overcoming Barriers of Age & Physical Limitations—A well-illustrated informative book that covers areas such as mail-order sources, indoor gardening and raised beds. The book includes dozens of suggestions for adapting tools, managing garden tasks and creating accessible yards. Available from: Storey Communications, Inc., 105 Schoolhouse Road, Pownal, VT 05261 or call (802) 823-5811. Price: $27.95

The Enabling Garden: Creating Barrier Free Gardens—This book provides information on the best tools and techniques to make gardening easier. It includes easy-to-follow diagrams for wheelchair-accessible raised beds and paths. Available from: Taylor Publishing Company, 1550 West Mockingbird Lane, Dallas, TX 75235 or call 800-947-0402. Price: $13.95

Outdoor Gardening for the Handicapped (Leaflet 51, 8 pages) Available from: Bulletin Room 82, P & A Building, Clemson University, Clemson, SC 29634-0311 or call (864) 656-3261. No charge.

Designing Barrier Free Nature Areas—Available from Cornell University, Instructional Materials Services, Ithaca, NY 14853 or call (607) 255-1837. Price: $3.00+$3.00 shipping/ handling.

Accessible Gardening For People with Physical Disabilities: A Guide to Methods, Tools, and Plants—This book outlines gardening aspects-accessible paths and ramps, garden designs, tools, and plant selection. Includes a section on children's gardening. Available from: Woodbine House, Inc., 6510 Bells Mill Road, Bethesda, MD 20871 or call (800) 843-7323. Price: $16.95.

Able to Garden—This is a practical guide for elderly gardeners and those with disabilities. It has ideas for gardening in limited spaces and includes container gardening and tool selection. <http://shop.barnesandnoble.com.> ISBN #0713461373, publisher Trafalgar Square. Price: $22.95.

Backyards and Butterflies, Ways to Include Children with Disabilities in Outdoor Activities—This book contains ideas on gardening, including building an accessible planting table and making raised beds. Available from: Brookline Books (800) 666-2665. Price: $14.95

Center for Universal Design, School of Design (includes housing and gardening), North Carolina State University, Box 8613, Raleigh, NC 27695-8613, (919) 515-3082 Voice or TDD.
n

Assistive Technology Support for a Student with a Learning Disability

Sharon Milner, M.Ed., M.A., CCC/SLP
& Jody Tate, M.S., OTR/L

R.H. was an eighth grade student whose areas of interest included computer technology, science and math. He aspired to be an astrophysicist with a specific interest in robotics. Even though he was classified as a student with a learning disability, he attended all classes in a regular education setting within a Delaware school district. Previous IQ testing placed R.H. in the superior range for overall cognitive functioning. Decoding of written information, reading comprehension and written expression/spelling skills, however, represented significant areas of concern which profoundly affected his academic performance. Completing assignments required long hours of concentration with assistance required from family members.

Results of an assistive technology (AT) evaluation, completed by an occupational therapist, speech-language pathologist, and rehabilitation engineer, indicated strengths in the areas of auditory processing/comprehension, immediate and short-term memory, verbal expression, and linguistic organization. R.H. demonstrated significantly impaired reading comprehension skills as a result of decoding deficits. Test results indicated maximum reliance on sight words and contextual support for comprehension of written information. He also exhibited written expression skills which were judged to be severely limited due to significant spelling deficits.

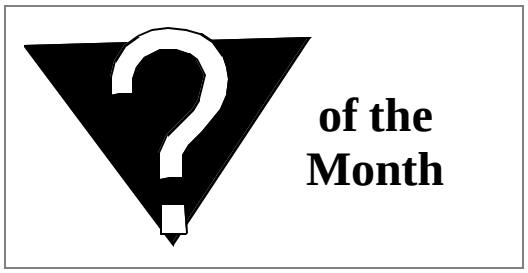
The AT explored by R.H. during the evaluation had the potential to facilitate his learning as well as provide a means for successful completion of academic requirements (reading and writing assignments for class and home, test taking). R.H. responded favorably to scanning and the screen reading program **ULTimate Reader**. This product provided him with the opportunity to independently read and comprehend information commensurate with his academic potential.

For the area of writing, R.H. used a writing/word prediction program called **Co-Writer**. This program provided auditory feedback of the material being typed. This method of auditory feedback is flexible and may be programmed to read each letter as it is typed, single words, or the entire sentence. In addition, **Co-Writer** has the capability to read each word in the word prediction list. R.H. was able to recognize a majority of the words that appeared in the word prediction list and he used them appropriately. If he was able to correctly spell the first three to four letters of a word, it would usually appear in the word prediction list. This improved his spelling when writing. In addition, **Co-Writer's** abbreviation expansion provided another means of improving R.H.'s spelling. For example, he would be able to program the abbreviation expansion to recognize the same sequence of letters as the abbreviation for a word that he consistently misspelled. The abbreviation expansion program recognized the word and automatically inserted the word using the correct spelling. Since **Co-Writer** was used with

ULTimate Reader, R.H. had two opportunities to receive auditory feedback which allowed him to recognize if a word was misspelled.

In regard to R.H.'s academic potential in school, college, and future employment, another alternative to creating written documentation was the use of voice activated computer systems. This type of system in combination with a screen review program would give R.H. the support he needed for school and future endeavors. During this evaluation R.H. was introduced to a voice recognition program called **Dragon Dictate**. This program allowed him to access the computer using voice. R.H. may find that voice activated systems such as **Dragon Dictate** or the more updated version, **Naturally Speaking**, may be beneficial for lengthy writing tasks at the college level and for vocational use.

Presently, R.H. is using the recommended AT to successfully complete school assignments. This AT consists of a laptop computer, a scanner, **ULTimate Reader**, **Co-Writer** and a spelling aid called the **Speaking Merriam-Webster Dictionary and Thesaurus**. R.H. exhibited the ability to independently operate and utilize these systems following an appropriate training period of approximately six hours. His parents and two school personnel also attended the AT training sessions. This technology has allowed him to demonstrate his academic knowledge and has introduced him to new opportunities for continued learning. Due to his success with the AT at the middle school level, it will be essential that he continue to have the opportunity to utilize the most beneficial technology through high school and college and/or employment. For this reason, R.H. and his family have explored a referral to the Division of Vocational Rehabilitation when he turns 15 years old for the acquisition of personal AT equipment. n



This question was answered by Tracy Bombara, a speech/language pathologist with considerable augmentative communication expertise and the new AT Specialist at the Sussex ATRC.

The word “prerequisite” is defined by *Webster's 21st Dictionary* as “something required beforehand,” and often becomes part of discussions relating to whether an AAC system should be implemented with a person who has difficulty communicating verbally. These discussions usually center around whether a person has the “prerequisite” cognitive and/or linguistic abilities to utilize a system that operates on some type of “code” such as pictures or symbols or words. The yardstick used to determine these prerequisite levels is often standardized language test results that report age equivalencies. And if a person's score is less than that of an average two year old, then conventional wisdom leads to the conclusion that the individual **would not** be able to adapt to using an AAC system.

Armed with the test result information, educated professionals frequently develop arguments that persons with congenital or acquired cognitive limitations may not have the required skills to be able to use an intermediary means to accomplish a function that so many of us take for granted: communication. So, as educated professionals, should we wait for them to demonstrate these skills, or should we try something else?

My answer to this question is grounded in the belief that the major “prerequisite” skill to use some type of AAC is the ability to breathe. My argument centers around the fact that newborn infants are able to communicate a variety of feelings and states, using very limited means of expression, and the adults in their world are able to respond appropriately in the majority of cases. My definition of AAC is “any means that allows a person to communicate more effectively,” and is not limited to something that has a price tag above the $2,000 mark.

The primary skill that I look for when considering any type of AAC system is the ability to respond to some type of change in the environment, be it positively or negatively. If a person demonstrates this ability, the positive and negative responses can be used to identify initial vocabulary items. The form or forms that the “AAC system” takes on can be adapted to meet the functional needs of the individual, and do not necessarily have to be housed in a single device or picture board. The “code” used may include simple gestures, basic signs, objects, photographs, symbol drawings, or even sight words.

As educated professionals, we also need to pay attention to the function served by the form we

introduce as AAC. Typically, when requests for vocabulary suggestions are made to families, care providers and staff, the top items on the list include “bathroom,” favorite foods and drinks, and illness or discomfort. An AAC system should not simply be a tool to meet the needs of those who work with the individual, but also a means of increasing personal expression.

Assessment for AAC must include observation and information-gathering related to the individual’s activities in settings that are both familiar and less familiar. The difference in responses to change will provide insight into a place to start for vocabulary development. Positive responses to change will give an indication of vocabulary that may be introduced for requesting or choice making. Negative responses to change may give ideas for teaching the ability to refuse in a more conventionally accepted manner than behavior outbursts.

Does my reasoning indicate that all persons who are non-speaking or who have difficulty communicating should categorically be able to use a communication board or a voice output system? The answer to that question is that I don't feel that any population group will categorically be able to use anything. Not all persons will respond to attempts to increase their communication through adapted means, but my experience has taught me that the cases in which it has not been successful have been complicated by other factors. The expectations of the persons who surround that individual and who provide the basis for communicative interaction must support the use of the aided system. Providing a picture book or an eye gaze system will not make a difference in a world where all needs are anticipated and met without a choice offered, or where the choice expressed has little consequence. It is unrealistic to expect that an individual who has had his or her needs met for a long period of time will suddenly see the value of any communication system and immediately use it without the support and encouragement of those in his or her environment. It is also unrealistic to expect that a few sessions each week with a speech/language pathologist will improve a person’s ability to use a system functionally. While the speech/language pathologist is the “expert” on language and communication, he or she is only **one** member of a team that must be committed to making an AAC system an integral part of the user's life. AAC systems are tools, not cures for decreased verbal communication. Providing legitimate opportunities for use that result in positive outcomes for the individual will determine the success of system implementation.

Returning to the **Question of the Month**, my answer would be that if we are looking for defined prerequisite skills, we are missing the opportunity to start where the individual is now, and improve the communication skills he or she currently has.

I would encourage you to start simple, and look at the **abilities** that the individual presents. Use your powers of observation to come up with a plan, and keep the plan moving. A two picture system may be appropriate today, but probably won't be next month. Our own communication needs and skills change frequently, and so should those of our AAC users. Involve the entire

"team" from the beginning, using as many natural support opportunities as you can identify. The individuals we work with will let us know when and where the journey should take us. n

New Tax Advantages

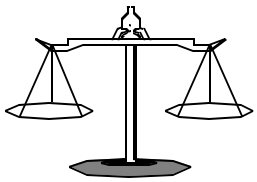
The Taxpayer Relief Act of 1997 made changes to the federal income tax code, some favoring people with disabilities. Increases in the personal exemption, standard deduction and gross income filing requirements affect everyone. Below are brief descriptions of some specific disability-related changes affecting 1997 returns to be filed by April 1998.

- **Adoption credit**. Beginning January 1997, taxpayers qualify for a nonrefundable credit for adoption expenses up to $5,000 per child. For children with special needs, the credit is $6,000. Children must be under age 18. Special needs, to be determined by the state of residence, are defined to include: ethnic background, age, minority group status, presence of siblings, *chronic medical condition or emotional or physical handicap*. The credit phases out when modified Adjusted Gross Income (AGI) exceeds $75,000.
- Employer payment of qualified adoption expenses under an adoption assistance program are not taxable up to the $5,000 and $6,000 amounts.
- The additional standard deduction for those age 65 or older or blind is $1,000 for 1997.
- The Earned Income Credit has been adjusted for inflation. Income limitations are $9,770 for persons with wages with no qualifying children, a category including thousands of adults with disabilities on SSI/SSDI.
- The applicable percentage for self-employed who pay health insurance premiums has increased to a 40% deduction.
- **Medical Savings Accounts** (**MSAs**) Beginning in 1997, MSAs are available for up to 750,000 employees. Eligible taxpayers must: be self-employed or work for a business with 50 or fewer employees; have an employer-sponsored medical insurance policy with an annual deductible amount between $3,000-$4,500 for families or between $2,250-$2,500 for individual coverage; not to be covered by any other health insurance plan unless the plan provides only limited coverage such as supplemental Medicare, disability, dental and vision care, or long-term care; current medical insurance must have an annual limit on out-of-pocket expenses of $5,500 or less for families, $3,000 or less for individuals. MSA funds can be used to pay for the health insurance deductible amounts in addition to medical goods and services covered under the current rules for medical deductions on Schedule A (e.g., personal assis-

tance and assistive technology). Money withdrawn is tax-free income. MSA funds can be withdrawn for purposes other than medical *if the taxpayer is disabled* or age 65 or older.

- **Capital gains rules on sale of main home** are substantially revised for all taxpayers, with an exclusion up to $250,000 of gain for a home sold after May 6, 1997. The exclusion can be used every two years. The rules for owning and using a home as a principal residence for an aggregate of two years during the five years prior to sale or exchange are met if *the taxpayer* is *physically or mentally incapable of self-care and resides in a facility that provides care for his condition*, and he had lived in the principal residence for an aggregate of at least one year during the five years preceding the sale of the home.

Reprinted in its entirety with permission from UCPA's Washington Watch, December 16, 1997.
n



Community Legal Aid Society, Inc. Establishes Children's SSI Project

Daniel Atkins, Esquire, Disabilities Law Program (DLP) of CLASI

SSI Reform

As previously reported in *The AT Messenger* (Jan/Feb 1998 article by Ron Sibert), the Welfare Reform Act of 1996 has dramatically changed the landscape of the Children's Supplemental Security Income (SSI) program. SSI is a federal needs-based program administered by the Social Security Administration (SSA) that provides a monthly financial benefit and Medicaid insurance to eligible children who are disabled.

Prior to the enactment of the Welfare Reform Act on August 22, 1996, the Social Security Act provided that children under the age of 18 were disabled if they had an impairment, or combination of impairments, of "comparable severity," which would prevent an adult from performing substantial gainful activity. "**Comparable severity**" was defined in the SSI regulations as medically-determinable physical and/or mental impairments that so limit a child's ability to function independently, appropriately, and effectively in an age-appropriate manner that the impairments and their resulting limitations are comparable to those which would disable an adult.

After the Welfare Reform Act (the "Act"), disability for children has been redefined to require medically determinable physical and/or mental impairment(s) that result in **marked and severe functional limitations**. As with the prior standard, the impairments must last or be expected to last 12 months or result in death. The new law eliminates the individual functional assessment (IFA) at Step 4 of the sequential analysis of disability for children. And, among other things, the Act also removes "maladaptive behavior" from the listings of possible childhood mental disorders, and requires continuing disability reviews at least once every three years for most children, at which time children could see their benefits terminated.

Social Security Administration Renotices Families

Since passage of the Act, approximately three hundred thousand of the one million children on SSI were reevaluated and about one hundred thousand were cut off from receiving benefits. However, the SSA has acknowledged that it may have terminated a few too many children in its haste to implement the Act, and due process rights might have been breached in the process. As a result:

(1) Children whose eligibility for SSI has been terminated and who have not appealed will be notified by the SSA of their right to appeal and will be provided with a new period of 60 days in which to appeal and 10 days to request benefit continuation during the appeal. Benefit continuation permits children to receive benefits while the appeal of their termination is pending. So long as benefit continuation is requested in good faith the SSA will not seek to recoup benefits should the appeal ultimately fail. It is also interesting to note that 45 states are sending families notices of the right to appeal, in addition to the notices being sent by the SSA. Delaware should consider doing the same since the state stands only to gain by having more children eligible for a federal program that provides essential monetary and health insurance benefits to children with disabilities.

(2) Children whose eligibility for SSI has been terminated (redetermination cases) and who have requested reconsideration but who have not requested benefit continuation will be notified by the SSA of their right to request benefit continuation and will be provided a new 10-day period in which to request benefit continuation during the appeal.

(3) All "failure to cooperate" cessations/denials who have not appealed will be rereviewed. These are cases in which children and families have not provided appropriate information to SSA or have failed to respond to notices.

(4) All cessations of childhood redeterminations and all denials of initial childhood determinations filed on or after August 22, 1996 that show a primary or secondary diagnosis code of mental retardation or speech and language disorder and who have not appealed will be returned and rereviewed.

(5) Additional numbers of both childhood initial denials and redetermination cessations are expected to be rereviewed on a selective basis.

Community Legal Aid Society, Inc. Children's SSI Project

To address the heavy volume of terminations of reevaluated children under the new SSI rules, the DLP of CLASI has made children's SSI cases a priority in 1998. The DLP began the year by presenting a three-hour workshop on children's SSI for private attorneys who are interested in handling cases on a pro bono basis. The DLP, along with Delaware Volunteer Legal Services (DVLS), will continue to recruit volunteers throughout the State, and will serve as a clearinghouse/support center for volunteer attorneys. Available at the three DLP offices are binders for SSI advocates/or parents that include among other items:

(1) A guide to the new children's SSI program rules;

(2) The new children's SSI rules;

(3) Sample forms, letters, case preparation materials, and

(4) Question and answer guides.

The DLP considers these cases a priority, and as a result, each attorney and at least three paralegals in the program will be handling cases. While the DLP will do its best to meet the needs of as many children as possible, it will be impossible to represent every child terminated from the SSI program. As a result, DVLS is recruiting more volunteers and the DLP is providing self-help materials to as many parents as possible. Parents and advocates should contact the DLP:

New Castle County 575-0690
Kent County 674-8500
Sussex County 856-0038
or
Delaware Legal Help Link 478-8850

in order to consult with an advocate, or to pursue the possibility of acquiring representation. n

Public Hearing Update

In the last issue of *The AT Messenger*, we posted a notice about the January 15 public hearing on assistive technology in Washington. That hearing was to be the first of five held throughout the country to gather information about existing needs for AT devices and services, systemic barriers to meeting those needs, and successful approaches that have removed barriers to AT for individuals with disabilities.

At the hearing on conducted on January 15, three Delawareans presented testimony to a distinguished panel representing the major disability-related components of the U.S. Department of Education. Among those on the panel were Judith Heumann, Assistant Secretary; Dr. Katherine Seelman, Director of the National Institute on Disability and Rehabilitation Research (NIDRR); Dr. Thomas Hehir, Director of the Office of Special Education Programs (OSEP); and Fred Schroeder, Director of the Rehabilitative Services Administration (RSA).

Brian Hartman, attorney with Delaware's Protection and Advocacy Program, presented the preliminary findings of a study of the need for AT devices and services among clients of the Delaware Division of Mental Retardation. He noted that the majority of clients evaluated needed devices or services to which they currently do not have access.

Mrs. Joan Bradley, a very accomplished professional who uses an augmentative communication system, testified about the ongoing difficulties she has experienced in attempting to secure funding for her communication device through Medicare. Mrs. Bradley commented: "Assistive Technology such as the Delta Talker can do a world of good, but should not be this hard to find or to fund. There is still a lot that needs to be done so that everyone has access to these services."

Beth Mineo Mollica, Director of the DATI, discussed the need for ongoing monitoring and advocacy. She noted: "...ironically, we may find technology—once empowering and liberating—increasingly being the primary instrument of a new kind of discrimination. Unless people with disabilities have equal access to the emerging technologies that are shaping our future jobs, recreational pursuits, and learning opportunities, they will again be on the outside looking in. With the world of technology getting more diverse and complex, individuals and systems will become even more reliant on the DATI and its counterparts."

Representative's from many national disability-related organizations provided testimony about the AT needs of their constituents. The listening panel also heard from parents, researchers, state government officials, and AT users about the ongoing challenges posed by access barriers, changing demographics, and technological advances.

If you were unable to attend, but would like to share your opinions, the U.S. Department of Education welcomes your written comments. You may direct your remarks to NIDRR, 600 Independence Avenue, SW, Washington, DC 20202-2705, MES 3420, attention Carol Cohen.

Comments may also be sent electronically to carol cohen@ed.gov or faxed to (202) 205-8515. n

FINANCING ASSISTIVE TECHNOLOGY

Health Insurance Update: Managed Care Trends & Tips

Ron Sibert, DATI Funding Specialist

Health insurers, both public and private, are moving aggressively toward a managed care model of service delivery, The primary reason for this trend appears to be financial. Health care costs in this country over the past two decades have gradually grown beyond the public and private sectors' ability to foot the bill. The projected growth rate of Medicaid alone—from $88 billion currently to $150 billion by the year 2000—is a staggering figure by anyone's standards. Several cost reduction models have been proposed over the past several years—mostly as part of a nationwide health care reform effort. Concepts such as "single payer" and "insurance reform" and "managed competition" have been set aside with the reform movement itself. Some observers claim that the health care reform movement was abandoned because the proposed models were so incompatible with our current social, political, and business structures that they simply defied implementation in this country. However, there is that one model that appears to have the right ingredients: it provides health care at reduced cost, and has been around for some time, has been reasonably simple to implement (albeit with mixed results). That model is, of course, managed care, in which health care services are delivered by what are known as health maintenance organizations (HMOs) or managed care organizations (MCOs).

HMOs/MCOs are at once the insurer and the health care service (including AT devices and services) provider. This consolidation in large part enables them to provide less expensive medical coverage. It is not surprising then that private firms are encouraging their employees to enroll in these plans, and public health care agencies are also either offering such plans or requiring their beneficiaries to enroll in them. Delaware Medicaid is an excellent case in point.[1] There are also indications that Medicare, the federal health care program for people who are aged or adults who are permanently disabled, will also be encouraging its beneficiaries to enroll in managed care programs in the near future.

Of course, managed care has both good and bad points. But either way, this increasingly prevalent health care delivery system poses new challenges for doctors and patients alike. HMOs/MCOs (henceforth called "providers") provide health care services on a contractual basis to individuals as well as groups that are insured through their employers or other public and private agencies. Providers receive a fixed dollar amount per patient in exchange for agreeing to meet their enrollees' health care needs during the stated contract period. So the typical provider only profits when it can hold the cost of medical care delivery to a level significantly below the

1. See pages 8 & 9 of the March/April 1996 issue of *The AT Messenger.*

revenues it generates in premiums. In other words, these companies generate profit by maximizing the number of patients the company serves while minimizing the average per patient treatment cost. These objectives can be accomplished in several ways. Some firms, for instance, are increasing their patient loads and their physicians' hours (less costly than hiring additional doctors) to accommodate the patient influx. U.S. Healthcare, which merged with Aetna, pays its doctors up to 1.5% more per patient per month if the physicians work 50 to 60 hours per week—a model that it says Aetna doctors will adopt.[2]

Some providers have been known to control costs by offering physicians financial incentives to provide the least expensive effective treatment. This approach risks compromising the quality of care patients receive. Fortunately, the private MCOs that are contracted to administer the Diamond State Health Plan (the Delaware Medicaid managed care program) are restricted from engaging in this practice when providing services within the scope of their state contracts.

The quality of service a person receives depends very much on the responsiveness of the individual provider and the consumer's skill in making informed choices. Service options under managed care may be very limited in comparison to the standard fee-for-service plans to which many of us are accustomed. Different companies offer different options, and consumers must be prepared to play a very active role in selecting their managed care providers, monitoring service delivery, and in making whatever adjustments are required to accommodate individual needs.

The *Consumer Reports* is currently running a series on managed care. A recent installment contains some helpful strategies to employ both before and after enrolling in a plan. The following is a listing of several that are likely to be the most effective:[3]

Before Enrollment

Check on specialty care. Get the provider's list of specialists as well as their primary care doctors to make sure the plan has sufficient personnel to meet your needs.

Review special needs & medication. You need to know if the plan will approve your established treatment plan or medication regimen.

Consider emergency care. If you have a condition, such as asthma or a heart condition, that might require emergency care, ask how (i.e., under what circumstances) the plan pays for such visits.

Ask about chronic conditions. Find out about monitoring and/or outreach, and what level of service might be expected.

---

2. *The Wall Street Journal*, August 1, 1996.
3. *Consumer Reports*, August, 1996, pg. 33.

After Enrollment

Be prepared to switch doctors or plans. You are the boss, and switching away from a particular plan or doctor sends an important message to the provider—namely that something needs to be fixed.

Prepare an "escape fund." You may discover that your plan does not cover a particular service that you had not anticipated at the beginning. Try to have an emergency fund that you can tap if you need to seek care outside of the HMO.

Be a "squeaky wheel." Carefully monitor the services you receive, and complain when you are less than satisfied. Also familiarize yourself with the provider's grievance procedures so that your concerns are addressed efficiently. n

Overbrook School's 2001 Project

A national model for access to technology

One of the oldest schools in the nation is applying some of the latest technological innovations in preparing its students for the future. In only the second year of a four-year transition, the results are demonstrative.

A blind high school student places a newspaper page on a scanner. Using computer software, he scans the page and converts it into a digital file, which he's able to read on a refreshable braille display before sending to a braille printer to generate a hard copy he can read later. With a powerful desktop computer and specialized hardware and software, he's been able to take charge of his life in ways that were not previously available to him.

He's one of 190 students at Overbrook School for the Blind. The privately owned Philadelphia school that evolved from an academy founded in 1832 is attracting nationwide attention in education circles these days with its aggressive implementation of classroom technology. Initiated in 1996 in close cooperation with HumanWare, the Overbrook 2001 project is opening new avenues of independence and stimulating the intellectual curiosity of blind and low-vision students. Thanks to advances in adaptive software and hardware tools, people who are blind or visually impaired may now gain access to information resources as rapidly and effectively as sighted individuals.

The phased Overbrook 2001 project is designed to sequentially bring classrooms and teaching programs on-line over a four-year period. By 2001 all students in the secondary school program, encompassing junior and senior high school, will have individual workstations; all elementary classes will have workstations, and every preschool classroom will be equipped with a personal computer.

"Overbrook School has been using HumanWare products for the 15 years I've been here. Now Overbrook 2001 has made our relationship tighter," explains Bernadette M. Kappen, the school's administrative director. "Experience, reliability and responsiveness were essential elements for the 2001 program," said Kappen. "We required good technical assistance, and HumanWare has given us all the support we need. That's why in equipping our secondary classrooms, our most sophisticated configurations, we're working with HumanWare exclusively."

In just its second year, the 2001 program is yielding tangible results. "We've seen a noticeable increase in writing skills," reports Kappen. "Some of the kids were always very tentative at writing. Getting thoughts down on paper was challenging even for some low-vision students because it was difficult for them to read the material back." With desktop computing tools, however, students can easily review and revise their writing and use features like spell-check to

help them feel more confident.

The HumanWare representative who supervises a seven-state territory says Overbrook 2001 has placed the school among the most technologically elite in the nation.

“Among numerous schools for blind in the mid-Atlantic area I cover, none other can compare,” asserts Ed Smith, HumanWare’s mid-Atlantic regional sales manager. “I don’t know of another school that’s taken on a project like this. In many of its programs Overbrook is applying technology in truly innovative ways to achieve remarkable results.”

This article was reprinted in its entirety from HumanAwareness, Winter 1997-98 with permission from HumanWare, Inc. n

Cell Phones, TTYs, and You

by Judy Harkins, Director
RERC on Universal Telecommunications Access, Gallaudet University,
and Anita B. Haravon,Dissemination Coordinator, Lexington RERC

Wireless telecommunication devices such as cell phones, pagers, and cordless phones are changing the way Americans communicate. Will TTY users be able to join the wireless revolution?

The answer to this question is not simple.

On one hand, wireless communications are becoming more visual and less dependent on voice alone. There are wireless phones that can let you surf the Internet. Pagers are great products for leaving messages for anyone who travels. Two-way paging can be even more convenient for people on the go. Vibrating cellular phones let you know of incoming telephone calls.

In the next few years, we will see even more new products and services that let you communicate without wires. New government policy in telecommunications is increasing competition in this industry. Consumers will have more choice of telephone companies and telephone products.

The most important news in the wireless world is a shift from older analog technology to digital technology. This kind of shift is happening in many industries—for example in audio recording (CDs replacing vinyl records) and in video recording (the new digital video disc players versus the old VCR).

In the wireless telephone industry, the shift to digital technologies is creating some unexpected problems for hearing aids and TTYs. The industry is working on these problems, but they are not yet solved and consumers need to be aware of them.

Why are there problems? Digital wireless cell phone systems are more efficient than analog systems. They allow several people to share a single telephone channel. The phones communicate with the radio tower by pulsing radio frequency signals. The signals contain speech that is encoded by computer.

The pulsing of the signal causes hearing aids to buzz when the phone is near the hearing aid. And the encoding process seems to garble TTY beeps. Thus, the new phones are not accessible.

The good news is that analog phones, which are more accessible, are easy to find. In fact, most cell phones sold today are still analog phones. For now, the best advice is to stick with analog, but keep an eye on the WorldWide Web and other information sources for improvements to

digital cell phone accessibility.

Analog cell phones and TTYs

Analog systems work fairly well with TTYs. If you buy a cell phone with a built-in modular jack (RJ-11), you are ready to go. Some companies offer adapters that will wire up your cell phone to a direct-connect TTY. A few phones may even be usable if you place them over the TTY's cups, but this is not an ideal situation because ambient noise can cause garbling. Another source of garbling can be noise in the cellular transmission, which is less reliable than wireline transmission.

Keep in mind that you may want to receive calls too. (Interestingly, most people do not give out their cell phone numbers because they do not want to receive calls.) For receiving calls, you will need a phone that vibrates or a remote vibrating device that you can carry in a pocket.

Some basic tips for shoppers:

- For now, the best way to proceed if you need cellular communications is to discuss your communication needs with your service providers (the companies that operate wireless telephone services).
- Consult TTY manufacturers. If you do not have a TTY with direct-connect capability, you will probably need to get one. You are an important customer to TTY companies, so let them know your needs.
- Now is the time to begin educating wireless telephone manufacturers about your needs, because Section 255 of the Communications Act is now in effect. Section 255 requires that telephone equipment be accessible to and usable by people with disabilities, if it is readily achievable for the company to make it so.
- Keep in mind that telephones are sold in a wide variety of outlets now, such as tire stores, boating stores, and even convenience stores. Sales staff in such establishments will probably not be able to help you with accessibility issues, but the service provider should be responsive.
- If someone tries to sell you digital phone service, and you would like to try it out, make sure they give you a written assurance of a money-back trial period. The provider should be willing to refund your money if its products will not support TTYs.

For more information, please contact

RERC on Hearing Enhancement & Assistive Devices
Lexington School for the Deaf/Center for the Deaf
30th Ave. and 7th St., Jackson Heights, NY 11370
V/TTY: 718-899-8800 x212, Fax: 718-899-3433
email: <research@lexnyc.org>
web site: http://idt.net/~reslex

RERC on Universal Telecommunications Access, Gallaudet University Ely Center, 800 Florida Ave., NE, Washington, DC 20006
V/TTY 202 651-5257 Fax: 202-651-5476
email: <jeharkins@gallaudet.edu>
web site: http://tap.gallaudet.edu

This article was reprinted from LexAcess, Fall 1997, with permission from Alda News, Spring 1997. n

Delaware Recycles AT

If you are interested in an item, please call the number listed next to the item. If you would like to add or remove an item from the list, call 800-870-3284, press 1 for English, and then press 3 for the DATI Central Site office. All prices are negotiable and all area codes are 302 unless otherwise noted.

Devices Available:

Ambulation/Mobility

Cane, wooden, Free, Donna, 731-1775
Crutches, wooden, Free, Donna, 731-1775
Walker, $50, Connie, 653-7341
Walker, Child's, Stabilizing, Free, Robin, 479-7801
Walker, folds, front wheels & storage bag, Free, Donna, 731-1775
Walker, folds, w/wheels, Free, Donna, 731-1775

Hearing

Telecaption II Decoder, $25, Donald, 892-9038

Personal Care/Home Management

Bath Chair, w/commode, arm rests, back support, $100, Catherine, 652-6641 after 5 p.m.
Commode, bedside, Free, Donna, 731-1775
Commode, portable, arm rests, back support, neg., Maryanne, 737-6215
Flexiflow Companion Nutrition Pump, Ross, Free, Donna, 731-1775
Geriatric Chair, BioCare 5000, 3-position, neg., Carol, 610-358-2137
Hospital Bed, new, w/mattress in plastic, $300, Joseph, 733-0628
Hospital Bed, Electric, $200, Richard, 610-565-3636
Hospital Bed, Electric, 3-position, $600, Stephen, 947-1637
Hospital Bed, Electric, adj., traction bar, $1,500 or B/O, ask for Michele only, 368-8864
Hospital Bed, Electric, $1,200, Billie, 322-7863 after 6 p.m.
Hospital Bed, Electric, inc. trapeze, $600, Stuart, day - 934-9801, eve. - 645-8750
Hospital Bed, Invacare, $375, Ruby, 764-8585
Hospital Bed, Fully Adj., $350, Ray, 738-1271
Hospital Bed, Manual, Free, Harry, 855-1692

Linear Pump, Wright, aids circulation, Free, Lucille, 836-1283
Oxygen Concentrator, w/Alarm and D tank, B/O, Robert, 325-4063
Oxygen Machine, $1K, Millie, 800-982-2248
Peristaltic Gradient Sequential Compression Pump, Negotiable, Joanne, 658-5878
Potty Chair, Child's (under 6) w/desk top, Free, Robin, 479-7801
Pulmo-Aide Compressor, $40, Millie, 800-982-2248
Reacher, 24", Free, Donna, 731-1775
Reacher, 30", Free, Donna, 731-1775
Shoe Horn, Extended, Free, Donna, 731-1775
Sock Aid, Terry Cloth, Free, Donna, 731-1775
Stair Glide, Bruno, $999, Gordon, 674-1264
Stair Glide, (2) Cheney, perfect condition, neg., Sandra, 239-7440
Stair Glide, Liberty Special, excellent condition, $1.5K or B/O, Joan, 239-4976
Stair Glide, Silver Glide II, neg., Jay, 734-8400
Stair Lift, Silver Glide, 250lb load, at least 13 steps, $2K, Elizabeth, 239-5064
Stair Lift, $2,500, Brad, 517-773-2158
Stair Lift, National Wheelovator Falcon, for 4 steps, neg., Cheryl, 368-7230

Three/Four-Wheeled Powered Scooters

Motorized Cart, Explorer, Model 4246, Ortho-Kinetics, Inc., used one year, many extras, $2,500, Alan, 610-970-1381
Motorized Cart, Lark, w/lift, can attach to car, $1,500, Nancy, 834-7554
Ortho Kinetic Lift for Scooter, fits back of van, hatch back, or station wagon, $600 or B/O, Michael, 478-7401
Scooter, Omega, $2K, Brad, 517-773-2158
Scooter, BEC, never used, $950, Ralph, 368-5550
Scooter, 3-wheel, w/basket, teal, make offer, Nora, 610-583-9435 between 4-7 p.m.

Vehicles/Accessories

Braun Swing Lift for full-sized van, $2,200, Ginny, 234-1512
Braun Power Door Opener w/remote control for lift and door, $600, Ginny, 234-1512
Hand Brake/Throttle, new, GM, $375, Barbara, 678-0515
Hand Controls for brakes, emergency brake, and accelerator, $30 ea., Robert, 322-5264
Ramp, permanently attaches to a van, $60, Elizabeth, 422-2896
Van, '88 Dodge Maxi Van, 2-tone brown, 50K, lift, bed, toilet, storage, electric, $20K or $12K to qualified buyer, Franklin, 368-4675
Van, '88 Ford E150, Ricon, sidedoor w/c lift, driver hand controls, remote control, 91K, $6.5K or B/O, Jean, 325-2528

Van, '89 Ford E150, blue, Braun w/c lift, automatic, $4.5K, Richard, 610-274-0242
'95 Saturn, SL2, 48K, ps, pb, a/c, am/fm cassette, dual airbags, equipped with hand controls, $9.7K, Deacon, 326-0333

Vision

CCTVs, may need some repair, Free, Carol, 737-6808

Wheelchairs/Accessories

Adult, Electric, w/recharger, E&J, $1,500, Mary, 984-1225 after 6 p.m.
Adult, Electric, Joystick Hoveround, reclines, hi-back, video and manual inc., neg., Josephine, 764-5324
Adult, Electric, new w/battery & charger, reasonable offer, Albert, 738-0422
Adult, Electric, w/charger, manual inc., std, $900, Dolores, 856-3261
Adult, Electric, Action 9000, inc. joystick & battery charger, 1 1/2 yrs old, $2,450, Ruby, 764-8585
Adult, Manual, Invacare, Jay Back, $600 Firm, William, 652-1914
Adult, Manual, standard, almost new, $200, Bert, 529-9005
Adult, Manual, Tilt 'n Space, Free, Rosemary, 366-7553
Adult, Manual, collapsible, $100, Nancy, 834-7554
Adult, Manual, 24" wheels, $175, Ruby, 764-8585
Adult, Manual, La-Bac Tilt 'n Space, $1,500 or B/O, Sandi, 992-0225
Child, Quickie, Manual, w/tray, $275, Vernessa, 655-9840
Child, Quickie P10, Electric, $1,200, Richard, 610-565-3636
Child, Zippie by Quickie, Manual, Pink & Black, tilts, $500, Jamie, 945-8668
Children's, variety, Free, Kristen, 672-1960
W/C Arm Rest, $20, Dick, 239-4243
W/C Seat Cushion, Free, Donna, 731-1775
W/C Full Tray, $30, Dick, 239-4243

Devices Needed:

Barrier Free Lift, Herb, 610-667-5051
Bike, Adult, 3-wheeled, Sandra, 875-8095
Bike, Adult, 3-wheeled, pedal with your hands or feet, willing to pay reasonable price, Pat, day - 292-9913, eve. - 653-6892
Hoyer Lift, Ralph, 368-5550
Lift for Rascal Scooter, Dawn, 738-5336
Lift Chair, willing to pay reasonable price, Sharon, 832-8356
Lift Chair, willing to pay reasonable price, Chris, 834-8734
Shower Chair w/back, wheels, and opening for commode, Herb, 610-667-5051
Stroller base for Tumble Forms chair, willing to pay reasonable price, Patty, 998-6302

Tumble Forms Ready Racer/Star Car, willing to pay reasonable price, Katherine, 219-277-5849
Wheelchair Cushion (Roho), Herb, 610-667-5051
Wheelchair, 22", collapsible, Barbara, 834-2267
Wheelchair Parts, Meyra brand, Lisa, 410-893-8614

Note: If you are looking for items not on the list, please contact the Central Site office at 1-800-870-DATI. New items are added to the list regularly.

If there has been no activity or interaction with the contributor to the list within six months, items are automatically removed from the list. n

To contact DATI's Central Site office or the ATRC closest to you...
Call 1-800-870-DATI

Press #1 for English or

Press #2 for Spanish

then press...
#3 for the Central Site office or
#4 for the New Castle County ATRC or
#5 for the Kent County ATRC or
#6 for the Sussex County ATRC

TDD callers—If you do not press #1 or 2 your call will be answered on a TDD line by someone at the Central Site office.

Funding for AT in Schools

Do you know a student who has been excluded from Internet-based learning experiences because of disability-related barriers?

If your answer is yes, put that student, his/her family or teachers in touch with us! Through a joint project of two University of Delaware programs—the Network for Education and Assistive Technology (NEAT) and the Science, Engineering, and Math Opportunities Program (SEM)—funding is available to help schools remedy these access barriers.

Three schools districts have already been awarded Assistive Technology Partnership Grants to increase Internet access for students with visual limitations, learning disabilities, and limited literacy skills. Awards to date have averaged $3,000, and have been earmarked for purchase of both hardware and software.

All Delaware schools are eligible to apply. Submissions must focus on improving access to Internet-based educational opportunities for students with disabilities through the application of assistive technology. Grant funds may be used for the purchase of assistive technology and/or modifications to existing computer systems.

This opportunity is time-limited, and applications will be processed on a first-come, first-considered basis. For more information, or to receive an application packet, contact:

Beth Mineo Mollica or Kenneth Barner
University of Delaware/duPont Hospital for Children
P.O. Box 269
Wilmington, DE 19899
Phone: 302-651-6836
Fax: 302-651-6895
E-mail: mineo@asel.udel.edu