

# CONTEMPORARY LONG TERM CARE

COVERING SKILLED NURSING, ASSISTED LIVING, AND ADULT DAY

## SENIOR LIVING TECHNOLOGY

SPECIAL SECTION

software is such a time saver that Scherer is doing less overtime herself.

Maintaining West Point, Pennsylvania-based, ACTS Retirement-Life Communities' 15 CCRCs is the daunting task of maintenance systems manager Scott Rohrer. How does he do it? With a lot of help from his network-based preventive maintenance software program. Each week the system identifies, prompts, and tracks routinely scheduled maintenance tasks and provides detailed job plans on how to complete a complex assignment. Work orders are also posted to the system and can be easily monitored for quality control. ACTS is currently integrating the program with its accounting software for automatic amortization of core assets such as refrigerators, air conditioners, and generators.

Having quality indicators at your fingertips will become a premium in the future. Beverly Enterprises, the giant Fort Smith, Arkansas-based nursing home chain, is nearing the completion of an outcomes database that will allow data to be pulled daily, as opposed to the current weekly capability. According to Ron Litke, business solutions manager, the database will be able to integrate multiple systems, from employee turnover to clinical data, and will interface with a user-friendly, graphic-based front-end program.

For smaller, less well-capitalized providers, many vendors provide outcomes database software. So do HCFA and the American Health Care Association.

Before a facility can pull reports daily, however, it has to be able to enter data daily. Many data-capturing tools can make this possible, including handheld computers, wireless devices, and touch screens. Unfortunately, they are cost-prohibitive for most providers, says Heath Odum, president of Integrity Group, a Minneapolis-based information systems consulting firm. "Once data-capturing tools become more readily available and cost-effective, you'll begin to see real improvement in care," Odum predicts.

Pharmacy companies tend to be ahead of the technological curve in long term care, giving providers greater flexibility to meet the challenges of capitated funding and a higher acuity population.

For instance, many providers are contracting with pharmacies for automati-

cally dispensed, multi-dose-packaging medications (also known as automated compliance packaging). These resident-specific, bar-coded packages help providers "improve patient compliance, dramatically reduce the potential for medication errors, significantly cut med pass time, and provide vital inventory controls to reduce waste," writes Dana Saffel in the June issue of *Consultant Pharmacist*.

Rich Williams, operations manager for Chapel Hill, North Carolina-based Southern Assisted Living, echoes these sentiments. Southern recently implemented multi-dose packaging in one of its thirteen assisted living communities and already, the benefits are apparent. "We expect to see a savings in pass time

of about thirty to forty percent, if not fifty percent," says Williams. And with a 7-day drug exchange, rather than the standard 30 days, Williams says he's noticed a significant reduction in waste.

Automated medication dispensing systems are another significant advance. As facilities accept more acutely ill people, their need for immediate access to medications increases. Automated medication dispensing systems, common in acute care facilities, are making inroads into subacute care and skilled nursing, as states start to allow these devices to be used in emergencies. Operating like ATM machines, automated dispensing systems offer providers secure, on-demand, computer-controlled access to emergency medications.



MS sufferer Norman Haverkos (above), a resident of Beechwood Home in Cincinnati, operates his computer keyboard with a tongue-touch keypad (left).

## Improving patient care

*Technology can better the lives of residents and staff*

IT'S A TYPICAL DAY AT BEECHWOOD HOME, A not-for-profit skilled nursing facility in Cincinnati, Ohio. Residents are busy going about their daily routines: exercising, lifting weights, communicating via e-mail with friends and family, designing greeting cards, composing and playing music. What isn't typical, however, is that most of these residents

have cerebral palsy, spinal chord injury, brain trauma, or other diagnoses that would prevent them from doing these sorts of activities without the help of assistive technologies.

Norman Haverkos, a 68-year-old resident at Beechwood, has watched 35 years of multiple sclerosis slowly rob him of nearly all muscle movement. But

today, with the use of a wireless, tongue-touch keypad mounted on a retainer in the roof of his mouth, Haverkos can e-mail his son in Chicago, drive his wheelchair, dial the telephone, and operate electrical appliances in his room. In other words, he is able to regain vital areas of independence that MS stole from him.

## Seniors in cyberspace

According to a recent survey by AARP, seniors are the fastest-growing segment of Internet visitor. What's more, SeniorCom, one of the Internet's most active senior web sites, claims that "seniors are the fastest growing sector in the PC purchasing market."

But long term care has been slow to capitalize on the trend. A survey of Wisconsin providers conducted by OMNNI Associates, an Appleton, Wisconsin-based architecture, engineering, and environmental firm, found that while 70 percent of respondents said they were online, only 5 percent said their residents were wired.

Why the low numbers? Catherine Donker, marketing director at OMNNI, says most providers are preoccupied with other concerns. "They see the need, but it's on the back burner right now," she says.

But in facilities that manage to make computers available to residents, the payoff is high. Here is a sample of the life-enhancing computer and Internet activities residents are logging onto:

- **Hobbies and clubs.** At Indian River West, an ACTS Retirement-Life Community facility in Vero Beach, Pennsylvania, residents of a newly formed book club use the Internet to locate information about books they might want to read.

- **Staying in touch with family members.** Not only do residents find computers and the Internet rewarding, providers have come to appreciate what a selling point they can be. "When we tell prospective residents about our Internet capabilities, they love the idea that they can e-mail their families," says Brisgill of Merrill Gardens. "Their families—many of whom are already online—love it too. And residents can do it without running up their phone bills. They especially love that!"

Being computer-literate can also help bridge the generation gap between residents and their families. "Residents feel it is a way of having something in com-

mon with their children and grandchildren." says Brown.

- **Community connections.** Connecting residents via the Internet with people outside of the facility is a goal of Merrill Gardens, an independent and assisted living community in Esplanade, Texas. Residents have started a pen pal program with residents of a sister facility in Orange City, Florida. General Manager Peggy Brisgill says the facility recently hired a volunteer to develop a similar program with the local high school.

At Gwynedd Estates, another ACTS facility in Lower Gwynedd, Pennsylvania, 30 members of a local high school computer club called Interact have volunteered their time on Saturdays to train residents on general computer skills, e-mail, and the Internet. According to Jane Dougherty, spokesperson

*Assistive devices include oversized keyboards, monitors, and tracking balls*

for West Point, Pennsylvania-based ACTS, the students and residents have established close ties. "One student even brought in a cake for all to share."

At Plainfield Tower West, a 154-unit independent living community in Plainfield, New Jersey, residents use a computer encyclopedia program to tutor, on a weekly basis, grade-schoolers from nearby Milestone Preparatory Academy. Residents assist the students in researching topics for history papers and other school assignments.

- **Fun and games.** Residents of Plainfield Tower West also like to play solitaire and other games on the computer. And Beechwood uses computer programs in its occupational therapy, music therapy, and activity programs. An interactive music program, for example, allows residents to listen to various types of music, learn music theory, and try their hands at composing a song—or a symphony.

- **Expertise.** Because it operates on a tight budget, Plainfield Tower got a grant to fund a computer-training course taught by a visiting instructor.

The instructor taught four residents who, in turn, teach the rest of the community. As it turned out, the residents enjoyed teaching others almost as much as they enjoyed using the computer themselves, says Sandra Brown, corporate communications director for Plainfield Tower West's parent, Princeton, New Jersey-based Presbyterian Homes and Services. "The residents love learning it because they can acquire new skills and teach them to other residents."

But getting long term care residents online involves more than just providing computers and training. Frustration in manipulating a computer could dampen the enthusiasm of even the most ardent computer user. People with arthritis, poor eyesight, and diseases or nerve damage that make muscle control difficult are especially prone to discouragement.

A number of inexpensive devices, such as oversized keyboards, monitors, and tracking balls, can make the going easier. Other assistive technologies include "adaptive pointers" that fit on residents' hands, allowing them to key in letters on the keyboard. And for people who can't use their hands, there's a light-emitting headband called a "head mouse" that can manipulate the computer screen much like a hand-operated mouse does. Head mice enable Beechwood residents to play games, send e-mails, explore a variety of computer programs, and surf the Internet. Used in combination with a voice-simulator, they can enable residents who are unable to speak to use the telephone and communicate verbally with staff and fellow residents. "These devices are not luxuries," says Kay Barker, an occupational therapist at Beechwood. "Our outcomes have shown enhancements in psychological as well as physical well being. We're getting closer to showing that they are a medical necessity."

## Improving care quality

Technology can also help improve quality of care and quality of life for long term care residents in a number of ways, including the following:

- **Encouraging exercise.** Preventive care through regular exercise mean healthier seniors—and a healthier bottom line for your facility. And thanks to recently developed geriatric exercise equipment, age is no longer a barrier to