FEATURESTORY

New wireless options are making life easier for residents and operators. The result is safer communities that can offer greater autonomy and peace of mind across the board

No strings attached



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Assisted living operators constantly struggle to balance safety and resident choice. New wireless options are making this less of a battle. Best of all, wireless choices do their jobs without bringing attention to themselves.

BY JULIE W. WILLIAMSON

Assisted living operators face the ongoing challenge of keeping their residents safe and secure, and, at the same time, ensuring that their communities also promote dignity and encourage residents to maintain as much independence as possible.

Marrying those two goals isn't always easy. In fact, some might say it can be downright difficult as more seniors who are older, frailer and cognitively impaired enter assisted living—and wish to stay there as long as possible. Fortunately, a host of innovative, discreet and easy-to-install and operate wireless security systems is giving both operators and residents peace of mind that autonomy needn't be compromised in the quest for widespread security and safety.

"Technology in this arena continues to evolve at a rapid pace," said David Stern, marketing manager, Home Health, for GE Healthcare. The progress, he noted, can be categorized in terms of features, technological platforms, battery life, ease of use (including the accessibility and usability of the information provided), vendor support in staff training and implementation, and assistance in marketing and business plans.

EXPANDING REACH

"Technology must be intuitive and easy-to-use," states Mike MacLeod, a co-founder of Status Solutions. The Charlottesville, VA-based firm is the developer of SARA, an automated alerting system and awareness engine that provides a wireless sensor network, integration tools (to existing systems and devices) and broadcast communication.

Assisted living operators who may have shied away from wireless solutions in the past for fear of unreliability and other limitations might want to take another look.

"Some people may worry that wireless is less safe. That's just not the case anymore," assured Chad Laurens, founder and inventor of SimpliSafe, a wireless home security provider. Not only does today's technology offer advanced software and features, such as customizable alerts, data-trending and back-up monitoring to ensure that help is on the way when it's needed, wireless solutions also are cost-effective and easy to install.

"A big benefit of wireless security for those living in an assisted living environment is that the sensors can be placed in locations that meet the needs of the end-user. If you were to install a hardwired system, you'd be forced to choose exactly where the emergency buttons would be and probably would have to make compromises that don't serve anyone well in the event of an emergency," Laurens explained. If a resident is confined to a wheelchair, for example, wireless emergency call buttons can be strategically placed throughout the home at a height that is easily reachable, as opposed to having residents struggle to reach a fixed, hard-wired pull cord or push button, he said.

Wearable wireless pendants are pushing those benefits even further, allowing residents to instantly call for help from anywhere in the community—without the worry of having to access a wall-mounted call button, wireless or otherwise. And in some cases, caregivers are alerted by impact- and activity-sensing technology that eliminates the need for the resident to activate their pendant at all.

"Research shows that four out of five elderly individuals either cannot or will not push a button to call for help," said Kelly Besecker,

vice president of sales and marketing for Reston, VA-based AFrame Digital. Advanced features of the wrist-worn AFrame system allow activity, impacts due to falls and physiological telehealth data to be collected and automatically monitored.

"A nurse call for assistance should provide more information today–including where a resident fell—and it should not rely on a user to actively request assistance. Staff can receive these alerts anywhere in real-time, so they can react quickly," Besecker said.

Another advantage of wireless solutions is the relative cost-effectiveness, sources noted. As Stern explained, it requires only a modest initial outlay, and studies have shown that revenue streams may increase with these types of technologies. It also can be successfully implemented without specialized technological training.

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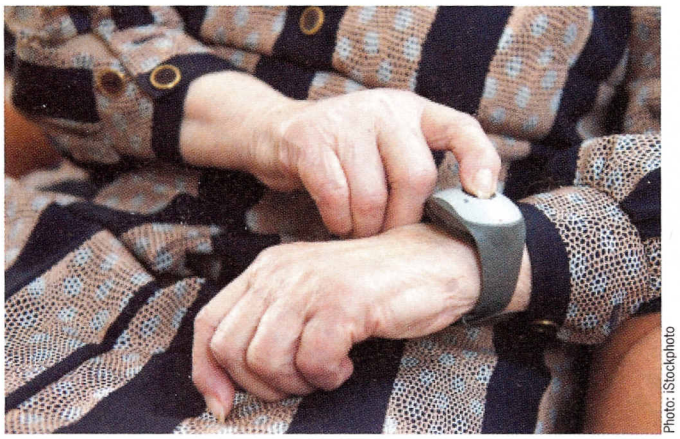

Photo: iStockphoto

Assisted living operators constantly struggle to balance safety and resident choice. A resident's tendencies can complicate efforts.

MORE RESPONSIVENESS

At Harbour Village in Greendale, WI, wireless security solutions have greatly enhanced quality of care and service. In August, the community implemented GE Healthcare's QuietCare technology. Each residence in Harbour Village's assisted living and memory care buildings is outfitted with the wireless, sensor-based system.

"Wireless systems have been especially beneficial in our memory care community where many cognitively-impaired residents can't use pull cords," said Harbour Village Executive Director Krista McCook. "Residents and even prospective residents and their families are very excited about this technology."

Sensors silently track residents' location in their homes and alert staff if deviations in normal routines occur. Although QuietCare has been in place at Harbour Village for only several months, McCook said there already have been numerous situations where the system has helped staff quickly determine condition changes and falls, and has improved resident care as a result.

After Harbour Village caregivers responded to another resident who was spending extended periods in the bathroom, it was determined the man was having trouble toileting but was too embarrassed to inform staff. Simple dietary changes remedied the problem and prevented medical complications.

The technology also has proven effective in alerting staff to changes in activities of daily living and promoting minor shifts in care to allow residents to age in place. In one case, staff was alerted to a resident who was spending approximately two hours in the bathroom each morning and it was determined that the resident was beginning to struggle with daily grooming and dressing. With some simple cuing and minor assistance, staff was able to assist the resident–without stripping her of her dignity and independence.

"Every day, this woman was well groomed and well put together. Had we not received those alerts and been able to explore a seven-day history, we wouldn't have known that she was having difficulties," McCook explained.

"The sensors have been a big help with fall prevention. Already, we've had situations where staff responded to the night motion sensor and entered the room to find a resident at the edge of the bed," she said. "Staff was able to help safely transfer them to the bathroom."

Harbour Village also employs a number of other wireless technologies, including a wandering/elopement system that is beneficial for keeping at-risk assisted living residents who don't yet require a fully secured unit.

As an adjunctive security measure to the QuietCare system, each residence also features an emergency call system that can be wirelessly converted for residents who prefer that over the traditional pull cord.

MORE TIMELY INFO

As Stern pointed out, the real value of today's wireless resident security solutions is its ability to be synergistic with the clinical and hospitality focus of assisted living by allowing for continual versus episodic assessments (and reassessments) of residents' needs.

"This provides more timely, accurate information to promote more responsive and appropriate care plans," he said.

In the assisted living environment, where resident conditions and requirements can vary greatly, flexibility is also key–and vendors are offering systems and service packages that are anything but one-size-fits-all.

Sometimes, resident security takes other forms, as well. Today's wireless technologies offer unsurpassed control for both residents and assisted living operators.

Residents may feel more secure if they have a system that allows them to turn lights on or off, or lock doors with a remote computer or cellular phone, for example. Further, if a smoke or fire alarm is activated several doors down or even in a different unit, systems can be programmed to alert other residents.

"The goal is to offer wireless solutions that are fully scalable to meet the unique needs of users," said Mary Miller, marketing director, Z-Wave Alliance.

Z-Wave technology uses low-power radio waves that travel through walls, floors and cabinets and allows all home electronics—including ordinary appliances, such as toasters, window shades, thermostats and lighting—to communicate with one another (and the user) via remote control. Nearly any device may connect to Z-Wave control by simply plugging it into a Z-Wave module and then "joining' it to the user's Z-Wave network. A basic Z-Wave remote access system can be installed for roughly $500, according to Miller.

While ease of use and cost-effectiveness are important factors, facilities also must factor in interoperability. Besecker stressed the importance of inquiring about open standards upon which the system is based, as well as its ability to operate alongside existing legacy equipment.

In the future, assisted living operators can expect even more from their wireless solutions, not the least of which will involve greater expansion of coverage and more meaningful data generated through embedded technologies.

"Technologies will help address present information in a manner that promotes its use and adoption," said GE Healthcare's Stern. "This will include reports that are generated for resident families and professionals." ■