

Caregiver technology: bridging the privacy versus independence conundrum

By David Inns

As available technologies to support family caregivers in maintaining the well-being of their older family members increase, so does the privacy pushback. Older adults are concerned that some of these technological tools invade their privacy—a worry at odds with family caregivers’ goal of ensuring that their older relatives are safe at home and in their communities.

Brenda is an 87-year-old woman living alone who wants to remain in her home and stay out of an assisted living facility for as long as possible. Her daughter has begun to worry about her mom’s well-being, and she suggests they get a home-sensor system that will send regular alerts to her cell phone with updates on her mom’s movements, sleeping patterns, if a fall has occurred and more. But Brenda sees this as an invasion of her privacy, and doesn’t understand how she would benefit from such monitoring.

The benefits for family caregivers are clear, but the older adult may not understand why their caregivers need this information. A review by the National Institutes of Health in the *Journal of the American Medical Informatics Association* (goo.gl/fzPh85) identified issues with privacy and obtrusiveness as important factors affecting smart home technology adoption.

Do Benefits Outweigh Concerns?

Looking at it from the con side, older adults may feel they’re losing independence, putting a burden on their family members and experiencing frustration with the tracking of their every move. Studies, including AARP’s *Caregivers & Technology* report (goo.gl/RC35d0), however, have demonstrated that the benefits outweigh the negatives. Home-monitoring systems can detect when a person falls, is not following their normal sleep and movement habits or if they have been non-active for an “abnormal” amount of time. Many systems can analyze this data and communicate it to a predetermined contact so that the older adult can get immediate help, if needed. Similarly, many devices designed for this use have smart phone apps to provide family members with updates.

In addition to providing emergency support, caregiver technology can monitor activities of daily living to establish patterns and evaluate data so caregivers can be proactive if they spot changes indicative of a negative health event. A sensor might detect a fall and then lack of movement signaling fainting, heart attack or stroke. As well, this technology can transmit vital signs

and perform other wellness activities; this capability can reduce the need for doctor appointments and, ultimately, reduce healthcare costs.

Coming Together to Forge a Plan

Conversations about care decisions can be difficult, so family members need to clearly and carefully discuss the potential benefits of such technology with the person receiving care. Decisions about adopting a new technology should be made together.

The understanding that older adults want to maintain independence for as long as possible without losing their privacy and dignity should inform the conversation. The objective is, after all, for elders to safely maintain an independent lifestyle. The most successful technology designs are those sensitive to users' privacy concerns and consider the extent to which a technology might undermine individual autonomy, control and dignity.

The discussion should focus on how the older adult can benefit: caregivers can emphasize the positive aspects of the technology's medical and emergency services, and health and activity updates, and how having access to these features can make for more meaningful communication, whether via phone or in person. Consider what options are best for the situation at hand, and select the technology that will enable the older family member to stay healthy, safe and independent, while giving family caregivers peace of mind. ■

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GreatCall's Lively Mobile and Healthsense Monitoring

Mobile urgent response devices, such as GreatCall's Lively Mobile, are equipped with technology that can detect when a fall occurs, contact a trained agent (24 hours a day, 7 days a week) and notify a family member. These devices also have GPS technology, providing the family caregiver with information on whether their relative has left the house, is following his or her usual routine or has missed a doctor appointment; this can decrease the number of calls to the older relative to ask about these activities.

Healthsense monitoring uses passive sensors to track activities such as eating, sleeping and movement. The technology has been used successfully in partnerships with independent senior living organizations across the United States, including Fallon Health. A 12-month study with Fallon Health (goo.gl/JjKDer) found that using Healthsense remote monitoring and predictive analytics, in connection with Fallon's model of care for older adults, reduced total medical expenses by \$687 per member, per month—a nearly 16 percent reduction for pilot members, as compared to a control group. The Fallon population using Healthsense demonstrated a 32.2 percent reduction in fees for inpatient hospital visits, a 39.4 percent reduction in emergency department costs and a 67.7 percent reduction in expenses for long-term care versus the control during the year-long study.

—David Inns