High Tech Gadgets Help Seniors Stay Safe at Home

By Cathy Dausman

A heat sensor mounted above the oven can alert Justin Pickering if his father has left the burner on. Photo Cathy Dausman

By all accounts Roger Pickering, 72, is an active senior who still lives on his own in the East Bay. But his son worries about his widowed father, although he lives just 10 minutes away in Lafayette. Is his father awake or asleep? Did he take his medication on time? Did he leave a door open? Did he fall in his house or did he simply fall asleep watching TV?

Pickering has bad knees and his house has "a lot of steps," says his son, Justin Pickering. Falls are the leading cause of fatal and nonfatal injuries in U.S. adults over 65 (40 million), according to the Centers for Disease Control and Prevention; one out of three people in that age range falls each year.

Justin Pickering has also worried more since his mother died in 2012, leaving his father alone. "Yeah, I'm the sole caregiver [for my dad]," he said. He wasn't actively searching for a way to keep an eye on his father, having briefly considered using a baby monitor system, but when he stumbled across the SafeinHome technology, he knew he was on to something.

SafeinHome is a smartphone app where sensors are placed unobtrusively around the senior's home, explained company representative Shelly Gordon. She said it is just "one example of the exploding 'aging in place' tech market that Aging in Place magazine said will reach $30 billion by 2018."

High tech interfaces between the senior population and their baby boomer children allow the older generation to remain at home longer and more safely. The list of technologies either currently available or under development include toilets that test for urine sugar levels, body fat, and blood pressure, "smart spectacles" that aid the vision impaired to navigate their homes, beds that monitor a patient's vital signs, video games that detect early signs of dementia, and even stoves that turn off when their owners forget to (http://aginginplace.com/mini-2/technology-for-aging-in-place/3/).

In the Pickering home, ceiling mounted sensors about the size of smoke alarms track Roger's progress throughout the house and notify Justin when anything unusual happens. SafeinHome and similar technologies, including Lively and Quiet Care are passive systems, designed for a caregiver to monitor. Other systems like personal emergency response (PERS) buttons, use a pendant or wristband and require user activation. Gordon said some seniors don't use the PERS button either because they misplace the button or "don't want to bother anyone."

Father and son agree their system gives them peace of mind.

"It's cool," Justin Pickering said. "It takes the worries off my shoulders." Roger Pickering, who used to work in the Information Technology field, likes the system too, and reminds his son to check its operation often.

"It gives me a sense of assurance," the older Pickering said. The possibility of falling or being immobilized without anyone knowing was a regular topic of discussion among the members of Pickering's senior support group, but he said his research on help-in-home systems was limited to reading about them in AARP magazine. Now Roger Pickering uses his system to monitor "comings and goings" at his own house. By consulting his smart phone, for example, he can be away when the house cleaners are working, and know exactly when they leave.
"I didn't know I needed it," Justin Pickering said. "Now I can't live without it."

High Tech Help

Technological devices and interfaces help seniors age in place, and offer a way for caregivers to monitor loved ones from afar. For example, GrandCare Systems (https://www.grandcare.com/) uses the Internet and the senior's TV to communicate, with wireless sensors to monitor wellness, including motion, body temperature, door position, blood pressure, weight, and other programmed, customized variables. For information about additional resources, visit the following websites:

- http://www.safeinhome.com/
- http://www.mylively.com/
- http://www.careinnovations.com/about/
- Rest Assured Telecare: http://www.rescare.com/homecare-services/rest-assured-telecare/
- For information about how a PERS works, visit: http://www.caregiver.com/channels/tech/articles/PERS_faqs.htm.

Roger Pickering points out the black antenna that receives wireless information from the SafeinHome sensors around his house.

Reach the reporter at: cathy.d@lamorindaweekly.com