Safe at Home

Baby boomers, take note. Your smart house will soon be taking care of you.

BY ROBYN A. FRIEDMAN





AST YEAR Susan McDonough's mother underwent heart surgery and suffered a stroke and seizure. Fiercely independent, the 74-year-old Albany, N.Y., resident would not consider moving from her home. But her children were worried about her living alone. So in April, McDonough enrolled her mother in a pilot program conducted by General Electric for its new product, Home Assurance.

Home Assurance utilizes security sensors that are placed strategically around a house to electronically report routine movements. Activities such as opening and closing doors, walking through the house and opening the refrigerator door are all captured as "normal" behavior. Any irregular behavior is immediately identified and reported to remote caregivers, who can also log onto a secure web

site at any time to monitor the activities of their loved ones.

McDonough has the system programmed to notify her by phone or e-mail if there is no activity in her mother's bedroom between 6 am and 9 am. She is able to check on her mother without being intrusive, and her mother feels secure knowing that someone will be notified if there is an emergency.

GE has been testing Home Assurance since last spring and expects to have the product on the market sometime this year, says Paul Cuddihy, project leader at GE's Global Research Center. Depending on the number of sensors and features selected by the user, the initial fee for the equipment is expected to be between \$250 and \$500. Monitoring fees will run \$35 to \$45 per month.

Home Assurance is just one example of a new generation of products on the horizon that will make the lives of elderly Americans—and their caretakers—better. "The number of people living longer than 65 is increasing, but the caregiver population is not growing nearly as fast," says Sumi Helal, a professor of computer and information science and engineering at the University of Florida. Helal recently completed a 500-square-foot "smart house" at the school that melds the latest computer and sensor technology to provide assistance to people as they age.

The house is capable of keeping tabs on its residents as well as on the home itself. It can sense a water leak and alert the homeowner by cell phone. It can also obey voice commands to control the lights, stereo, television and drapes. As a resident moves from room to room, the house senses the movement, turning on the television and tuning it to the proper station as the resident enters the room. The homeowner can even unlock the front door electronically, by phone.



Components of Shell's HomeGenie system allow homeowners to control light systems and appliances via the Internet.

Although Helal's technology will not be available commercially for a few years, other products intended to make homeowners more secure are on the market now.

To protect his three young children, John Sattler recently installed a SonarGuard system on the 40-foot pool at his suburban Dallas home. The system uses sonar technology to create an underwater "safety net" in a pool and sounds an alarm if a child enters the pool. The system can differentiate between the wave pattern created by a ball or pool



SonarGuard's pool system creates an invisible sonar "net" that sounds an alarm if a child falls in. Opposite: Napco's IQ sensor.

toy falling into the water and that of a small child. SonarGuard, developed by RJE Technologies Inc., sells for between \$5,000 and \$20,000, with most installations in the \$5,000 to \$6,500 range, according to Robert Jechart, the company's president.

Home security systems can now keep track of residents' whereabouts or notify homeowners of water leaks or extreme temperature situations. Napco Security Group manufactures a Smart Home System that helps parents keep track of

their kids while they are at work. When a child comes home, he enters a personal code; the system then notifies parents by e-mail, pager or cell phone that the child has arrived safely. The electronic latchkey is relatively inexpensive and is widely available through alarm companies.

Within months, Shell Oil will be selling its HomeGenie

There's a Greg Norman golf course behind it all.

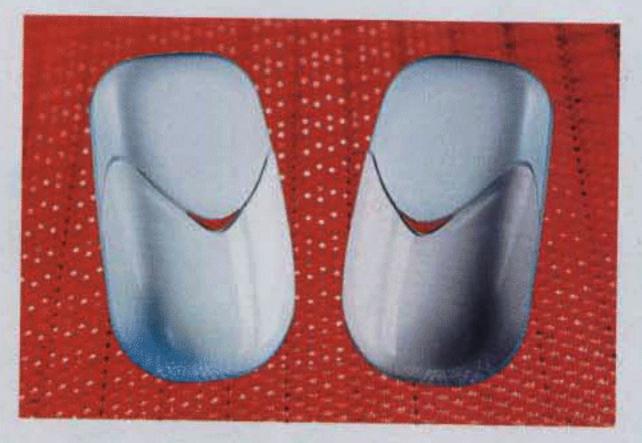
A private community rich in classic Lowcountry architecture, history, and Greg Norman golf along the banks of the Okatie River, a half-hour drive from Beaufort, SC and Savannah, GA. Homesites from \$160,000. Home/homesite packages from \$595,000. For more information, call (843)379-2500 or 1-866-653-3435 or visit www.oldfield1732.com.



system, which allows homeowners to access and control various systems in their home via the Internet. Owners can control their thermostat, lights and small appliances with the system (which will be sold at retail stores and will cost less than \$1,000, with monthly fees of less than \$30) and can see live video of their home, from anywhere at any time. Running home to turn off

the coffeepot will become a thing of the past.

Another product that will hit the shelves within the next year is the Online Medicine Cabinet developed by Accenture Technology Labs. Using a camera, face-recognition software and the Internet, the cabinet can recognize different household members and give reminders to take medication and refill prescriptions. As residents enter the bathroom, the medicine cabinet recognizes them and tells



them which medications to take. It also keeps track of local allergy conditions, and if the pollen count is high, it reminds users to take their allergy medication. The cabinet can process vital signs, such as blood pressure and cholesterol, and can upload data to a physician. Accenture expects the price of the cabinet to be about \$1,000.

As the oldest baby boomers

approach 60, experts predict that the demand for assisted care will skyrocket in the near future, as will the demand for technology that can help older Americans retain their independence. And that makes people like Susan McDonough happy. "Technology now gives me a comfort level to know that my mom is still independent and that her lifestyle is not impeded due to her health concerns," she says. "It gives me peace of mind."

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