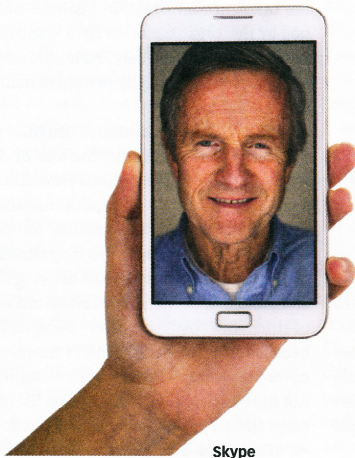


family matters

Tech support for long-distance caregivers

Devices that promise to help you monitor a loved one's health and activity



Karen Cobb's 84-year-old mother lives in an assisted-living facility about 12 hours from her Houston home. "One of the biggest problems with the distance is that I have to trust others to be my eyes and ears," says Cobb, director of A Place for Mom, a national senior-care referral network. Cobb says she chose a facility that is extremely responsive to her calls and keeps her in touch with her mom's activities, often by text message. And she put her mom's accounts in her own name and allows care providers to automatically debit the account, which she can monitor online 24/7.

If you live an hour or more away from a person who needs your care, you can think of yourself as a long-distance caregiver. There are about 7 million of you in the U.S., according to the National Institute on Aging.

Long-distance caregivers increasingly rely on technology to help with medication management, to get information on a treatment or diagnosis, to find support, and to search for services. "Technology can help a caregiver stay in closer touch with their relative

and gain a greater sense of control over the care situation," says Kathy Kelly, executive director of the Family Caregiver Alliance, a non-profit that supports caregivers.

But the industry is young. "There's not enough information yet to understand which applications are effective, and under what circumstances," says Grace Whiting, director of communications and coalitions for the National Alliance for Caregiving, a coalition of national organizations. "We need lots more data."

There's also the concern of privacy. Wearable devices and sensors in the home can detect whether the fridge has been opened, doors are left

open, or stoves have been running for a long time. But your parent, or the person who acts as their legal proxy, has to be comfortable with the fact that their data may be tracked and shared. And there's the additional cost. But if it means you'll need an aide for fewer hours, it might be worth it, Kelly says.

So check with caregiver organizations or ask facilities where your loved one resides about products they have used and recommend. Then research device prices and monthly costs, and make sure you can cancel their service at any time. Also check on their shipping, setup, return, and other fees.

Almost all of the examples that follow were compiled by the Center for Technology and Aging, a research group based in California. We have not tested them, so we are not recommending them, but we cite them as examples of types of products that may be helpful. (However, there are two exceptions: the Fitbit Flex activity tracker and Omron blood pressure monitor, which did well in our tests.)

Health monitors

Vital-signs monitors include traditional devices such as weight scales, blood pressure cuffs, and blood glucose meters that are now also connected to the Internet, so you and physicians can keep tabs on your relative's condition. Products can also measure heart rate, temperature, heart function, and movement. Many products provide Web and mobile tools for tracking and analyzing data.

→ **Heart monitors.** Some can record heart rhythms to monitor any heartbeat irregularities. Results can be shared with your parent's physician.

Example: AliveCor Heart Monitor, \$75.

→ **Pill dispensers.** These medication reminders range from bottles with tops that glow when it's time for a dose to dispensers alerting users to take their medications with a series of optional visual and/or auditory alerts. In some cases, if users do not take their medications, caregivers can be notified via phone, e-mail, and text message.

Example: MedMinder pill dispensers, \$40 to \$60 monthly monitoring fee.



MedMinder pill dispenser

→ **Blood pressure monitor.** Models can take several consecutive readings and calculate the average. Some also have an irregular-heartbeat detector. Readings may be downloaded to a PC and shared with your parent's doctor.

Example: Omron 10 Series BP786, \$75.



Omron blood pressure monitor

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Wearable monitors

These monitors measure steps taken, speed, activity levels, calories spent, and amount of time with no movement.

→ **Activity trackers.** They can sometimes be worn as a wristband, clipped onto clothing, or carried in a pocket. They can track your parent's activity and sleep patterns, and automatically sync the data on selected computers and smart phones. Of course, your relative must be comfortable wearing or carrying around one of the devices and remember to use it.

Example: Fitbit Flex, \$100.



Fitbit Flex activity tracker

Sleep monitors

Individuals and clinicians use these products to monitor sleep to adjust behavior or to provide indications of other concerns that might require a professional intervention, such as sleep apnea.

→ **Wireless models.** For people who find an activity tracker uncomfortable to wear while sleeping, or who might not remember to put one on, these products use a sensor tucked under their mattress and a smart-phone app to record sleep information such as heart and respiration rates, motion, and bed presence.

Example: Withings Aura, \$300.



Withings Aura sleep monitor

Personal safety devices

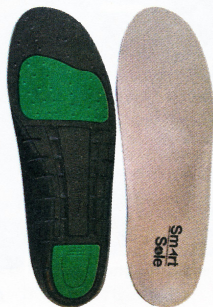
These include GPS tracking devices and personal emergency-response systems, which have evolved so that they can be activated while outside of the home. Some devices let caregivers create "geo-fencing," which allows movement within a certain boundary around the home but sends alerts via phone or computer when an older adult wanders off.

→ **Emergency-response systems.** Two-way voice communication facilitated through a pendant or watch. Some claim a call for assistance is automatically placed if a fall is suspected but the user is unable to push a button. May come with the ability to call multiple contacts.

Example: Philips Lifeline GoSafe, \$149 for device plus monitoring fees starting at \$55 per month.

→ **GPS locators.** Insoles with built-in GPS can be placed in your relative's shoes. You can locate them by computer, laptop, tablet, iPhone, or Android device.

Example: GPS SmartSole, \$299 plus \$30 to \$50 monthly monitoring fee.



GPS SmartSole

Social communication

These technologies include video-enabled PC or mobile-app solutions to communicate with remote family caregivers, other relatives, or friends.

Examples: FaceTime, Google Hangouts, and Skype.

Monitoring sensors

Sensor products can check a number of items within a house: motion patterns, stove on/off status, carbon dioxide or carbon monoxide levels, air quality, and presence of smoke or fire. They can also lock doors and control other items in the home remotely.

→ **Daily activity monitoring.** Activity sensors can be placed on the refrigerator, stove, door, and other objects around the home. Your relative may also wear a watch that monitors activity. You can allow caregivers and physicians to access the data. Set up notifications to be delivered by e-mail, text, or mobile app.

Example: Lively, \$50 plus \$28 per month.



Lively activity monitor

→ **Home-management systems.**

Control the climate, manage the security system, lock and unlock doors, and even control the lights remotely. E-mail, text, or voice-call alerts may be sent if your relative's alarm is triggered.

Example: Lowe's Iris, \$179 to \$299 plus \$10 per month.

Video monitoring

Cameras can monitor an individual's activities of daily living and provide caregivers with direct video feed on a smart phone, tablet app, or the Web to check on the status of a family member.

→ **Wireless systems.** Cameras can be viewed remotely from a smart phone or computer. You may be able to get video motion alerts and the ability to pan and zoom.

Example: Netgear VueZone, \$130 and more plus service that costs up to \$100 monthly.

Financial monitoring

You can simply set up accounts as Cobb did to control and monitor her mother's finances. Or you might want to use a program that tracks suspicious activity.

→ **Remote account monitoring.** As soon as suspicious activity is suspected, an alert may be dispatched to your parent and one or more caregivers. Look for programs where no account numbers are available and no money can be moved to help avoid elder financial abuse.

Example: EverSafe, \$5 to \$10 per month. \$