

Home Care Automation Report

Mobile technology facilitates participatory health and management of chronic disease

Category: Technology

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Synopsis: We've only witnessed the tip of the iceberg when it comes to the promise of mobile technologies for home health agencies and others struggling to manage chronic disease in America.

Imagine if you could send text messages to your home care clients to remind them to take their prescription medicine on time. Or, if your employees had a patient's up-to-the-minute health information *before* they arrived at the client's home.

These scenarios are increasingly likely, thanks to mobile technologies that provide actionable information to help home care workers, healthcare practitioners *and* patients effectively manage widespread chronic disease.

Chronic care and participatory health

The rising incidence and cost of chronic care in America coincides with consumers' growing interest in mobile health solutions. Chronic care consumes 75 percent of our healthcare expenditures, or \$1.7 trillion annually, according to Jane Sarasohn-Kahn. She is a health economist, management consultant and founder of [THINK-Health](#), a strategic health consulting firm. We included a link to her recently published report, [Participatory Health: Online and Mobile Tools Help Chronically Ill Manage Their Care](#), in the September 17 issue of *HCAR*.

"We need to teach people how to better engage with and manage their own chronic care conditions, 24/7. If we don't attack chronic care, we won't save money," Sarasohn-Kahn said.

Sarasohn-Kahn says most chronic conditions come from lifestyle behaviors. Technology can help patients make better decisions, such as what to eat and how much to move. Fortunately, mobile phones, landlines and computers can make it easy for patients to provide key health indicators to healthcare providers and for providers to send simple reminders to patients.

"We can use text messaging to remind someone to test their blood glucose, or remind them at lunchtime to order something healthy," Sarasohn-Kahn says. "These nudges engage consumers in their own health in a personalized way. Wouldn't it be nice, for example, if we could hook a patient's pedometer data to a monitor and send it to their healthcare practitioner?"

"The solution is to provide actionable information and useful, useable tools to patients. There must be a partnership between patients and clinicians. There's a real opportunity to monitor important health measures, such as blood pressure or glucose levels, and then loop them back to physicians or health coaches who can communicate back to us, tweak medications and so on. By closing the loop, we can have optimal outcomes."

Employers are also recognizing they can get better return on investment using technology to improve employee wellness. By linking reminders and nudging techniques with incentives, such as discounts for healthy foods, employers can help ensure employees adopt wellness programs.

Consumers interested in mobile health

People want to receive information from their healthcare practitioners. Earlier this month, the CTIA-The Wireless Association® and Harris Interactive® released the results of a [study](#) in which 78 percent of consumers expressed interest in mHealth (or mobile health) solutions and more than one in ten (15 percent) said they were extremely or very interested in learning more about it. In fact, 19 percent said they would upgrade their existing wireless plan to participate and 11 percent said they would even consider switching wireless providers to receive mobile healthcare services.

Forty percent of those surveyed believed mobile health services, such as wireless remote monitoring, would supplement the medical care they receive from their doctor and 24 percent believed mobile health services might replace doctor visits.

Of particular importance to home health agencies, 68 percent agreed that mobile health care would allow for more home-based care.

Patient-centered medical home

Sarasohn-Kahn says we must address security and privacy of health information by allowing patients to opt-in to the technology and by firming up regulations, especially with wireless networks, which are believed to be less secure. As we see more mHealth pilot programs, says Sarasohn-Kahn, we'll begin to find solutions to these and other current barriers.

"These are exciting prospects for folks going into patients' homes," she says. "They are often unarmed with the information they need at the point of care. The declining cost of mobile technology and the proliferation of electronic health records can arm these workers better to do their jobs more productively and have greater satisfaction for themselves and among patients. Home health workers can make better decisions on the fly, see more patients, spend more time with them and have greater efficiencies. As workers have access to information, they'll actually have more time to care for patients.

"The technology is evolving," she continues. "Intel is doing wonderful ethnographic research. They're going into older people's homes and putting scales under the floorboards so people can be 'invisibly' weighed when they get out of bed and the data can be wirelessly communicates to a doctor or health coach elsewhere so people can be monitored on a daily basis. We'll eventually learn how to put sensors around the house to help people manage their health better at home. These are exciting developments.

"The patient centered medical home is the idea of the future. Primary care providers and health coaches will be the quarterbacks of a person's health. This process can morph with web-based and mobile tools."