Older Populations Have Adopted Technology for Health

People Over 65 Will Use Remote Care Technology to Take Better Care of Themselves

Executive Summary

Engaging older adults with chronic conditions through the use of remote technology has the potential to transform healthcare and improve their health and independence. When properly implemented, remote care technology can activate members to effectively manage their care by driving behavior change and can keep members connected to their support team. A common misperception is that people over 65 will reject technology and refuse to integrate it into their daily lives. Remote care management (RCM) can overcome those obstacles and yield powerful results.

Recent studies show older adults are connecting with technology more than ever.¹ For Medicare Advantage (MA) plans, the key when implementing an RCM program for members is to consider two characteristics: people over 65 are traditionally less-experienced with technology when compared to younger adults, and most people over 65 show declines in perceptual, motor, and/or cognitive function that can interfere with their ability to use technologies.² These hurdles can be overcome with a comprehensive understanding of how aging influences technology use. This paper analyzes older adults’ attitudes toward technology and discusses the importance of designing technology that understands older adults’ unique needs, preferences, capabilities, and limitations.
Tech-Savvy Older Adults

Despite a common perception that older adults will not adopt technology, this population has demonstrated numerous instances of successful use and acceptance of technology. A recent report by Pew Research Center found that for the first time, more than half of older adults are active online. Even more importantly, recent studies also suggest that older adults are moving beyond simply buying a computer and connecting to the Internet and are now integrating technology into their everyday lives. For example, the same Pew Research Center report found that among older adults online, 70% use the Internet on a typical day. Similarly, an AARP survey found 40% of adults age 50 and older consider themselves “extremely or very comfortable using the Internet.” These findings indicate that once adults are given the tools and training needed to start using the Internet, they become active users. In addition to computer and Internet use, other technologies, such as e-readers and tablets, have also been increasingly adopted among older adults. A poll conducted by Harris Interactive found that older adults make up the highest percentage of tablet and e-reader owners. Their acceptance of e-readers and tablets is of particular interest because these technologies, like new healthcare technologies, have a touchscreen interface. Recognizing that consumers typically understand new things in the context of things they already know, it stands to reason that by making the unfamiliar—healthcare technology—familiar, the likelihood of adoption among older adults would be high.

This trend of older adults using technology is expected to continue to escalate as the 78 million baby boomers age and require more healthcare services. Baby boomers use technology for everything—from entertainment and news to online banking and social networking—almost twice as much as the current older generation and just as much as young adults. Baby boomers are also the early adopters of online health. They are 98% more likely to visit health websites compared to the average Internet user, and are increasingly exposed to online health services at work. A 2011 survey of nearly 3,000 large employers by global consulting firm Mercer found 11% of large employers—those with at least 5,000 employees—said they have a telemedicine program (the delivery of clinical services, including diagnosis and treatment, from a remote location) for their employees.

As of April 2012, 53% of American adults age 65 and older use the Internet. From entertainment and news to online banking and social networking—almost twice as much as the current older generation and just as much as young adults. Baby boomers are also the early adopters of online health. They are 98% more likely to visit health websites compared to the average Internet user, and are increasingly exposed to online health services at work. A 2011 survey of nearly 3,000 large employers by global consulting firm Mercer found 11% of large employers—those with at least 5,000 employees—said they have a telemedicine program (the delivery of clinical services, including diagnosis and treatment, from a remote location) for their employees.

Internet use by age group, 2000-2012

% of American adults age 18+ who use the Internet

Source: Pew Internet & American Life Project Surveys, April 2000-April 2012
More: http://pewinternet.org/Trend-Data/Internet-Adoption.aspx
Technology Adoption Influencers

Understanding barriers to wider healthcare technology adoption is vital to enable its further adoption. In this section, we discuss the complex interplay of barriers identified in literature, including: establishing a clear need for the technology and addressing older adults’ concerns about privacy, ease of use, and connectedness to their clinician. One patient satisfaction survey of participants in the Veterans Health Administration’s care coordination/home telehealth program found the only challenges participants identified were equipment functionality and care coordinator accessibility. These identified barriers suggest health technology must be easy-to-use, familiar, and maintain or enhance clinical relationships in order for older adults to integrate technology into their daily lives.

Meet the Needs and Wants of the Older Population

Research shows that older adults are more likely to use technology when the technology’s benefits are apparent and can enable them to accomplish their goals. Based on analysis of members’ concerns and preferences, it can be argued that older adults’ need for home healthcare technology will be largely driven by their dissatisfaction with our current healthcare system and desire for innovation that supports aging in place. Technology must go beyond inputs and data—it must quickly demonstrate benefits.

Addressing gaps in healthcare

Nearly half of American adults age 50 and older are concerned there won’t be enough nurses or doctors to provide care in the future. This concern is validated by recent research showing that a majority of older adults are not receiving the care they need. A 2012 poll found only 7% of adults age 60 and over are receiving all seven of the care services identified by the study as important to “healthy aging,” whereas a large majority (76%) received fewer than half. As the aging population continues to grow and consequently, resources become more and more stretched, older adults’ concern over access will also increase, opening the door for new care models. Evidence of this is already being seen. A recent national survey indicates that a “majority of American adults expect their doctors to communicate with them proactively—even when they’re well—via texts, emails and proactive smart phone alerts.”

Supporting older adults’ preferred lifestyle

Independence is a critical issue for many older adults, as exemplified by their overwhelming preference to live in their own homes, for as long as possible. A 2012 national sample of 2,250 American adults age 60 and older found at least three or four respondents in every market are “very or somewhat confident in their ability to stay in their current home for the next five to ten years without significant modifications,” and one in five already made modifications to help them age in place. However, due to the rising rates of chronic disease among older adults—approximately 80% of older adults require ongoing care

Humana Cares* Case Study

Insight supplied by participants of the Humana Cares telehealth pilot study suggest that healthcare in particular may be a domain in which older adults adopt technology as a helpful tool. Humana Cares, a national division of Humana*, launched an extensive RCM program in January 2011, where 2,000 of its members with congestive heart failure (100% of whom were age 65 or older) were given a remote care monitoring device that included daily biometric monitoring and member education. Near the conclusion of the pilot, participants expressed high satisfaction with the technology and in fact, were reluctant to return it. Kate Marcus, clinical operations manager for Humana Cares, recalls, “As we are removing these devices from the home, we are really seeing how connected the members are to their devices and how connected they are to the nurse.”
for at least one chronic condition, 50% have multiple chronic conditions, and 60% are managing three or more prescription medications—living at home can be unfeasible, unhealthy, and costly to MA plans. Fortunately, technologies have the potential to support aging in place and older adults agree. A 2008 AARP report showed that older adults are willing to use a wide range of technologies to “gather information, be safe at home, and promote their personal health and wellness” if these technologies allow them to remain independent.

Offer a Safe and Secure Experience

Concerns about privacy and security become more prevalent as people get older. A Pew Research Center survey showed that 61% of adults aged 65 and older are ‘very concerned’ about businesses and people they don’t know getting personal information about them or their families, compared to 46% of Americans between ages 18 and 29. Participants in a 2009 qualitative study on technology echo these sentiments, stating, “Everything comes back to privacy...we grew up reading 1984 and Brave New World. I don’t know if kids in high school even have to read these anymore. 1984 sounds like a history book. But it’s still valid—those futuristic environments in which everything is known and controlled.”

To remove this potential barrier, technology for older adults must be intuitive, incorporate logic flow, and include tailored features for novice users. Secondly, as people age, they can experience a number of perceptional, motor, and cognitive changes that threaten their ability to use technology effectively. However, with the innovative use of touchscreen interface, new technologies can now accommodate for many common age-related limitations in new ways.

Make Sophisticated Technology Simple

The use of technology by older adults is heavily predicated on the user interface experience in terms of ease of use and simplicity. Consider that 57% of baby boomers indicate a product having “too many features” is the primary cause of their frustration with technology. Older adults, who typically have little technological background compared to younger adults, lack confidence in their capabilities to understand and use technology, and as a result feel insecure, discouraged, irritated, and stressed when using technology.

To minimize these concerns, it is important to make privacy options clear and for technologies that target older adults to incorporate data protection features like encryption, authentication, and controlled access. One study found that only 34% of boomers felt comfortable about privacy with Internet sites that customized content or advertising, and yet, when provided with clearly stated privacy policies that number increased to 52%.

For example:

- Perceptual skills: Approximately one third of Americans between ages 65 and 74 have hearing loss, and most people notice visual problems around the age of 40. A large, colorful touchscreen makes it easier for older adults to perceive and comprehend visual messages.

- Motor movement: With age, people experience an overall slowness of movement and consequently, can find it difficult to make precise selections of small interface targets. In lieu of joysticks or a mouse, a touch screen uses virtual buttons that are easier to press accurately. Also, when used in landscape mode, older adults can hold the device in both hands while manipulating screen objects, reducing physical burden.

- Cognitive reasoning: Technologies traditionally rely on a person’s ability to keep information active; however this is typically unrealistic for older users unless they are practiced users. Good use of text, color, or icons inform users where they are in the system and where they have been.

It is also important to note that there is considerable variability in performance by individual, and thus, technology should also include customizable or adjustable features to meet each person’s unique needs.
Humanize Technology through Videoconferencing

A commonly held belief among older adults is that technology will replace in-person interaction with their healthcare provider. Technology features, like two-way videoconferencing, can help relieve these fears by making the online experience as familiar and as personalized as the offline experience in terms of content and interaction. Available data also largely disputes this fear, indicating that although technology redefines the patient-doctor relationship, it does not detract from it. For example, in a Florida-based study of primary-care-centered telemedicine, almost all respondents reported that using technology to consult with their doctor did not have a negative impact on the doctor/patient relationship. In fact, more than 60% of respondents thought the technology had a positive effect on their relationship with their doctor.

Conclusion

Contrary to popular belief, older adults are increasingly interested and involved in using new technology. MA plans and providers that fail to take advantage of this trend and optimize the use of technology miss an important opportunity to engage and improve the health of older adults—the most frequent and heaviest users of health services in the U.S.—in a more safe, effective, and cost-efficient way. However, not all technology is useful to and usable by older adults. Well-designed technology understands the user and accommodates for their unique needs, preferences, capabilities, and limitations. Leveraging these technologies will lead to interventions that promote successful aging, bringing important benefits to older adults, their families, and the healthcare system as a whole.

For More Information

Learn how Intel-GE Care Innovations™ solutions incorporate insights gained from 12 years living with, talking with, studying, observing, and listening to older adults and other people at all levels of healthcare and independent living. Visit careinnovations.com/MApayer to see an online overview of our remote care management platform.
References Consulted


11. Lance B. Young, PhD, MBA; Linda Foster, RN, MSN; Aaron Silander, MSW; Bonnie J. Wakefield, PhD, RN. Home Telehealth: Patient Satisfaction, Program Functions, and Challenges for the Care Coordinator. Journal of Gerontological Nursing, November 2011 - Volume 37 • Issue 11: 38-46


The Care Innovations™ remote care management solution requires an internet connection to enable communications with the patient's care team and back-end data hosting. Our remote care management solution is intended for use by patients who are able to operate our remote care management solution in accordance with its instructions for use and are under the guidance of a healthcare professional. Our remote care management solution is not intended for emergency medical communications or real-time patient monitoring. Available for over the counter use.

Copyright © 2015 Intel-GE Care Innovations LLC. All rights reserved. Care Innovations, the Care Innovations logo, and the Caring Icon logo are trademarks of Intel-GE Care Innovations LLC. Intel and the Intel corporate logo are trademarks of Intel Corporation in the United States and/or other countries, used under license. GE and the GE Monogram are trademarks of General Electric Company in the United States and/or other countries, used under license. *All other third-party trademarks are the properties of their respective owners.