

Independent/Assisted Living Industry in the U.S.

A Wellness & Health Innovation (WHI) white paper developed by Parks Associates



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INTRODUCTION

In this white paper, Parks Associates’ analyst Harry Wang provides perspectives on the U.S. independent/assisted living industry by analyzing industry drivers, consumer perceptions and needs, market structure, prevailing business models, and outlooks.

Aging Seniors and Their Needs

The world is graying. The U.S. Census Bureau projects the 65+ population will increase by 48% in 2005-2020. During this period, the oldest age group—85 years and above—will increase by 43%. Outside the U.S., the situation is equally challenging. Each month, the world’s elderly (65 and plus) population increases by 795,000¹. In Japan, the proportion of the population aged 65 years and older hit 20.8% in 2006 and consumed more than 50% of the national health expenditure². As this population will increase to around 40% of total population by 2050, their share of the healthcare expenditure will increase as well³. In China, the world’s biggest developing nation, more than 88 million people are seniors. By the end of 2050, more than 100 million people will be 75 years or older⁴.

Longevity is a blessing but creates its own social and economic implications. For example, the Alzheimer’s Association expects the number of people over 65 who suffer from Alzheimer’s disease to increase from five million in 2007 to 7.7 million in 2030. By 2050, 60% of people with Alzheimer’s disease in the U.S. will be 85 or older⁵. The ballooning senior population also strains an already fragile long-term care system. In the U.S., a shortage of nursing-home staff, high turnover rates for home aides, lack of funding for long-term health insurance, and experiences with (or expectations of) less than adequate service all contribute to people’s reluctance to move into a long-term care facility.

Instead, seniors prefer living in their homes and own communities. Technologies are gradually making it possible for them to live an independent life. However, user demands are increasingly expanding beyond basic safety and health needs to expect an experience of connection and fulfillment. Technologies, although currently focused on making the environment more intelligent in tracking seniors’ health status and activities, will catch up to these demands with more functions such as communication channels with family and health professionals.

SENIORS’ NEEDS AND WANTS ARE MULTIDIMENSIONAL

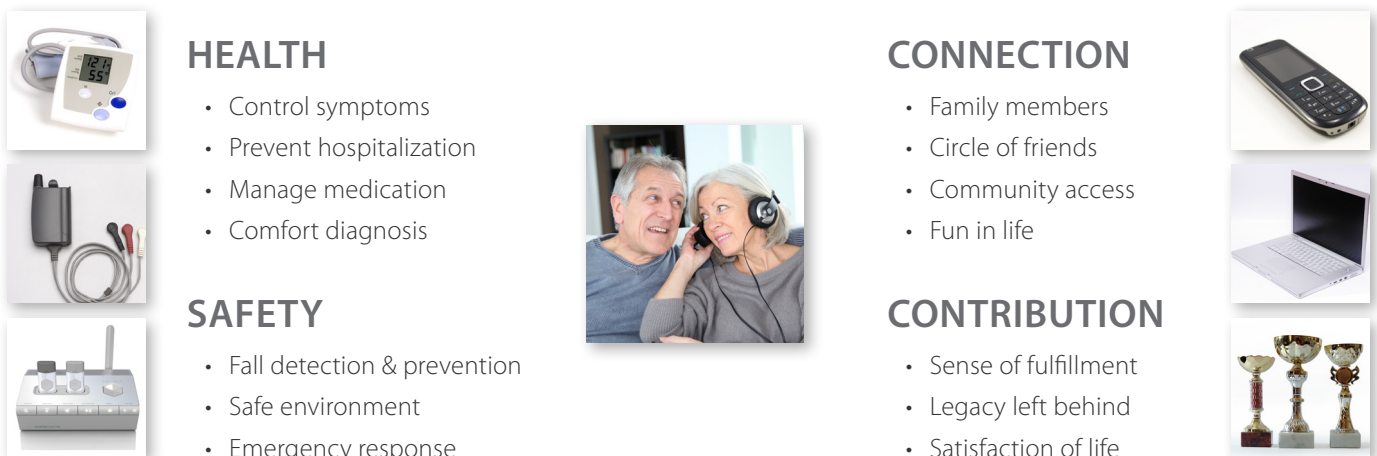


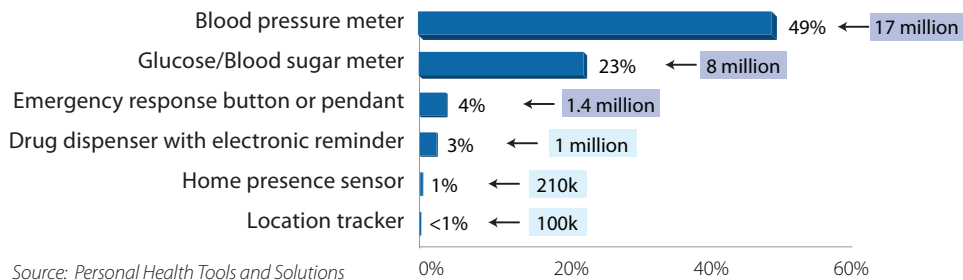
Figure 1 – Seniors’ Needs and Wants Are Multidimensional

The Role of Technologies and Seniors' Perceptions

General technology adoption among seniors is already reaching a mass-market level in the U.S. Parks Associates' consumer survey reveals that among seniors 65 years and older in the U.S., 81% have broadband Internet access, 73% subscribe to pay-TV services, and 72% have a basic mobile phone, with 6% owning a smartphone. However, adoption of technologies specific to health and safety, such as location trackers and home sensors, is still at an early stage (Figure 2).

Ownership of Health or Safety Monitor Devices (Q3/10)

(Among 644 seniors and older, ±3.86%)



Source: *Personal Health Tools and Solutions*
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Figure 2 – U.S. Ownership of Health or Safety Monitoring Devices

In the next five years, Parks Associates expects to see significant advances in body-area network sensors, silicon for medical use, mobile app-enabled care solutions, and embedded wireless monitoring technologies (Figure 3). These developments will further expand technology's role in end users' pursuit of wellness and independent living and create business opportunities for aspiring entrepreneurs.





Body-area Network Sensors	Silicon for Medical Use	Mobile App-enabled Care Solutions	Embedded Wireless Monitoring Technology
			
<p>Its embedded low-power radio enables wireless data transfer from sensors to recording devices</p> <p>Printed battery technology makes it a disposable digital band-aid</p>	<p>Its Tylenol capsule-sized EndoSure® sensor is an implantable wireless sensor to transmit cardiac output, blood pressure, and heart rate data to an external electronic module for monitoring and reporting</p>	<p>Its DiabetesManager mobile app supports medication adherence and securely provides for the capture, storage, and real-time transmission of blood glucose data and other diabetes self-management information</p>	<p>Its Mobile Cardiac Outpatient Telemetry solution uses mobile broadband to send ECG data to physicians for arrhythmia monitoring and detection</p>

Figure 3 – Technology Hotspots for the Next Five Years

Challenges still remain. Besides low awareness about the benefits of these technologies, many seniors are put off by the complexity of the hardware and software. Often companies adapt these devices from industry designs that lack consumer appeal. As a result, early-adopter seniors find these devices awkward to use, with user interfaces crammed with functions and no intuitive flow to the product design. Compliance consequently goes down, and consumers’ value perception turns negative.

The high costs of such devices and associated services are another inhibiting factor. For example, a wearable GPS tracker is currently priced at £128-£256 (\$200-\$400) plus a monthly service fee of £31.50 (\$49) and up. Advanced medication dispensers, in another example, can cost between £193 (\$300) and £4,490 (\$7,000), plus a monthly monitoring fee. In contrast, seniors and their grown-up children indicated in Parks Associates’ consumer survey⁶ that they are more comfortable with hardware costs under £64 (about \$100) and monthly service costs of £19-£22.50 (\$30-\$35)⁷.

Seniors’ adult children are an increasingly viable consumer segment for the senior independent living market. In the U.S. alone, about 18%, or 20 million households, are currently taking care of one or multiple family members with age-related problems. An additional eight million households anticipate looking after an elderly parent with either age-related problems or chronic ailments. Their top concern is that their parents might fall in the home and hurt themselves, which could lead to more serious consequences (Figure 4). Inability to call for help, taking the wrong medication, suffering an acute attack, and getting lost in the neighborhood complete the list of caregivers’ top-five concerns. Because of their concerns, they are far more interested than their loved ones (the people for whom the solution is designed) in finding a solution. Family caregivers show strong interest in basic services such as PERS (personal emergency response service), and they also indicate growing interest in advanced services such as in-home activity monitoring and telehealth monitoring with the hope it will bring comfort knowing their parents are safe.

Concerns about Sick Senior (Q2/10)

“What concerns you most about this person?”

(Among respondents taking care of or anticipating caring for loved ones w/ fragile conditions or Alzheimer’s/Parkinson Disease, n=340, ±5.31%)

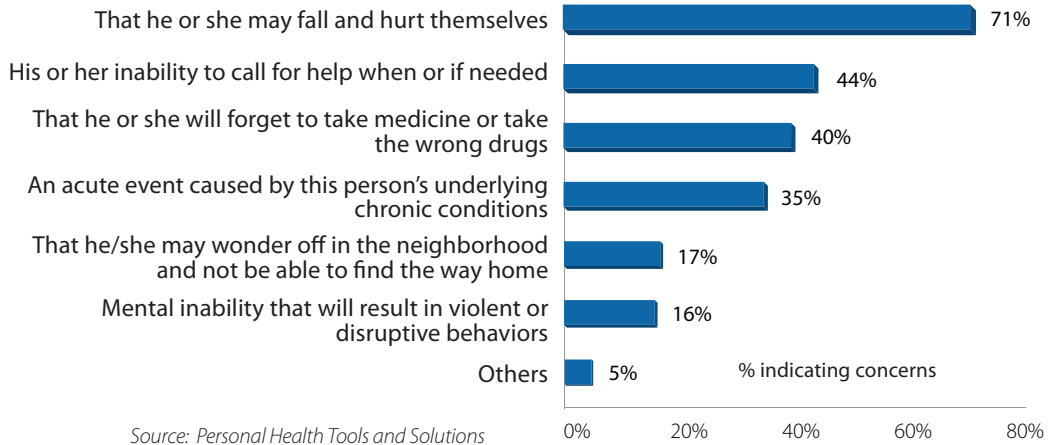


Figure 4 – Concerns about Seniors among Family Caregivers

Developing Successful Business Models for the Senior Independent Living Market

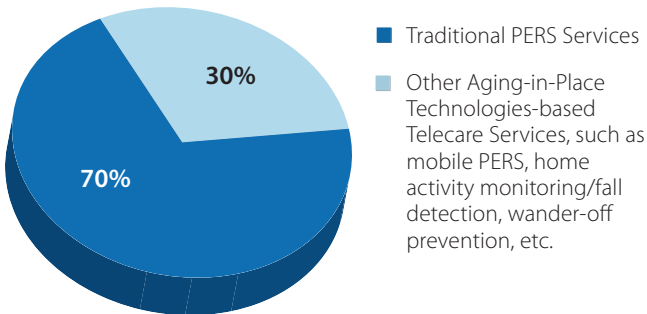
Companies of all types are targeting the senior independent living market (Figure 5), but few have found the magic formula to drive mass-market adoption. Some have chosen to offer a service with recurring fees while others focus on making and supplying hardware or software. Despite the variety of business approaches, developing a successful mass-market business model remains the top challenge for the industry. Many blame the lack of reimbursement as the key inhibitor, and given the current state of the global economy, these conditions are unlikely to change. In many countries, including the U.S., government programs fund senior care, and legislative actions to expand reimbursement of senior independent care equipment and services are a remote possibility at best, particularly in the near term when governments around the world are facing significant budget shortfalls or heavy debts.

<p>Equipment Vendors/Distributors</p> <p>Manufacture and distribute health and senior aging-in-place products like sensors, medication reminders, and home health monitoring platforms.</p>	
<p>Safety Service Providers</p> <p>Offer home emergency response, fall detection, and wander-off prevention services. Most also use a homegrown solution that may or may not work with third-party hardware.</p>	
<p>Safety and Health Service Providers</p> <p>Offer not only home safety monitoring solutions but also blend it with health vital sign collection, personal health education, communications with care providers and family members, etc.</p>	
<p>Software and Applications Developers</p> <p>Develop software or service platforms and do not own hardware or run service themselves. Their goal is to enable health and aging-in-place services by working with partners and licensing the platforms to service providers.</p>	

Figure 5 – Vendors in the Senior Independent Living Market

The consumer market may provide better near-term opportunities. Consumer spending is historically the pillar of the senior independent living industry as it accounts for 76% of the industry’s 2009 revenue in the U.S. The majority of the spending is on the PERS⁸ service (Figure 6).

**U.S. Aging-in-Place Revenues
By Technologies (2009)**



**U.S. Aging-in-Place Revenues
By Funding Sources (2009)**

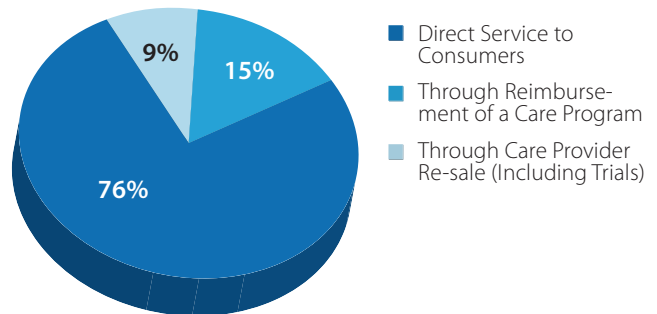


Figure 6 – Industry Revenue by Technology and Funding Sources

PERS providers are upgrading their service offerings and stepping up marketing activities in order to rejuvenate industry growth. Many have picked senior independent living solutions and bundle them with base PERS services. Fall detection, for instance, has become a top value-added service for PERS providers, and demand for this solution has attracted many independent solution providers, including Wellcore, Halo Monitoring, and AFrameDigital.

Developing a successful business model in this market cannot succeed without good partners. Vendors must pair up with partners to reach out to new funding sources or expand distribution channels to boost consumer awareness and sales. WellAware Systems, for instance, successfully convinced the Evangelical Lutheran Good Samaritan Society, a large homecare service provider, to run a five-state, three-year trial using \$8.1 million funding from The Leona M. and Harry B. Helmsley Charitable Trust. As part of the trial, 1,600 seniors will use WellAware Systems' home activity sensor solutions.

Another example is Intel-GE Care Innovations, the joint venture of Intel's Digital Health group and GE's home health division. It is expanding the distribution of its HealthGuide through partners like Fujitsu in the Netherlands, Orange in France, Telefonica in Spain, and Asklepios Hospital Group in Germany. These partners will add more touch points for technologies to reach seniors more effectively and efficiently.

Partnerships are also likely to reduce vendors' costs on solution development and lead to new directions. BL Healthcare, for instance, is building its solution into existing consumer electronic devices, and its partners, such as Verizon, are helping the start-up to make the total solution less costly to own and less intrusive to consumers' digital home user experience. These efforts are a prime example of the innovative thinking brought in by a new breed of solution developers that aim to address seniors' independent living needs and wants in a holistic manner and at a lower cost.

Outlook for the Industry

Looking to the future, WHI is excited about the new opportunities in digital health technologies introduced by the healthcare reform law in the U.S. The Patient Protection and Affordable Care Act first will establish a national voluntary insurance program for community living assistance services. Seniors enrolled in the program could use a cash benefit (no less than \$50 per day on average, with no lifetime limit) to pay for long-term care services or technologies. Secondly, the new law will encourage setup of accountable care organizations, which will provide coordinated care for patients in inpatient, outpatient, and home-based environments. Homecare agencies and services can be part of the accountable care organizations, and senior independent living services may become eligible as components of coordinated care and share the revenues with other care providers participating in the organizations. These prospects, together with the momentum and opportunities in the consumer market, are putting the senior independent living sector on a sustainable long-term growth track.

ENDNOTES:

¹ World Health Organization (WHO)

² Ibid

³ Ibid

⁴ National Bureau of Statistics of China

⁵ The Alzheimer's Association

⁶ Personal Health Tools and Applications (2Q2010), a Parks Associates consumer survey of 1,958 consumers of their adoption and interest in digital health technologies and services.

⁷ All Pound values in this paragraph are based on the exchange rate of 1 Pound=1.558 dollar as of December 31, 2010.

⁸ Personal Emergency Response System



ABOUT THE AUTHOR

Harry Wang studies the consumer electronics and entertainment service industries with a focus on portable CE hardware, software, and associated applications and services. He is also the lead analyst for Parks Associates' digital health research program. Harry has presented his research in numerous industry events including CES, Digital Hollywood, Photo Marketing Association Annual Show, American Telemedicine Association Annual Show, World Health Congress, and Parks Associates' CONNECTIONS™ conferences.

Harry earned his MS degree in marketing research from the University of Texas at Arlington. He also holds an MBA degree in finance from Texas Christian University and a BA degree in international business from Guangdong University of Foreign Studies, P.R. China..

INDUSTRY EXPERTISE: Digital Health Products and Services, Portable and Mobile Access Platforms and Applications, Digital Imaging Products and Services

ABOUT WELLNESS AND HEALTH INNOVATION

Wellness and Health Innovation (WHI) is a national initiative designed to support Scottish companies developing innovative products, services and applications for the wellness and health sector. Delivered on behalf of Scottish Enterprise, WHI fulfils this key role by building a community of WHI companies and providing market intelligence, product, technology and innovation support and business development assistance to enable Scottish SMEs to produce market-ready innovations that meet clear market needs.

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