Mobility Matters

A White Paper

By: Laurie Orlov

Aging in Place - Technology Watch
www.ageinplacetech.com

1/16/2012

MobileHelp
3701 FAU Blvd., Suite #300
Boca Raton, FL 33431
1-800-800-1710
www.mobilehelpnow.com

WHY MOBILITY ENABLES AGING IN PLACE

Older adults seek Independent living and aging in place

We like it where we are, thank you very much. Let's face it -- nobody wants to move from a home they enjoy, from familiar surroundings and long-time memories. Studies reinforce what families and older adults already know:

- **AARP and Pew survey responders prefer aging in place.** Depending on the survey, 75% or more of older adults want to remain in their own homes, for example, as cited in AARP's "Home and Community Preferences report."[1] And the Pew Research survey "Growing Old in America" reinforces the same message – in fact 67% of seniors aged 65+ live in homes they own.[2]
- **Harvard housing study 2011 – staying home**. The majority of baby boomers live in their own home and according to a recent Harvard study are likely to age in place since most people do not relocate in the years leading up to or after retirement.[3]
- **Living longer and living alone.** There are 5 million seniors aged 85+ in the United States. Today, women who reach the age of 85 are likely to live another 6-8 years, men another 5-7.[4] This year, the largest number ever reached the ages of 90 and older. Of today's 39 million adults aged 65+, 10 million of them live alone and according to the US Census Bureau, the likelihood of living alone increases with age.[5]

But older adults can be at risk as they age

With such an unprecedented population of seniors, especially those living alone, it is no wonder that their health risks grow right along with the growing population. According to the CDC, one out of three adults aged 65+ falls each year, but fewer than half talk to their doctor about it.[6] Yet falls are the leading cause of death and the most common cause of non-fatal injury. The risks are numerous and the impact to wellbeing can be disastrous:

- **Risk of falls in/near the home.** Forty-four percent of all falls among seniors occur as a result of environmental hazards in and around the home, including tripping on throw rugs and lighting cords, slipping in tubs and on floors, inadequate lighting, or slipping on icy walkways.[7]
- **Risk of falls outside the home.** Fifty-six percent of falls of older adults occur outside the home, according to a report, The Global Epidemiology of Falls from the World Health Organization.[8] Furthermore, following an initial fall, older adults become fearful of falling again – and may curtail needed walking and exercise as a result.
- **Outcomes from falls.** For seniors suffering from the thinning bones of osteoporosis, a fall that results in breaking a hip, in particular, recovery is arduous – and too often is incomplete. Adults age 70+ are three times as likely to die from ground-level falls, that is, falling from a standing position, as younger adults, according to a study from the University of Rochester.[9]

Keeping older adults out and about – mobility matters

Along with greater life expectancy come greater expectations. The growing population of 70+ and beyond want to be out and about – keeping up the activities they always have enjoyed, but not causing worry to their families, caregivers and friends about their safety. In fact, studies show that:

- **Seniors are still driving.** Eighty percent of the 65+ demographic still drives – which helps keep them up and out of the house – and they are less prone to fatal accidents than younger cohorts.[10] In fact, there is no legal age specified as to when seniors should stop driving – and the fact that they leave the area of their home, enables social interaction and contact with the outside world that the homebound elderly don't enjoy.
- **Caregivers need reassurance.** But family caregivers worry about older family members – and wish that they could be reassured that they are safe both at home and when they are out and about. In fact, a recent study by the National Alliance for Caregiving found that caregivers are interested in technology that could help care recipients remain safe – including medication support technologies and passive monitoring systems.[11]
- **PERS and monitoring work, but only near home.** But passive home activity monitoring and traditional PERS technologies, while useful for the homebound, actually effectively tether older adults to the area where sensors are placed or for Personal Emergency Response

Systems (PERS) enabling an alert up to a maximum of several hundred feet through open air – that is, no cement walls in between -- from technology base stations placed in their homes. Beyond these distance limitations, typically identified by manufacturers, pressing the button on a pendant or watch will produce a signal that cannot reach the base station. Going out for even a short walk will place those most at risk of falling outside of the sensing range of activity monitors.

MobileHelp services help seniors stay safe, reassures families

Tracking capabilities of technology have been greatly enhanced by the introduction of GPS and cellular technologies – as witnessed by our growing dependency on using them to navigate, communicate with family and friends, and even find services and restaurants. **MobileHelp**, launched in 2009, is a wireless and cellular PERS company, unique in that it offers:

- **Tracking via GPS and cellular.** The product uses the AT&T cellular voice and data network to enable those carrying the device, according to the company, to make contact with the response center from ‘97% of locations in the United States.” Using its GPS satellite tracking technology, the response center can pinpoint the location of the device on a map, speak to the device owner or a companion, and initiate an appropriate response.
- **Alerting of responders and families.** Based on an agreed to set of responders, that can include family members or caregivers, the response center identifies the location of the device and dispatches the

nearest available emergency responders to the mapped location of the individual who pressed the button on the device.

- **Visual mapping of whereabouts via device tracking.** Even in the circumstances where there is no emergency, the device can be tracked to its specific location – acting as reassurance to family and caregiver that the whereabouts of an individual are known.
- **Two-way voice inside and out to connect user with responder.** When individuals sign up for the **MobileHelp** service, their medication and drug allergy information is stored so that response center staff can notify emergency medical personnel when the individual is not able to do so directly.
- **Certification of good business practices, safety and reliability.** The mPERS (Mobile Personal Emergency Response) market is relatively new and consumer confidence in the products can depend on an understanding of the rigor of certifications against widely accepted standards. **MobileHelp** has a global IS09001 certification for its manufacturing process, carrier certifications from AT&T, FCC Part 15 certification of non-interferene, and PTRCB certification of network reliability and radiation emissions – in addition to UL 1635 and 1637, the standards for Medical Alert Systems.

Scenario One: **Close to home - Alone in the driveway with a small child**

Date of Incident: 11/14/2011
State: Florida

System

Solo[12]

Flag - Button

Mobile button was pressed.

Concern

Customer fell when trying to exit parked vehicle in driveway. The customer was able to press the mobile button and call for assistance. She informed the operator that she also had a small child with her.

Outcome

Operator contacted fire department to assist customer, and a friend was also notified and able to help her before the fire department arrived.

Notes

This customer has used the mobile device several times to call for assistance during falls and slips.

Map

Scenario Two: **Away from home – in church parking lot**

Date of Incident: 9/14/2011
State: Michigan

System

Duo[13]

Flag - Button

Mobile button was pressed.

Concern

Customer fell in the parking lot of his church, between two cars, and used his mobile device to call for help. He had lost his glasses and his left eyebrow was bleeding. He was able to describe his surroundings, and had help from a person who passed by and stayed with him until paramedics arrived.

Outcome

Operator contacted the paramedics, and later notified caregivers of the incident.

Notes

Customer is visually impaired.

Map

Scenario Three: **Inside the home – Dual alarm multiple signals received**

Date of Incident: 12/19/2011
State: Maryland

System

Duo[14]

Flag - Button

Customer pressed the emergency pendant. Alarm came from both mobile device and Base.

Concern

Customer fell in the kitchen and was not able to get up. She pushed her emergency pendant and was able to speak to the operator to request assistance.

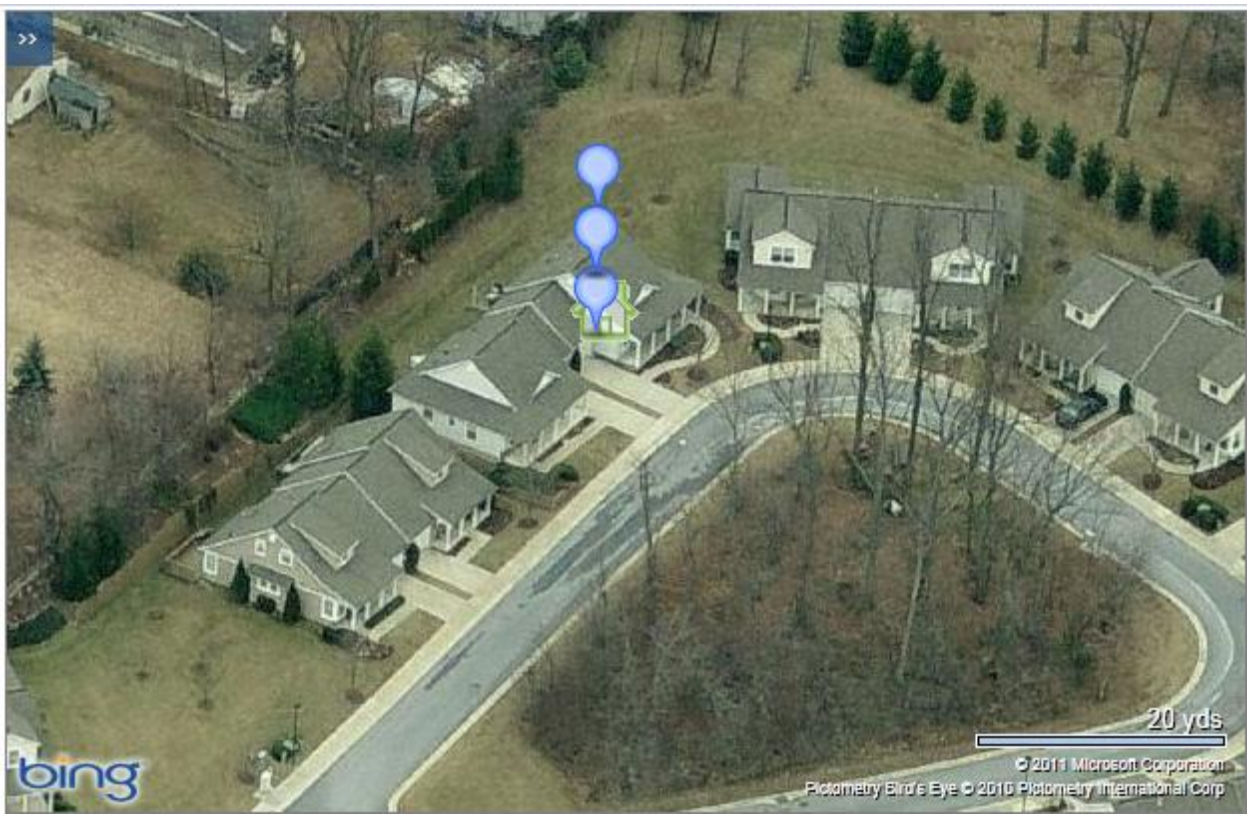
Outcome

The operator contacted the fire department and the customer's emergency contact who had the keys to her home. The fire department was able to enter the home and assist the customer.

Notes

Customer has trouble walking and uses a cane and walker.

Map



Conclusion

Older adults want to remain independent, age in their own homes, and they also want and need to feel safe and secure when they are away from the home. Traditional pendants restrict them to a specific distance from the home, while **MobileHelp** enables them to travel where they want to go, secure in the knowledge that an expert service organization is available to them at the press of a button, offering a visual map to responders of where they are, enabling a two-way conversation, and alerting of the right individuals at just the right time.

Footnotes

[1] http://assets.aarp.org/rgcenter/general/home-community-services-10.pdf

[2] http://www.pewsocialtrends.org/2009/06/29/growing-old-in-america-expectations-vs-reality/

[3] http://www.jchs.harvard.edu/publications/markets/son2011/son2011.pdf

[4] http://www.census.gov/prod/1/pop/p23-190/p23190-g.pdf

[5] http://www.census.gov/newsroom/releases/archives/facts_for_features_special_editions/cb10-ff06.html

[6] http://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html

[7] http://www.ext.colostate.edu/pubs/consumer/10242.html

[8] http://www.who.int/ageing/projects/1.Epidemiology%20of%20falls%20in%20older%20age.pdf

[9] http://www.sciencedaily.com/releases/2010/11/101101130135.htm

[10] http://dc.streetsblog.org/2011/06/14/how-seniors-get-stuck-at-home-with-no-transit-options/

[11] http://www.caregiving.org/data/FINAL_eConnected_Family_Caregiver_Study_Jan%202011.pdf

[12] http://www.mobilehelpnow.com/products.php#solo

[13] http://www.mobilehelpnow.com/products.php#duo

[14] http://www.mobilehelpnow.com/products.php#duo