

**Aging Well Working Session
Series: “*Family Matters in
Caregiving and Technology
Adoption*”**

Summary Report

April 2015

GLOBAL SOCIAL ENTERPRISE INITIATIVE

GEORGETOWN UNIVERSITY **McDonough**
SCHOOL of BUSINESS

PHILIPS

“Family Matters in Caregiving and Technology Adoption”

Executive Summary

More than 43.5 million adults care for a family member who is 50 years of age or older¹, with many of the care recipients being aging parents. Technology exists for caregivers to manage medication, connect with service providers, coordinate communication, and more. Additionally, smart technologies such as remote monitoring sensors, GPS trackers in shoes, and medication dispensers are available, but the companies that have introduced these technology applications cite challenges with customer acquisition and underwhelming sales². Few products for “aging well” and healthy aging are gaining marketplace traction in a meaningful way, despite the need for assistance in what is widely recognized as a time consuming, and often times stressful, responsibility.

In the fall of 2014, the Global Social Enterprise Initiative (GSEI) at Georgetown University’s McDonough School of Business and Philips conducted a research study to better understand how technology factors into the caregiving relationship. Both parties believe that technology has the potential to simplify caregiving duties and enable older adults to remain more independent, but recognize adoption has been low.

The study showed that caregivers are unintentional barriers to technology adoption by the older adults or seniors in their care. The needs of both consumers are, at times, competing: caregivers are primarily focused on the physiological and safety needs of their care recipient, while care recipients prioritize staying socially connected and engaged. In this context, the research revealed that seniors are being underexposed to new technologies despite their openness to trying them. They are underutilizing technology that could not only enrich their lives, but also enable them to be more independent and feel socially connected.

The study also reveals that some caregivers are unconsciously disregarding enrichment as a goal in their care recipient’s lives, instead focusing on the functional and practical duties of each day. Caregiving becomes a threshold event – one that transitions the relationship into a transactional one with the focus on a series of tasks to be accomplished.

¹ Alzheimer's Association, 2011 Alzheimer's Disease Facts and Figures, Alzheimer's and Dementia , Vol.7, Issue 2.] Updated: November 2012

² Interview with expert representing Silicon Valley start-up companies.

These results were discussed in April 2015 at a working session with leaders in caregiving, health care, consumer behavior, product innovation, technology platforms, policy, and academia (see Appendix A). Over the course of the working session, participants provided deeper insights into what was learned in the consumer study:

- ***New Narrative for Caregiving is Needed:*** The research suggests that the lack of a common experience for aging and elder care in the modern age is a contributing factor to low technology adoption in caregiving situations. Participants discussed how caregiving is most often conceived at a point of crisis or illness rather than an organic evolution in a life story. Several participants noted the need for a cultural shift in how caregiving is perceived. Most agreed that caregiving is a natural part of life's progression and our relationship with loved ones. By recognizing this as the common narrative in a family relationship, there will be room for honest dialogue about the impact of caregiving on all involved parties.
- ***Start with Familiar Technologies:*** Innovators need to start with technologies that are already being used and transform these for the aging well process. It is easier to rethink the use of televisions or lights in a room, rather than introduce something entirely new. How do we find technology that helps at the beginning of the care relationship and can be used through to the end, so it doesn't have to be relearned?
- ***Mutual Benefits Are Key:*** Marketers of technology products and services for aging well need to be aware there are two sets of consumer needs, which often times compete. The value proposition needs to be framed as being mutually beneficial, but likely for different reasons – and with different messages – one for caregivers and another for care recipients. While caregivers want peace of mind, messages around independence and active engagement will resonate more with the care recipient.
- ***Navigation needed:*** Trained navigators or counselors are needed to guide families on technology options that are available. Additionally, a tool that curates the best solutions would be useful to caregivers and their care recipients, particularly if the tool includes peer recommendations, which are highly valued. Besides consumers, professional members of the care team can benefit from training so they can recommend powerful tools for caregivers and technology solutions to their patients.
- ***Don't overlook intergenerational opportunities:*** The tension that is making caregivers a barrier to technology use can be overcome with a solution that could be readily available – younger family members, such as grandchildren. Technology that is being used by or can be taught by a grandchild may stand a better chance of being adopted.

Overview

Research by the National Alliance for Caregiving shows that nearly 40% of people in the U.S. are caring for an adult or child with a disability³. This leads one to assume there is a booming market ripe for caregiving technology. However, whether used to help people stay connected or to monitor health and well-being, technology usage and adoption is not breaking into the caregiving experience in a meaningful way.

Today, technology exists for caregivers to manage medication, connect with service providers, coordinate communication, and more. Additionally, smart technologies, such as remote monitoring using sensors, GPS trackers in shoes, and medication dispenser, are available, but the companies that have introduced these technology applications cite challenges with customer acquisition and underwhelming sales⁴.

Meanwhile, 90% of Americans over the age of 65 say they wish to remain in their homes and want to live independently as they age⁵. This holds true even if they begin to need assistance with daily living activities, as 82% say they would still prefer to stay in their homes⁶ rather than move into senior assisted living. With technology revolutionizing nearly every aspect of our lives, it would seem that a variety of technology solutions, applied individually or in combination, could significantly enable older adults to remain in their homes as they age. Yet, there is a tenuous connection between the promise of technologies for seniors, or “gerontechnology,” and its adoption.

This begs several questions to better understand the dissonance:

- *Who is the customer for caregiving technology?*
- *What can we do to increase integration of technologies that provide caregiving support?*
- *Have the right technology solutions been developed?*
- *What barriers impede a simplified and fulfilling caregiving experience?*
- *How do we address these barriers so that older adults can remain independent longer and age well, while alleviating caregiver stress?*

The “aging in place” or “aging well” technology market is estimated at \$2 billion⁷ annually and is expected to grow ten-fold by 2020⁸. By some estimates, revenues could reach as high as \$30 billion by 2017⁹. Yet, a recent study by Pew Research reveals that

³ Adler, Richard and Rajiv Mehta, “Catalyzing Technology to Support Family Caregiving”, National Alliance for Caregiving, July 2014.

⁴ Interview with expert representing Silicon Valley start-up companies.

⁵ “Aging in Place: A State Survey of Livability Policies and practices, National Conference of State Legislature, 2011.

⁶ Farber, Nicholas and Douglas Shinkle, “Aging in Place: A State Survey of Livability Policies and Practices”, National Conference of State Legislatures and AARP Policy Institute, December 2011.

⁷ Orlov, Laurie M. Technology for Aging In Place: 2013 Market Overview, July 20, 2013, www.aginginplacetech.com.

⁸ Cusano, Donna, “The ‘grey’ market is where it’s at for ‘quantified selfing’”.Telehealth & Telecare Aware, April 29, 2014.

⁹ “The Internet of Things for the Golden Years”, Semco Research, July 2013.

the overall technology adoption rate (Internet and broadband) among adults aged 65+ is lower (59%) than the general adult population (86%)¹⁰. This same study also shows that low income and non-college educated older adults have even lower technology adoption rates. Experts in the field of aging readily acknowledge that the marketplace of products for aging well, comprised largely of startups, is challenged by both channel complexity and consumer resistance¹¹.

In April 2015, Philips and GSEI held a working session titled “*Family Matters in Caregiving and Technology Adoption*” to look at these questions more closely. Experts in caregiving, health care, consumer behavior, product innovation, technology platforms, policy, and academia (see Appendix A) came together to build on the findings from new research that focused on probing deeply into the role of technology in the caregiving experience. This report provides highlights from the research and roundtable session.

Research Findings

Within a family, crossing the threshold into a caregiving relationship turns the relationship into one that is more complex than it may have been before. Several factors shape the caregiving experience. The list is long - personality, personal history, family/cultural traditions, illness, physical and mental capability, financial resources, living arrangements, geography, and access to transportation can all impact the caregiving experience. Additionally, emotions run the gamut from compliance and gratitude to resentment and deception. There is no shared narrative among caregivers other than the fact that the relationship is complicated and is evolving toward the inevitable decline of a loved one.

Additionally, both the caregiver and the person in their care are consumer targets for technology, but for different needs. So, how does this relationship influence technology usage, product innovation and service delivery? How can we work together to help older adults get the training and support they need to incorporate technology into their lives? What is the role of the caregiver in this equation?

To understand these questions, a two-part research study was conducted by GSEI and Philips to probe how the relationship between caregivers and care recipients might be affecting technology adoption and usage.

Methodology

The study began with 20-paired, telephone interviews (40 total), which were conducted with a caregiver taking care of an aging parent, spouse, relative or friend and the

¹⁰ Smith, Aaron, “Older Adults and Technology Use: Usage and Adoption”, Pew Research Internet Project, April 3, 2014.

¹¹ Orlov, Laurie M. “Technology for Aging in Place: 2015 Market Overview, January 2015.

recipient of that care¹². Each interview, which was conducted by a trained narratologist¹³, was conducted separately to promote an honest dialogue from both parties. No information was shared between the pair.

Following the interviews, a quantitative survey was designed based on insights from the paired conversations. The survey was fielded online to over 200 Americans, aged 30-65, who identified themselves as informal caregivers, meaning they do not receive compensation or have no special training. The recruitment was designed to find caregivers who were most likely to use and adopt technology in their everyday lives. For example, caregivers had to identify themselves as owning a smart phone and being comfortable using technology. Additionally, their care recipient needed to have an Internet connection and use technology for information gathering and communication purposes, such as e-mail. Factors such as poor health and low income, which are barriers to technology usage¹⁴, were controlled to curate a sample most conducive to technology adoption and usage.

Insights from New Study of Caregivers and Care Recipients

The research found that older adults being looked after by a caregiver are underexposed to new technologies despite their openness to trying them. As a result, technology is being underused to enrich their lives and preserve a state of greater independence to age in their own homes and communities.

This means that the caregivers are unintentional barriers to technology adoption as they are focused on physical health and safety needs of their loved one. Additionally, their underlying attitudes toward their caregiving situation are also impacting their actions. Without realizing it, some caregivers are unwittingly writing off enrichment as a goal in their care recipient's lives as they focus on the duties and daily tasks of care.

Fundamental Contradictions Shape the Experience of Caregiving

Caregivers in the study are actively using technology in their own lives, yet not to any meaningful degree in their caregiving responsibilities. In fact, 83 percent of them agreed that for people who are young and middle-aged today, technology is going to make getting older a better or easier experience.

¹² Care recipients with cognitive decline or memory issues were not recruited for the qualitative portion of the study and are underrepresented though not excluded from the quantitative survey.

¹³ Narratology refers to both the theory and study of narrative and narrative structure and the ways that these affect our perception.

¹⁴ Gell, Nancy, et.al. "Patterns of Technology Use Among Older Adults With and Without Disabilities", The Journal of Gerontology, November 26, 2013.

Needs are misaligned

As illustrated below, the caregiving relationship is fraught with contradictions. Left unresolved or even acknowledged, it helps explain the lack of technology used to support this relationship. Starting with differing views of what defines successful aging, this disparity contributes to a misplaced understanding of the needs for the care recipient.

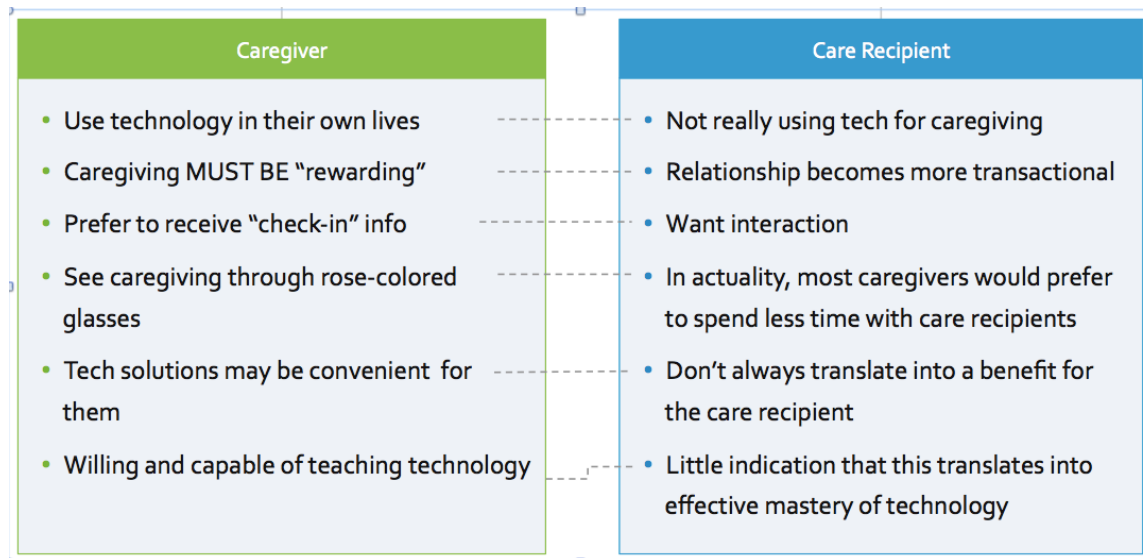


Figure 1: Contradictions in Caregiving

A key contradiction surfaced is the belief by the care recipient that technology can enhance social engagement by allowing individuals to stay connected to family and friends, foster learning, and promote a sense of purpose. Meanwhile, caregivers are more concerned with using technology for "check-in" information. This is a key point as a national longitudinal study of adults, age 60+, found that loneliness is the number one predictor of functional decline and death¹⁵. Additionally, loneliness is known to be a common source of distress, suffering, and impaired quality of life in older persons.

Therefore, it is no surprise that in the one-on-one interviews with the care recipients, they most often cited social interaction as what matters most to them as they age. On the other hand, caregivers - perhaps due to their younger age – see aging through a different lens and are more concerned with health, nutrition, and physical well-being as markers for successful aging. They are not readily making the connection to the importance of social engagement.

The differing perceptions of aging well translate into the caregiver seeking solutions that are health and security-related, while the care recipient wants social interaction,

¹⁵ Perissinotto, Carla M., et al, "Loneliness in Older Persons: A Predictor of Functional Decline and Death", The JAMA Network, July 23, 2012.

entertainment, and education to keep them from feeling isolated.

A MacArthur Foundation's study on successful aging defined the process of aging as "the ability to maintain three key behaviors or characteristics: low risk of disease and disease-related disability; high mental and physical function; and active engagement with life." Care recipients in our study brought to life just how important active engagement with life is to them.

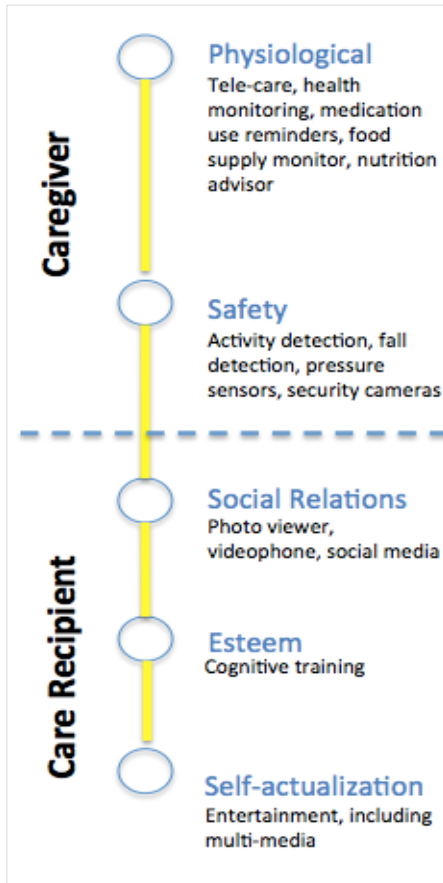
"My daughter has no idea about my dating life!"

"Everyone is playing games with others on their phones. I want to play games, too!"

Caregivers are so focused on their role as guardian for the health and safety of their care recipient that when taken in the context of Maslow's hierarchy of needs, meeting the needs for personal hygiene, food, safety, health, etc. all come first. Technology use does not readily come to mind as a way to help with all these time consuming duties that may be causing the caregiver stress. Technology is also not being thought of as a tool for the care recipients' enrichment or higher order needs for socialization, esteem, and self-actualization¹⁶ (see Figure 2).

¹⁶ Brink, Michiel and Johanna E.M.H. van Browswijk, "Addressing Maslow's deficiency needs in smart homes", Group PEBE, Department of the Built Environment, Eindhoven University of Technology, The Netherlands, 2013.

Figure 2



Recognizing the Need for Social Interaction and Enrichment: According to the study, 48% of caregivers said they are concerned that the older adults in their care are depressed or lonely. They also recognize the importance of entertainment and enrichment activities. Similarly, 60% of those surveyed said that enrichment for the care recipient is at, or near, the top of their priority list. Moreover, in one-on-one interviews with a group of care recipients, they most often cited social interaction as what matters most to them as they age. But, 68% of caregivers report that the older adult in their care has not started any new enrichment activities in the past two years and most often seek enrichment through watching television and talking on the phone.

Technology has the potential to offer great benefits to older adults. Those who embrace its use for more than basic phone calls, email and texting, exhibit noticeable improvements in their mental well-being. In fact, the research found a glimmer of hope when it comes to the use of social media, noting that

perceived loneliness drops among older adults who use it.

Intent vs. Action: If technology can improve the emotional well-being and independence of care recipients and alleviate caregiver stress, why is it underutilized? The study revealed that it is not the caregiver’s lack of desire or ability that prevents them from introducing new technology to their care recipients. For instance, the study found that:

- Two-thirds (66%) of caregivers believe their care recipient is open to using new technology;
- Nearly three-quarters (75%) of caregivers said it is fun or extremely fun to teach a care recipient a new technology; and
- 72 percent feel capable of teaching a new technology

With caregivers seemingly willing to share new technologies, why has this not become a reality?

Ushering in a “Vigil of Decline”

Surprisingly, the research pointed to caregivers as being unintentional barriers to technology adoption. Caregiving is a threshold event that fundamentally changes the relationship between two people – whether it is an adult-child and parent or caregiver and spouse or partner. Additionally, some caregivers begin to internalize the decline of

their loved one, in some ways already grieving and ushering in a “vigil of decline” as they wait for what for many is the inevitable next movement into professional care.

As a result, the caregiver will subconsciously make decisions about how they will invest their time. Whether it’s time pressure, or the fear of where the journey is headed, caregivers begin to cope by reducing the relationship to a functional one or a “to do” list to be completed. As caregiving duties evolve, the relationship becomes more transactional in nature. It becomes a series of tasks to be accomplished rather than a chance to build a closer relationship or invest in enrichment activities for their care recipient.

Now, caregivers fall into a sense of “duty” and “obligation” in the relationship with their care recipient. Some caregivers in the study spoke of a

“They did it for us, so now we do it for them.”

“There’s a lot more joy in taking care of a child, as opposed to helping a senior who in many respects is

feeling of role reversal with their aging parent. However, they pointed out that the relationship did not offer the same payoff of a child who will grow and thrive. These feelings are reinforced by the societal preconception that shapes the caregiving experience, such as the idea that most seniors are not technology users.

Combined with the fact that 32 percent of caregivers report having purchased a new technology that has gone unused, they are also not likely to encourage use of technologies beyond the television and phone, further underscoring their beliefs.

Caregivers are Divvying Up Limited Time

Caregivers in the study reported spending an average of 88 hours per month on caregiving activities, which is the equivalent of 11 work days. This is in addition to other responsibilities – 69% work full-time and 77% have children in their household. They are so overwhelmed with the day-to-day care responsibilities that they don't seem to have the time or patience to teach their loved one how to use available technology.

For technology to be an effective tool in a caregiving situation, it must meet the needs of both sets of consumers. As a result of the demands on their time, caregivers crave efficiency in this experience and not necessarily because they want to spend more “quality time” with his/her care recipient. In fact, they prefer to spend less time. When asked what they would do if technology could be employed to cut the time spent on caregiving duties in half, caregivers prioritized personal errands, quality time with their own family, and entertainment over spending more time with their older adult loved one. Only 17% of the recovered time would be allocated toward spending more time with their care recipient.

Technology needs to solve for competing needs:

Caregiver	Efficiency Practicality
Care Recipient	Retention of freedom & choice Socialization

Illustrating a conflict in caregiving needs and how technology factors in, is a story of a father and daughter interviewed for the study:

In this interview, a daughter described grocery shopping online as a “wonderful” service. However, when speaking with her father, he expressed that he did not want her to use it because going to the grocery store was an opportunity for her father to get out of the house. It offered him both freedom and choice.

Thus, the dilemma: What could be accomplished by the daughter in a matter of minutes instead took a few hours - factor in driving to her father’s house, the drive to the store, the time involved with shopping, the drive back to her father’s house and unloading, and the drive back to her home.

At a point in life when enjoyment options become fewer, the older adult relies more on the caregiver, who may be their only social outlet. Yet, the loss of independence could be overcome and opportunities for more socialization could be met with the introduction and emphasis on “active” technologies. These are technologies that keep the user – the care recipient in this case – in control of his/her environment and not confined to their four walls, which would simultaneously create more time for the caregiver.

Technology for aging well is being viewed too narrowly, with products aimed at caregivers primary use to monitor health and safety. There was virtually no mention of technology use for social interaction or enrichment among caregivers even though 78% acknowledge that the older adult in their care will become more reliant on them for entertainment and enrichment as they age. Caregivers are not making the connection

that by investing in enrichment for their care recipient, he/she may become less dependent on them.

Roundtable Findings

To probe more deeply into the research insights and outline potential changes to improve technology adoption and usage in caregiving, GSEI and Philips brought together executive decision makers representing health care, consumer behavior, product innovation, technology platforms policy, and academia in an April 2015 working session (see Appendix A). Armed with scenarios depicting research findings and real-life examples, participants tackled some key questions:


1. How does the idea of caregivers as a potential barrier to technology adoption among care recipients change product development and service delivery models?
2. How can we provide caregivers a more positive narrative to allow them to see technology as a means to support them versus another task?
3. How can we work together to help older adults get the training and support they need to incorporate technology into their lives? What community resources might be deployed to enable them to get the support they need?
4. What are innovations in the caregiving space, and what are possible areas for collaboration?
5. What are the **specific roles and actions** for each of the following stakeholders as we look to create a new paradigm for the caregiver-care recipient relationship?
 - Caregivers
 - Care Recipients
 - Product innovators
 - Service providers (both for profit and nonprofit)
 - Local and federal government
 - Academics
 - Policymakers

Several themes emerged from the roundtable session, including some thoughts on why caregivers are barriers to technology adoption and how to overcome it. The discussion also highlighted some opportunities to address positioning and messaging to a dual set of consumers – the caregiver and the care recipient.

New narrative for caregiving is needed

The caregiving experience is complex. It's no wonder that product and service innovators are not gaining traction with technology usage to aid in the process. This challenge is as much a marketing and communications opportunity, as it is a product opportunity. Several participants noted the need for a new narrative of caregiving - as a natural part of life's progression and our relationship with loved ones. Caregiving is part of the aging experience, but more so, a part of the family experience.

Caregivers and care recipients need guidance on how to have honest conversations with one another about their needs, their wants, their fears, and their hopes. Other family members and health professionals may also need guidance on their roles. The caregiver role is not cookie-cutter or stagnant. It constantly changes and doesn't end even if/when a care recipient goes into professional care.



"Caregiving is simply part of the family experience."

Ambivalence, Not Contradictions

While acknowledging the need for a more positive narrative, one participant felt caregiving was more about ambiguity and ambivalence than contradictions. It is difficult to suddenly find oneself responsible for an aging parent, relative, or friend - especially when one is also working and/or raising children. Caregiving is the interruption of an ongoing narrative with very little reward, satisfaction, sense of progress, or effective use of time.

Caregivers are not contradicting themselves, one participant clarified, but instead are being taken away from a different part of themselves. They need to give themselves permission to have their own lives. This led another participant to draw an analogy between caregiving and the "all joy and no fun" paradox of working women and parenthood¹⁷. When asked about motherhood, the working mom will likely gush about all the joys. Ask her what she wants most for Mother's Day, and the top three answers include "alone time" and "a break"¹⁸. Are there other similar narrative structures that can be brought to bear in the caregiving context?

Enrichment, Rather Than Rescue

Is there a way to move technology enrichment more "upstream," (starting at a younger age) so the infrastructure is in place before the need for care becomes paramount? Focusing on enrichment activities while the older adult is healthy and simply continuing these activities into the caregiving journey is a compelling way to minimize isolation and loneliness. The key is to finding technology that is helpful at the beginning of the aging process and doesn't need updating or upgrading every few months or years.

¹⁷ Solomon, Andrew, "Under Pressure: 'All Joy and No Fun' by Jennifer Senior", New York Times, January 31, 2014.

¹⁸ Voight, Kevin, "Mother's Day: The gift Mom really wants (you can't buy it)", May 10, 2014.

Language matters

Vocabulary in caregiving tends to put people in defined roles. More narratives describing a natural life occurrence that is an organic evolution of responsibility – rather than a “role reversal” of the parent becoming the child -- are what participants feel is needed. Integrating new narratives into popular television scripts and movies can help create more awareness and ignite an honest conversations needed for better care experiences and relationships.

“At the end of the day, I will always be a son, and she will always be my mom. If I change a light bulb, do I become a ‘light bulb changer’? Just because I start caring for my mom, why do I get the label of caregiver?”

Start With Familiar Technologies

Innovators need to start with technologies that are already being used and transform these for the aging well process. It is easier to rethink the use of televisions or lights in a room, rather than introduce something entirely new.

“Make new technologies hip, not medical.”

The idea of starting “upstream” while the consumer is active and healthy and having the technology device or service evolve (as one ages) was a widely discussed theme. For example, phones are already equipped with GPS. Wearable devices, such as fitness trackers and wearable clothing for exercise, appear to be ripe for extension.

Key Insights

- **Wide Range of Needs:** The caregiver has many roles, and enrichment for the care recipient is as important as providing for physiological care. Technology can play a powerful role in bringing in other family members, community peers, stakeholders, or other caregiving support that can lighten the burden on the caregiver. It can also supporting the care recipient and keep him/her from social isolation and loneliness.
- **Mutual Benefits Are Key:** Marketers of technology products and services for aging well need to be aware there are two sets of consumer needs, which often times compete. The value proposition needs to be framed as being mutually beneficial, but likely for different reasons for both caregivers and care recipients. For example, the GPS tracker worn in shoes or placed in a pocket is all about managing the care recipient’s safety for the caregiver. Yet armed with data about one’s personal health, it is empowering for the care recipient and key to maintaining independence. An interactive watch or fitness band may have a

better chance at adoption given its multi-purpose use.

AARP's success at providing driver's safety classes for adults in their late 60s and older is a great example of this. To potential participants, it is marketed as an opportunity to save money on their auto insurance premiums. To adult-aged children of older adults, it's promoted as a way to teach people how to compensate for the effects of aging on driving - a safety message.

Similarly, older adults resist anything that makes them feel old or less capable. Product positioning should steer clear of any reference to aging or loss of independence. Adoption could improve by providing discounts, focusing on a money saving message that avoids any age/decline stigma.

- **Full honestly unrealistic:** All participants agreed that an honest dialogue between the caregiver and care recipient is needed. However, some participants added that the parent-child relationship is based on a culture of lies from early childhood. It starts with parents pushing the idea of the tooth fairy and Santa Claus. It later involves the teenager who might lie about underage drinking or breaking a curfew. The same parents may later find themselves not being entirely truthful about their health status, or about whether they got any exercise that day or ate well. Many acknowledged that some degree of untruthfulness is to be expected.
- "I think the parent-child relationship doesn't become honest when someone gets sick. It's going to take more than good marketing to fix that social dynamic alone."*
- **Navigation needed:** Trained navigators or counselors are needed to guide families on technology options that are available. Additionally, a tool that curates the best solutions would be useful to caregivers and their care recipients. Tools that includes peer recommendations would be highly valued. Consumers, physicians, social workers, and others in the care team can also benefit from having access and knowledge about tools for caregivers that they can recommend to their patients.
 - **Income not the usual predictor:** This report features a consumer sample with the best likelihood of technology usage and adoption, and included a sample with above average income. Participants with start-up experience pointed out that people with higher income have the luxury of being in denial a little longer. Their experience has shown that families with lower socio-economic backgrounds are actually embracing technology faster because they run out of options faster. Another participant confirmed this observation and could be instructional to companies marketing their products and services aimed at the caregiving experience.

- ***Don't overlook intergenerational opportunities:*** The tension making caregivers barriers to technology use can be overcome with a solution that could be readily available – younger family members, such as grandchildren. Technology that is being used by or can be taught by a grandchild may stand a better chance of being adopted.

**Aging Well Working Session Series:
Family Matters in Caregiving and Technology Adoption
April 2, 2015**

Roundtable Participants

- 1. Terry Bradwell**, Chief Enterprise Strategy & Innovation Officer (Interim) & CIO, **AARP**
- 2. Alan Brightman**, Vice President & Research Fellow, **Yahoo! Labs**
- 3. Denise Brown**, Founder, **Caregiving.com**
- 4. Mary Lee Chamberlain**, Occupational Therapist, **Roobrik**
- 5. Deb Citrin**, Senior Director, Strategy and Business Development, Philips Home Monitoring, **Philips**
- 6. Meryl Comer**, President and CEO, **Geoffrey Beene Foundation Alzheimer's Initiative**
- 7. Judy Conaway**, Founder & Head of Content, **Roobrik**
- 8. David Creal**, Vice President of Franchise Support, **Right at Home**
- 9. Jodi Daniel**, Director, Office of the National Coordinator for Health Information Technology, **U.S. Department of Health & Human Services**
- 10. Jon Dauphine**, Senior Vice President, Education and Outreach, **AARP**
- 11. Scott Dingfield**, Chief Innovation Officer, **Home Instead Senior Care**
- 12. Jim Driscoll**, Strategy Consultant, **Epitome Group**
- 13. Ken Fang**, CEO, **Mobomo**
- 14. Jody Gastfriend**, Vice President, Senior Care, **Care.com**
- 15. Carrie Gladstone**, Assistant Vice President for Strategic Initiatives, Advancement Office, Washington, DC **Georgetown University**
- 16. Jennie Chin Hansen**, Recent CEO, **American Geriatrics Society**
- 17. Drew Holzapfel**, Managing Director, **High Lantern Group**
- 18. Gail Hunt**, President and CEO, **National Alliance for Caregiving**
- 19. Kathleen Kelly**, Executive Director, **Family Caregiver Alliance**
- 20. Jacquelyn Kung**, Expert/Consultant in Aging Space & Co-Founder, **ClearCare**
- 21. Zachary Lamm**, Senior Lead, Research and Narratology, **Epitome Group**
- 22. Carol Levine**, Director, Families and Health Care Project, **United Hospital Fund**
- 23. David Lindeman**, Director, Center for Aging and Technology, **University of California Center for Information Technology**
- 24. Liddy Manson**, President, **BeClose**
- 25. Ladan Manteghi**, Executive Director, Global Social Enterprise Initiative, **Georgetown University**
- 26. Kenneth Matos**, Senior Director, **Employment Research & Practice, Families & Work Institute**
- 27. Bill Novelli**, Founder, **Global Social Enterprise Initiative & Professor of Practice, Georgetown University**
- 28. Kimberly O'Loughlin**, General Manager of Philips Home Monitoring, **Philips**
- 29. Ashley Predith**, Assistant Executive Director, President's Council of Advisors on

Science & Technology, **Executive Office of the President**

30. **Lou Pugliese**, President, **EvolvED Global**
31. **John Schall**, CEO, **Caregiver Action Network**
32. **Palak Shah**, Social Innovations Director, **National Domestic Workers Alliance**
33. **David Shoultz**, Senior Director, Federal Government Relations and Policy, **Philips**
34. **Mark Stephenson**, Head of Brand Communications and Digital for North America, **Philips**
35. **Art Stevens**, Director of Social Innovation Projects, **PayPal**
36. **Paul Tang**, Internist and Vice President, Chief Innovation and Technology Officer, **Palo Alto Medical Foundation**
37. **Ed Van Siclen**, Vice President, Business Development, **ClearCare**
38. **Kamili Wilson**, Vice President, Isolation Impact Strategies, **AARP**

Author: Diane Ty with Ladan Manteghi, Global Social Enterprise Initiative at Georgetown University's McDonough School of Business.

Special Acknowledgement to: Lea Armstrong, Philips; Zachary Lamm and James Driscoll of The Epitome Group.