

HIMSS[®]18

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WHERE **THE WORLD** CONNECTS FOR HEALTH

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Las Vegas | Venetian – Palazzo – Sands Expo Center

A New Kind of Village: Combatting Loneliness in Older Adults

Session165, March 7, 2018

Davis Park, Front Porch Center for Innovation and Wellbeing

Sheila Zinck, IBM

ENGAGED

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Conflict of Interest

- Davis Park, Front Porch Center for Innovation and Wellbeing
- Sheila Zinck, IBM

Have no real or apparent conflicts of interest to report.

Agenda

- Why study loneliness?
- Research overview
 - The impacts of loneliness
 - The initiators of loneliness
 - The challenges to prevention and remediation
- Success factors and solution examples
- Recommendations

Learning Objectives

- Describe the impact of loneliness on physical health and mortality risk
- Identify the key initiators of loneliness in older adults
- Compare different solutions designed to mitigate loneliness and assess their impact
- Evaluate new technologies and partnerships required to develop and implement effective and scalable solutions

Aging populations are steadily growing

Projected percentage of the population greater than 60 years old by 2050



**“The challenge is converting
a world built by and for the young into a
world that supports and engages
population that live 100 years and
beyond.”**

Laura Carstensen
Director of the Stanford Center on
Longevity

Why Study Loneliness?

This is a 21st century challenge:

- A person born in 1900 had an average life expectancy of 50...people today can expect to live to 80+ with the “oldest of the old” (85+) growing at the fastest pace
- Loneliness in older adults has a pervasive impact on business, government and society



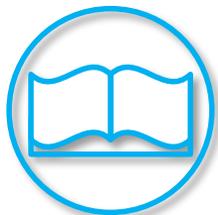
43%

Of older adults 60+ years old reported feelings of loneliness

Study Goals

As the global aging population continues to increase, there is a strong need to more fully understand the factors that play a role in loneliness's prevalence in the aging demographic

The findings of this study are designed to help promote issue awareness, encourage new perspectives, and identify potential solutions for communities, organizations, businesses, and governments wishing to engage and take action on this topic



Understand



Discover



Take Action

What is the role of digital and AI technologies in addressing this issue?

We conducted over 50 interviews across various disciplines to develop an inclusive global perspective



United States



Canada



United Kingdom



Germany



Denmark



Japan

Academics & Research

- Milken Institute Center for the Future of Aging
- Eriksholm Research Centre
- Rice University
- University of Tokyo
- University of California – San Diego

Public Health

- Local Government Association
- NHS24
- Healthcare DENMARK

Advocacy Groups

- Age UK
- Friends of the Elderly
- The Silver Line
- AustinUp

Foundations

- AARP
- CTA Foundation
- Global Coalition on Aging
- Alzheimer’s Disease International
- International Federation on Ageing

Industry Experts

- IBM Research
- IBM Watson Health
- IBM Watson IoT
- The Business of Aging

Businesses

- Baby Abuelita Productions
- Mindings
- Rendevar
- Front Porch

Understand	1	Why must organizations understand loneliness and aging?
	2	What precipitates loneliness?
Discover	3	Why is loneliness so difficult to mitigate?
	4	How is loneliness in the aging population being alleviated today?
Take action	5	What are guidelines for future solutions?

Loneliness stresses the health of older adults and their supporting infrastructure



Individual

Lonely individuals have increased physical and cognitive health risks that can decrease quality of life



Caregiver

Caregivers provide formal and informal support to older adults but will soon be outnumbered and unable to meet the needs of the growing demographic shift



Medical

Health systems experience pressure on limited resources due to high influx of individuals with physical and somatized health conditions linked to loneliness



Public and societal

Older adults are treated as an invisible population and whose neglect decreases the overall potential of society

The Impact of Loneliness

Individual Risks



29%

Increased risk of cardiovascular heart disease



64%

Increased risk of dementia



26%

Increased risk of death



43%

Of older adults 60+ years old reported feelings of loneliness

Economic Impact

Value of unpaid services provided by family caregivers in care to loved ones

\$470B



Healthcare spending attributed to adults 65+, despite being 14% of the U.S. total population

34%

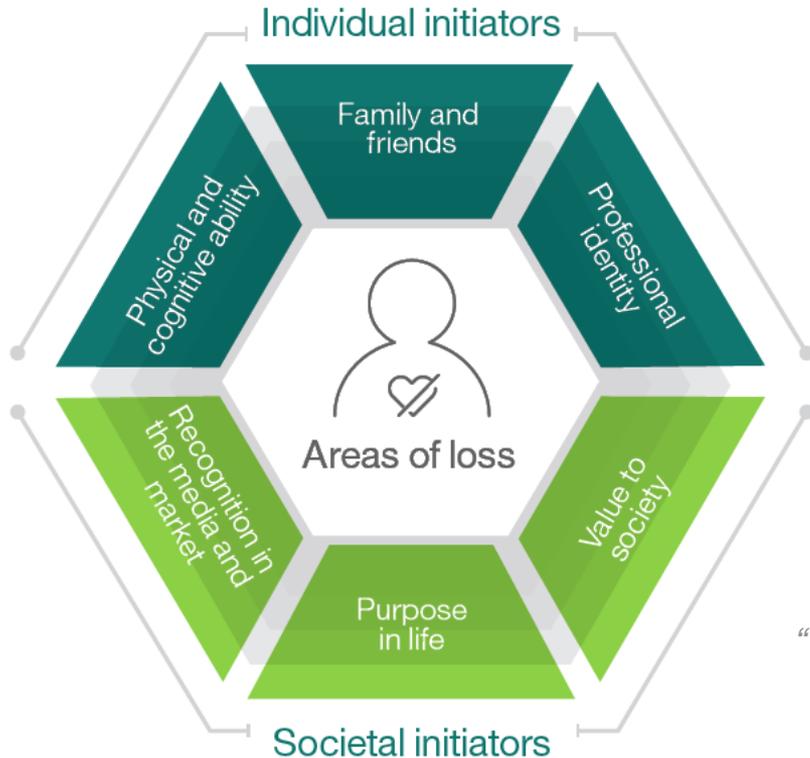


Estimated annual cost to employers attributed to caregiving-related productivity loss

\$33.6B



What causes loneliness in older adults?



- Health issues can limit one's ability to attend and participate in social activities with others
- Social networks naturally shrink over time if not maintained, eventually leading to isolation
- Many underestimate retirement's emotional and social impact
- Aging stereotypes perpetuate older adult portrayals as dependent on others and non-contributing
- Difficulty in finding purpose after retirement can be an isolating experience

"The root of loneliness for most people is some form of loss"

What we learned...the challenges



What we learned...the success factors

- Easy to access
- Community-specific
- Relevant content



Exploring innovative uses of technology to empower individuals to live well, especially in their later years

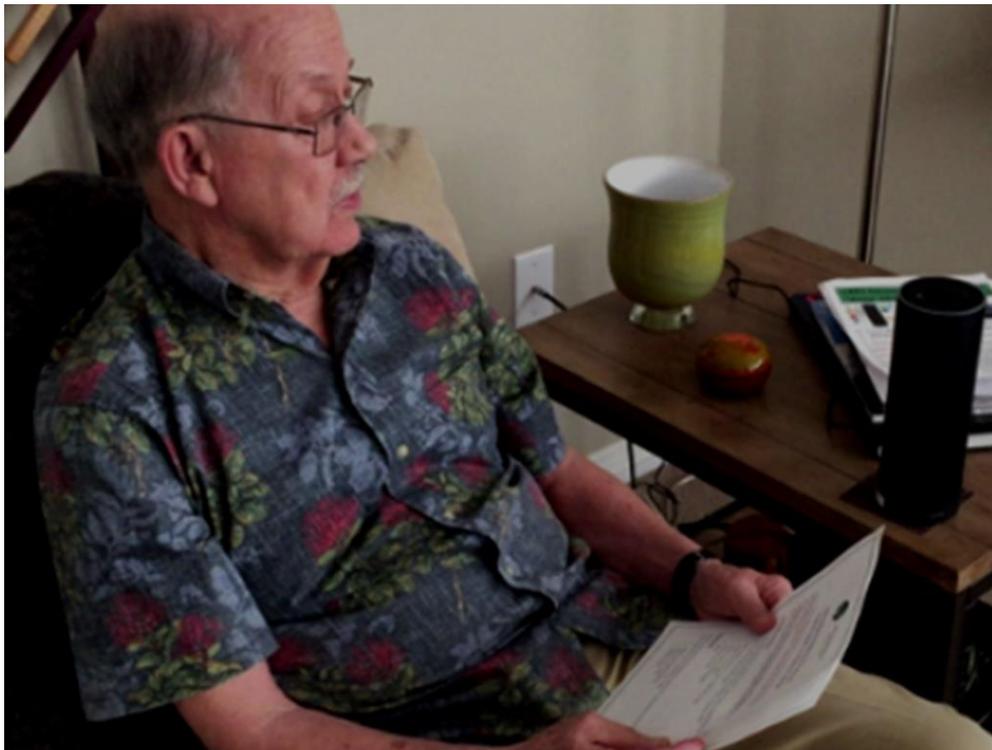


CENTER FOR INNOVATION
AND WELLBEING



Case Studies in Technology-based Engagement among Older Adults

- Voice First Engagement in Senior Living
- Transportation: Promoting Independence through Ridesharing
- Hearables: Emerging Innovations in Assistive Hearing Devices



Voice First Engagement in Senior Living

Virtual Personal Assistants and
Smart Homes for Older Adults



Study Outcomes (n=15)

Popular Skills

- Weather & Temperature (67%)
- Alarm & Timers (53%)
- Music, Date/Time (40%)
- News (27%)
- Searching information (20%)



Study Outcomes (n=15): Engagement

- 75% used their smart devices at least once a day
- 100% felt the Alexa overall made their life easier
- 71% felt more connected to family, friends, and the community since the start of the Alexa pilot



Voice First and Smart Homes



The Alexa Project Today

- 90 Voice First devices
- “Pay it forward”
- Addressing wellness and social isolation
- “Alexa Club”
- Scale and diffusion model across additional communities

Transportation: Promoting Independence through Ridesharing



Expectations: freedom, independence and affordability

“Convenience is paramount.”

“If I want to go get a cup of coffee, I want to go get a cup of coffee.”

“I don't drive a car anymore because I don't have the eyesight to drive.

“When you get to this age the cost of owning, maintaining, the insurance...and then you just figure out how much you need to go places, really the services of [ridesharing] are kind of cheaper...”



Olli: Autonomous Transportation

- Local Motors, IBM and Consumer Technology Association
- Resident focus groups discussions at San Diego Front Porch communities
- General transportation concerns: inflexibility, safety and privacy
- Residents are “not afraid of new technologies”

The Villa Gardens Lyft Concierge Pilot



- Pre- and post- surveys
- Interviews & focus group discussions
- 3 month duration
- Deployment to other Front Porch communities

Resident Survey (n=88)



- 65% don't own smartphones; 70% have never used ride-sharing services before
- 85% report 'access and convenience' impact their transportation decisions greatly
- 55% said transportation most needed for medical appointments
- 32% most used transportation for shopping and groceries



Resident Survey Comments

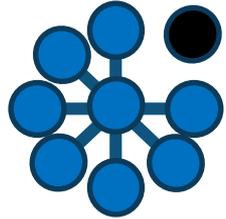
“Would travel much more if ride-sharing was available.”

“There are things we could do more of, things we could attend [w/ ride-sharing solutions].”

Hearables for All: Emerging Innovations in Assistive Hearing Devices



Why Hearables for All?



Increased social isolation from hearing loss



3X fall risk with mild hearing loss



Half of older adults 75+ face hearing difficulty



Only 30% of adults 70+ with hearing loss who could benefit from hearing aids have used them



Up to 40 percent faster cognitive decline

Hearables for All Project



- Funding from Consumer Technology Association (CTA)
- Hearables for All testing non-hearing aid assistive listening devices
- Devices include group and personal hearing devices



Project Goals

- Improve event experience
- Address social isolation
- Promote community building
- Increase engagement





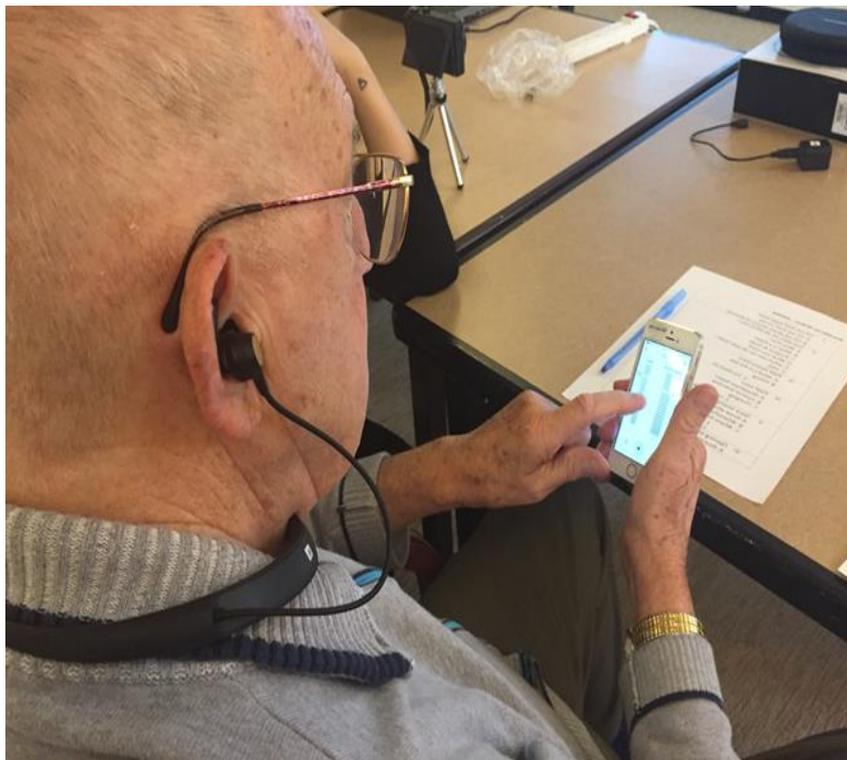
Ease of use

- Pick up a headset
- Put it on
- Adjust the sound with the dial on the earpiece
- Quality sound directly to ears
- Can be worn with a hearing aid or a T-Coil



Applications

- Community meetings and presentations
- Group classes
- “Silent Disco”
- One-on-one listening



Personal Sound Amplification Products (PSAPs)

- In-ear buds that may be used as alternatives to hearing aids
- Amplified sound similar intended to compete with hearing aids
 - Hearing aids (require prescription): \$4,000 to \$10,000/pair
 - PSAP's (over-the-counter): \$300 to \$500

Group Listening System: Findings (n=49)



- 63% were “Satisfied” or “Very Satisfied” with their experience.
- 69% Agreed/Strongly Agreed it helped them feel engaged.
- 63% Agreed/Strongly Agreed it made them more likely to attend future events.

Loneliness and the Aging - 21st century solutions

Three key questions...



1

How do we create a new kind of village?

...to help older adults feel more engaged with others and their community

2

How can we achieve new insights for detection and intervention?

...to discover new ways to address and alleviate loneliness

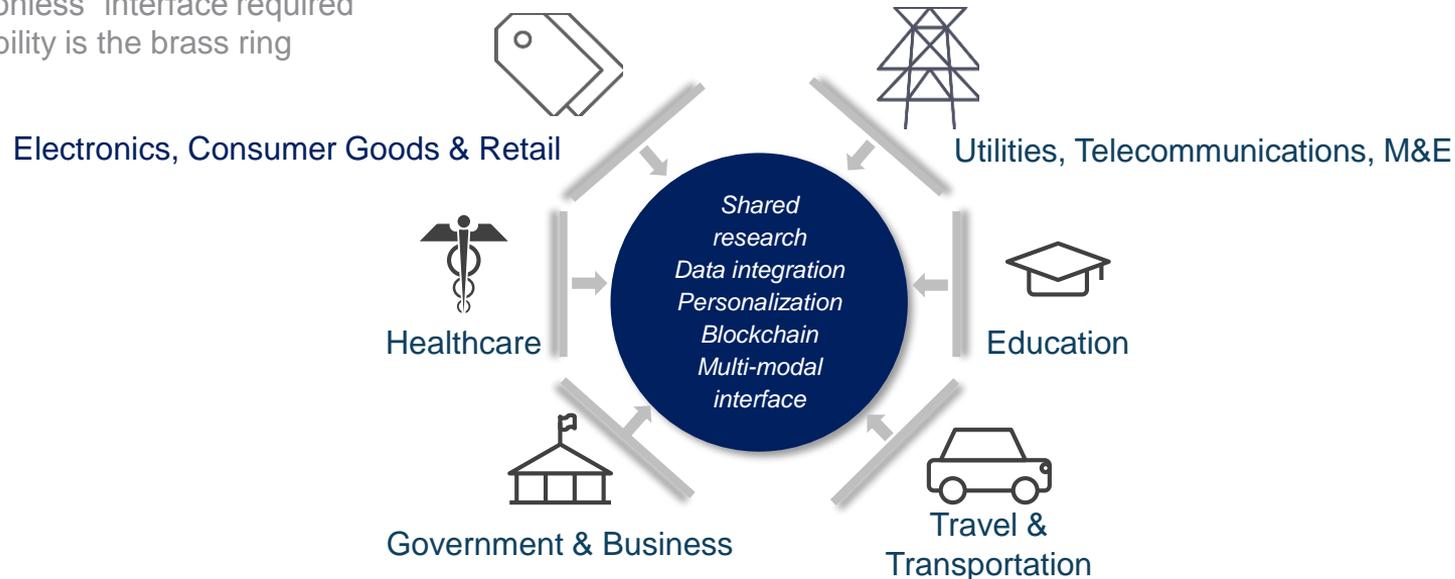
3

How can we help older adults rebuild their social capital?

... to continue social vibrancy and vitality in later life

Guidelines for New Solutions

- No one organization or industry can “own” this...opportunity and need for multiple stakeholders
- Secure, customized and relevant content & services are essential
- Personalization takes priority over simplification
- “Frictionless” interface required
- Scalability is the brass ring



Recommendations

For government agencies, healthcare providers and social support groups

- Incorporate loneliness criteria into routine medical screenings and social outreach programs.
- Leverage AI systems to aggregate data, connect organizations and effectively match and manage individual social and medical needs to programs and resources within the community



For government/municipalities and telecommunications & utilities providers

- Use existing network infrastructures with new partnerships to deliver personalized community based services and offerings that scale

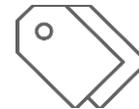


For all business organizations/employers

- “Re-wire, not retire”
 - Opportunity to revamp workplace policies and offer more flexible options to older adults
 - Retain institutional knowledge while offering retraining for new skills

For Consumer Goods, Retail, Electronics, T&T, Media

- Older adults control spend and are loyal – “What’s your senior market strategy?”
 - Shift focus from infirmity to “well-being, recreation, travel, fun”
 - Personalize offerings and experience; connect individuals to relevant content and interests



Questions?

For More Information

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