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
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.

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

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

**Public Health**
- Local Government Association
- NHS24
- Healthcare DENMARK

**Advocacy Groups**
- Age UK
- Friends of the Elderly
- The Silver Line
- AustinUp

**Industry Experts**
- IBM Research
- IBM Watson Health
- IBM Watson IoT
- The Business of Aging

**Businesses**
- Baby Abuelita Productions
- Mindings
- Rendever
- Front Porch

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<tr>
<th>Understand</th>
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<th>Why must organizations understand loneliness and aging?</th>
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<tbody>
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<td>2</td>
<td>What precipitates loneliness?</td>
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<td>Discover</td>
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<td>Why is loneliness so difficult to mitigate?</td>
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<td>How is loneliness in the aging population being alleviated today?</td>
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<td>Take action</td>
<td>5</td>
<td>What are guidelines for future solutions?</td>
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| United States | Canada | United Kingdom | Germany | Denmark | Japan |
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 somaticized 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

**Economic Impact**

- **43%**: Of older adults 60+ years old reported feelings of loneliness
- **$470B**: Value of unpaid services provided by family caregivers in care to loved ones
- **34%**: Healthcare spending attributed to adults 65+, despite being 14% of the U.S. total population
- **$33.6B**: Estimated annual cost to employers attributed to caregiving-related productivity loss
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”

Areas of loss:

- Physical and cognitive ability
- Professional identity
- Recognition in the market
- Value to society
- Purpose in life
- Family and friends

Individual initiators

Societal initiators
What we learned...the challenges

**Challenges to alleviate loneliness**

- **Screening**
  - Non-existent standard medical or social screening practices in place

- **Detection**
  - Difficult detection due to co-morbidity with other health and social conditions

- **Stigma**
  - Reluctance to reach out for social support due to social stigma

- **Ecosystem**
  - Fragmented and incomplete stakeholder ecosystem

- **Disconnect**
  - Disconnection among operations of multiple point solutions

- **Assumptions**
  - Inaccurate assumption prioritizing technology simplification over personalization and customization

**Lack of individual action**

**Lack of effective solutions**
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
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…”
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?

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

Increased social isolation from hearing loss

Up to 40 percent faster cognitive decline

3X fall risk with mild hearing loss

Sources: National Institute on Deafness and Other Communication Disorders; Johns Hopkins University;
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
Barbara receives an email from "Bank of America..."
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

 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...

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<th>Question</th>
<th>Answer</th>
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<td>How do we create a new kind of village?</td>
<td>...to help older adults feel more engaged with others and their community</td>
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<td>2</td>
<td>How can we achieve new insights for detection and intervention?</td>
<td>...to discover new ways to address and alleviate loneliness</td>
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<td>3</td>
<td>How can we help older adults rebuild their social capital?</td>
<td>...to continue social vibrancy and vitality in later life</td>
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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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