Loneliness and the Aging Population

How businesses and governments can address a looming public health crisis

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Loneliness is the perception of social isolation combined with the desire to increase connection with others

**Loneliness**: a subjective experience when one’s need for social interactions are not met

- **Desired frequency of social contact**
- **Meaningful relationships**
- **Sense of belonging, purpose, and having value**

Each individual has a different threshold for the level of social interaction they need to reach satisfaction with their social life.
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 will 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.

Our research investigated and discovered insights regarding loneliness in the older adult population.

What is the role of digital and cognitive technologies in addressing this issue?
We conducted over 50 interviews were conducted across various disciplines to develop an inclusive global perspective

**Academics & Research**
- Milken Institute Center for the Future of Aging
- Eriksholm Research Centre
- University of Wisconsin
- 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
- Rendever
- Front Porch
Five key questions are central to understanding loneliness in the aging population

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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. Older adults are particularly vulnerable to loneliness due to unique life events and milestones such as bereavement of spouse, retirement, etc.

**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. Their own health is negatively affected from caregiving stress experienced.

**Medical:**
Health systems experience pressure on limited resources due to high influx of individuals with physical and somaticized health conditions linked to loneliness.

**Public & Societal:**
Older adults are treated as an invisible population and whose neglect decreases the overall potential of society. Without older adult engagement, communities miss out on the opportunity to benefit from the knowledge and skills of their older residents.
Case study analysis spans two dimensions: intervention level and technology complexity

Loneliness among the older adult population is a challenging issue that is currently being addressed from a multitude of different angles. In our study, we analyzed a total of 24 different case studies showcasing a variety of approaches in engaging the older adult population (intervention level) and ideas in solution design (technology complexity).
Our studies have found that each intervention level has unique approaches towards loneliness alleviation.
Interventions at the individual level are characterized by approaches that personally address the user.

**Singing Dolls**
A doll resembling grandma or grandpa that sings assorted traditional songs in Hispanic culture at the push of a button.

**Robotic Pets**
An electronic pet whose interactions with the user are based on received social and environmental cues.

**Virtual Reality**
A virtual visual experience that transports the user to a local or faraway travel getaway.
Interventions at the community level utilize common communication platforms to reach larger audiences.

**Organized Living**
A redesign of society with infrastructure elements promoting healthy aging in place.

**City Adaptation**
A partnership between public and private groups working to advance opportunities for older adults.

**Smart Tablets**
A user-centered tablet specifically designed to facilitate social bonding with other users.

**Technology pilots**
A program that includes older adults in evaluating the impact new technologies have on improving quality of life.
Interventions at the national level employ existing infrastructure to scale solution efforts to the mass population

Healthy Post
A national postal program where the delivery of post is accompanied with a quick chat on health

Hotline for Help
A national hotline available to any resident in need of a friendly voice to talk to in times of loneliness

Community iPads
A national program where iPads with customized software connect older adults to healthcare services and their friends and family
Technology can enable or help facilitate the building of social connections and bonds

“There are ways of using digital technologies and digital connections that actually can … bridge that gap or bridge that [social] divide and … connect people where they were otherwise having difficulty actually making those connections or getting out of their house”

Thomas Goetz
Co-founder and CEO, Iodine

“Using technology as a facilitator not simply of virtual care, but to generate true socialization through real contact with other people, either within that home setting or within other settings, you know, taking people to clubs, to centers, etc., etc. is equally important”

George Crooks
Medical Director, NHS24

“I actually look at technology as creating a whole array of new possible tools to strengthen the social fabric, to help re-weave the fabric when it’s been torn, and to create new opportunities for communication”

James Lubben
Director, University Institute on Aging at Boston College
Our solution recommendations are based on the insights from our research findings

Three key questions…

How can we achieve new insights for detection and intervention to address and alleviate loneliness?

How do we help older adults feel more engaged with others and their community?

How can we help older adults create social vibrancy and vitality in later life?

Create a new kind of village

Achieve new insights

Rebuild social capital
Loneliness in older adults impacts a spectrum of stakeholders across various industries. By working with local partners, we can help redesign society that is effective in identifying loneliness and is capable of delivering new opportunities for older adults seeking to find purpose, engage with the community, and feel more connected with others.

1) How can we create a new kind of village?

Create a network where people can share advice and support each other

Provide active screening for early signs of loneliness

Redesign retirement concepts to reflect and explore new life purposes

Identify behavior patterns that may indicate isolation risk

Encourage development of new skills and interests

Improve mobility and engagement with self-driving vehicles

Build a better connected community for older adults
2) How can we achieve new insights for detection and intervention?

Aggregation, analysis, and integration of individual, stakeholder, research, and other information sources will yield greater insights leading to:

- Predictive abilities for earlier identification of people at risk, such as detecting physical or psychological changes known to play a role in loneliness
- More personal and effective connections that are relevant to and resonant with older adults
- New opportunities and innovations to enhance social connection and alleviate loneliness
3) How can we help older adults rebuild their social capital?

Just as many prepare their finances for retirement, it’s equally important for older adults to invest in and maintain their “social capital” for long-term health and happiness.

A scalable, customizable cognitive platform that combines user preferences with relevant content, services, and information can help older adults connect with their loved ones, engage with their communities, and build new social connections.

- Medical providers
- Community services
- Relevant web content
- Vetted individuals with an interest in connecting
- Learning opportunities
- Community engagements
- Interest-specific activities
- Accessible services based on preference
- Personal interests
- Geographic location
- Educational history
- Existing relationships
- Work history
- Medical conditions