

# The Future of Aging



## We are all aging.

As a biological inevitability, and a critical element of social life, aging transforms how we relate to ourselves, other people, and our environments. Unfortunately, it's a subject that remains neglected in mainstream dialogue. This lack of attention inhibits our ability to clearly recognize what's at stake for older adults and to consciously design for our collective future.



# The Future of Aging

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# The Heart of the Matter

As a young visiting nurse, I gained an early appreciation for the diverse ways in which people live and age in the community. Providing care to seniors in their home environment is an extraordinary opportunity to observe human behavior, social dynamics, and patterns of everyday life. Over time, you meet families, pets, and neighbors. You catch lingering notes of favorite foods and music, and hear personal stories of challenge and triumph. Every person is one of a kind, and this insight has always stayed with me.

Later, when I was working on staffing and care standards for long-term care homes, I had the opportunity to visit several facilities and meet with the people who lived and worked there. My interactions with residents and their families served as another great reminder that the way we care for the elderly is not simply a health care conversation, but a much broader societal issue that speaks to the heart of our values.

Re-conceptualizing the way we live and die has massive potential to impact hope and happiness, and transform society. In the future, the way we care for people at home will look very different to how we care for them today. My time at SE Health has been focused on accelerating innovation and change in how we respond to the needs of an aging population. Often, the issues are complex—but the solutions are not.

*How might we make our country and communities a better place to grow old?*

*How might we provide people with more versatility, choice, and involvement in their own wellness and care?*

Aging is a normal part of the life journey. In order to adapt our health system to an older population, we need to step back and take a broader view of aging and well-being, and assess how the facets of each collide. Coupled with intentional design and investment, this will pave the way for new narratives, new business models, and an immersive approach.

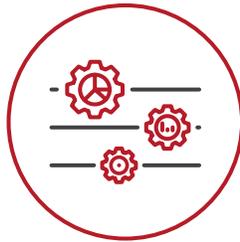
*The Future of Aging* provides comprehensive insights on healthy aging, the strengths of people, and the opportunities we must face and embrace together. After all, the aging population is all of us.



**Shirlee Sharkey**  
CEO, SE Health

This booklet provides a preview of one of the topics addressed in *The Future of Aging*. Our approach to this book was complex, multidisciplinary, and convergent in nature—a reflection of the times we live in. It is the result of a collaboration between Idea Couture, SE Health, and experts from various industries, who all came together to explore various topics through a systemic, experiential, foresight, and design lens.

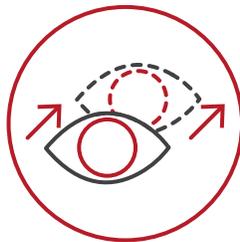
In this booklet, we present a brief perspective on aging in one’s community.



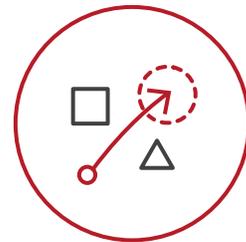
Systemic Perspective



Experiential Insight



Foresight Shifts



Design Strategies

# 01 Aging in One's Community

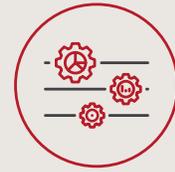
“Although some of the variations in older people’s health reflect their genetic inheritance, most is due to their physical and social environments, and the influence of these environments on their opportunities and health behavior.”



WHERE INDIVIDUAL MEETS ENVIRONMENT

# Where Individual Meets Environment

Understanding the current state.



SYSTEMIC PERSPECTIVE



The World Health Organization (WHO) defines “healthy aging” as the process of developing and maintaining functional ability that enables well-being in older age. There are three elements comprising functional ability: the capacity of the individual, the environment the individual inhabits, and the interplay between these two spheres.

This chapter focuses on the second component, environment. Specifically, it looks at the role that one’s community has in maintaining health and well-being in later life. An individual’s community encompasses their health and social systems, as well as their physical environment, all of which are considered important intermediaries to healthy aging.

Between 2015 and 2030, senior populations—defined by the United Nations as those over 60 years old—are expected to grow by 41% in North America and 23% in Europe, alongside even more rapidly aging populations observed in Asia, Africa, and Latin America. With this aggregate shift in demographics, governments are beginning to examine how their growing aging populations may come to challenge the sustainability of their health systems. Many want to transform these systems—which represent the single largest budget line for most governments—by transitioning from a costly focus on acute care beds, to a comprehensive system where health is created and maintained in the community. This massive reorganization is happening in countries such as Denmark, where the acute length of stay is currently 3.5 days (versus 6.5 days across the Organisation for Economic Co-operation and Development [OECD]) and plans are in progress to further reduce length of stay to below 3 days through deinstitutionalization of care delivery. New community-based models of care are also emerging, such as Health 1000 in the UK, a primary practice for older adults with complex health and social needs. These initiatives challenge predominant medical models of aging.

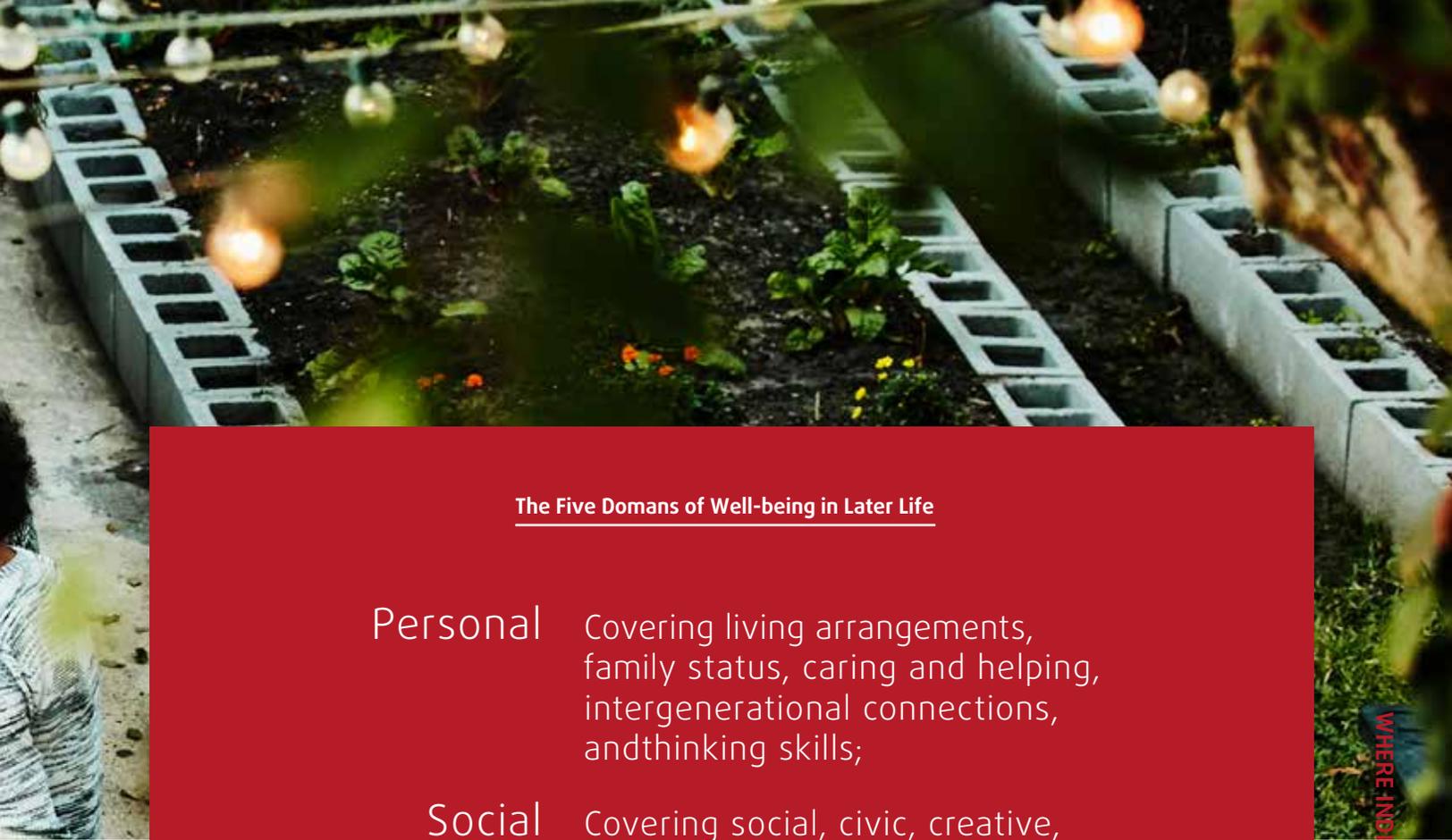
Many health systems are dealing with the need to address not only with the immediate health issues of an aging population, but also the failure of society to address the underlying causes of disease that have compounded over time. According to the WHO’s Department of Aging and Life Course, though individuals may start with similar health statuses at birth, their paths diverge over time as “inequalities accumulate over the life course, due to exposure to multiple health, environmental, and social risks or barriers.” For example, according to an article published by the



*Could new living arrangements, community models, systems of care, or social spaces mitigate the effect of relationship status?*

Gerontological Society of America, relationship status in older adults—that is, whether they are married, never married, divorced, or widowed—has been shown to be a significant determinant for long-term care admissions. Could new living arrangements, community models, systems of care, or social spaces mitigate the effect of relationship status?

Age UK developed an Index of Well-being in Later Life to look at how older adults rate their well-being across domains and how various factors contribute to it (see five domains to the right). The Index reinforces the central role of community, as it emphasizes the importance of seniors maintaining meaningful engagement with the world to bolster their well-being. In this chapter, we look at how various emerging community models, built environments, and informal systems will come to play an increasingly important role in supporting healthy aging in one's community.



WHERE INDIVIDUAL MEETS ENVIRONMENT

The Five Domans of Well-being in Later Life

- Personal** Covering living arrangements, family status, caring and helping, intergenerational connections, and thinking skills;
- Social** Covering social, civic, creative, and cultural participation as well as neighborliness and friendships, and personality attributes;
- Health** Covering physical and mental health, mental wellbeing, long-standing illness or disability, diagnosed health conditions, and physical activities;
- Resources** Covering employment status and earnings, pension income, financial and housing wealth, home ownership, and material resources;
- Local** Covering satisfaction with medical, leisure, public transport and shopping services.

# The Experience of Social Clustering



Exploring the context of community.

Communities are unique and dynamic combinations of individuals, places, ideas, and practices. They are cultivated by people who share a space, have common interests, take part in activities together, and participate in both giving and receiving support—all of which creates a sense of purpose, belonging, and stability among community members.

Throughout a person's life, they forge communities at various scales comprising family, friends, colleagues, and neighbors. These different groups then come to form the social safety net that individuals rely on for emotional and physical support. This support is a critical determinant of overall health and well-being at any age, but its form undergoes radical transformations across multiple transitions that occur in later life.

In this section, we examine how seniors' social relationships, cultural values, and built environments impact their personal beliefs, attitudes, and needs, which then drive their daily decisions and overall life satisfaction. We provide a brief overview of some established social and cultural factors that come together to shape how seniors engage in and experience community as they age, then identify and imagine how emergent forces of change might reshape community for seniors in the future.

#### Loss + Transition

The traditional role of family as the social safety net for seniors is being challenged, with marital instability, financial pressures, and geographic dispersion all making it increasingly difficult for seniors to access adequate support from their partners, children, and siblings. At the same time, today's seniors are living longer with chronic health issues, which means they may need more support than ever. As they spend less time with their adult children, and as their partners, family members, and close friends pass away, many seniors need to make deliberate choices about which community they will choose to support them as they age.

- "Transitions to long-term and residential care among older Canadians," Health Reports, Statistics Canada

**Elderly individuals who have lost a spouse are four times more likely to live in a seniors' residence or nursing home compared to elderly couples whose spouses are living.**



New ways of building community through both formal and informal systems of support are emerging to create stability for seniors experiencing loss and declining health. Alternative ideas and models of community can help promote resilience among seniors as they navigate the relationship transitions and losses that come with aging.

## Belonging

The effects of chronic illnesses, declining mobility, or living on a fixed income cause many seniors to disengage from the social activities that they previously enjoyed. As they retreat from the extended communities offered by clubs, associations, or teams, they also lose the social bonds that have provided them with a sense of belonging. Meanwhile, disruptions to living arrangements—such as moving into an intergenerational household, a retirement home, or a healthcare facility—engender a greater need for belonging, as well as a desire to understand one’s role in society. Shared housing offers the possibility of new relationships, but it may also set the stage for loneliness, as a loss of independence and a sense of being away from one’s “real” home can lead to isolation or depression.

Current models for engaging seniors in organized communities focus on providing medical and emotional support, but few consider how to appeal to seniors through their personal interests and values, or through the knowledge and skills that they can contribute to the community. Developing community models that specifically address seniors’ sense of belonging means discovering who people are and providing the support they need to form new social connections.

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“Positive indicators of social well-being may be associated with lower levels of interleukin-6 in otherwise healthy people. Interleukin-6 is an inflammatory factor implicated in age-related disorders such as Alzheimer’s disease, osteoporosis, rheumatoid arthritis, cardiovascular disease, and some forms of cancer.”




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— National Institute on Aging

## Purpose + Status

Seniors experience many changes in social status and identity, which are brought on by life-cycle events like retirement or watching children and grandchildren move away. These changes are often linked to a lost sense of self-worth or purpose, particularly for people who have spent most of their lives within a social and economic environment that aligns “productive capabilities” with identity and personal value. As they become less responsible for others and less likely to contribute to their communities in the ways they once did, seniors may feel like less of a person themselves.

Typical programs and services for people of all ages are designed according to the principles of individualism and productivity. Because such initiatives promote the value of standard status symbols like wealth, high-powered work, physical fitness, and other forms of achievement that do not align with old age, they allow discrimination against elderly people to emerge and persist. Moving forward, programs and services should be designed based on an understanding of the diverse and elaborate ways people can contribute to society. This would allow older people to be responsible, find purpose, and achieve social status in ways that they had previously not considered.



## Ageism:

“A process of systematic stereotyping or discrimination against people because they are old, just as racism and sexism accomplish with skin color and gender. [...] Ageism allows the younger generations to see older people as different than themselves; thus they subtly cease to identify with their elders as human beings.”

– *Age-Ism: Another Form of Bigotry*, Robert N Butler



# “John’s Story

Bringing to life current challenges  
in community.

Male, 75

Living alone (Private household)  
Retired (Private retirement income)  
Suburban

\$60,000–69,999  
Non-University Certificate  
Born in North America

Diabetes, Osteoarthritis  
Formal Home Care  
No Family Caregiver



The following persona is intended to bring to life the experiential insight about seniors and community. A persona grounds ethnographic research in an individual narrative, detailing how overarching themes—such as loss and transition, belonging, as well as purpose and status—may play out in detail for a particular person. We use personas as empathy-building and creative-thinking tools that help conceptualize and prototype the meaningful experiences that might come to define a future state.

JOHN'S STORY

### John's Story

John took a slow sip of coffee as he turned the next page of his book, then breathed in a gust of crisp morning air. The wind caused the leaves to fall steadily from the trees lining John's quiet street; it was that same frigid breeze that slowed John down each day. Massaging his stiff hands, John glanced over at the empty chair beside him, trying not to think about how lonely this past year had been. At least his home care aid, Nikita, would be arriving soon.

With all of John's close family members living out of province, Nikita was the only companion he had. He rarely spoke to his only child, Michael, who had become distant since John's wife Katherine passed away, and who frequently traveled for work. Moreover, while

the people on his street seemed nice, there always seemed to be too much space between him and them to ever develop a meaningful relationship. The only interactions he could muster up with these far younger strangers were distant smiles, which dropped off following a quick hello.

As he noticed Nikita pull up in her old, rickety sedan, John closed his book and drained the last of his coffee. She looked exhausted as she got out of her car and walked to his door.

“Morning, John,” she said. “Is that your favorite book again?”

John nodded and smiled, lifting himself up with the help of his cane. Sometimes, if Nikita wasn’t in a hurry to get home to her husband and kids, John would read her a passage from *Walden*. However, whenever he discussed the appeal of living in the woods—a desire he had shared with Katherine—Nikita would simply nod. He sometimes

wondered if Nikita was really listening or if she was just humoring him. He had been spending so much time alone since Katherine passed. His moments of solitude, which he had once treasured, had become an inescapable state of constant isolation. Katherine had always been the one to make plans, like visiting the nearby lavender farmers or even just making dinner reservations with friends and family. Without her, he was having a hard time knowing who to reach out to—and how.

Later that afternoon, Nikita and John walked to the nearby shopping plaza to pick up some groceries. As John took his careful, considered steps, a group of joggers passed by.

“I used to do a 10-kilometer run with my colleagues while I was working in insurance, no problem, you know,” John said. “We wouldn’t even get out of breath—we’d just talk and joke around the entire time.”



*The world felt more foreign than ever before, and he ached for a greater sense of vibrancy and connection.*

"You must miss it. I'm not much of a runner," Nikita replied, smiling at the familiar story.

John lightly tapped one of his knees with his cane.

"Guess I'm not either these days."

Once they arrived at the plaza, John sought out a nearby bench to give his tense legs some relief. He took in his surroundings, observing how much the world around him had changed—the ads on the walls were all animated, and people walking by with their lovers, friends, and even parents all seemed to be glued to their phones. Having grown up with the romance and counterculture of the 60s and 70s, he had a difficult time understanding people's values today.

"Can you believe everyone has one of these things?" John said, pointing to a woman scrolling on her smartphone and shooting Nikita a look of discontent. To his dismay, Nikita was typing away on her phone as well. John pretended not

to notice, diverting his attention instead to an elderly couple walking by. He was quieter than usual for the remainder of the walk home.

When it was time to say goodbye to Nikita, John became flustered. He brought up concerns about his symptoms and started asking her questions. They both knew he just wanted to have someone to talk to a little longer, even though he had already paid for her to stay longer than he'd really needed her help for.

He watched Nikita walk back to her car, the empty chairs on his porch in his periphery. Even though it was nice to have company, John felt that something was missing. The world felt more foreign than ever before, and he ached for a greater sense of vibrancy and connection.

Later that day, he watched the sun set like always and daydreamed about conversing with people he could learn from, people he could laugh with—people, perhaps, who also fantasized about life in the woods.

# Designing for Community in Later Life

Building out possible concepts and solutions.

The sweeping social, economic, political, and technological changes that are already underway today will inevitably reshape how seniors like John experience aging within their communities in the future. Despite these radical shifts, the human need to depend on and connect with others—during times of transition and when negotiating the challenges of everyday living—will remain.

While some seniors will continue to thrive socially despite changing circumstances, namely by relying on their own sociability or strong communities to find and foster meaningful relationships, many others will struggle with social isolation and loneliness as they age. To minimize the latter possibility, we must consider the drivers of positive and healthy relationships for seniors when envisioning the ways in which they will continue to foster a sense of community as they age.

For the remainder of this chapter, we explore how social clusters are formed and maintained, as well as how they are beginning to change through broad transitions. We look at how community-based care services for the elderly—from centralized institutional care, to decentralized at-home care, to other community models of care—are designed and integrated into communities. We examine how organizations are responding to the disruptive shifts shaping how services are designed, delivered, and experienced. Finally, we discuss the considerations that should be taken into account when imagining new communities and repurposing familiar spaces.





When creating experiences to support the elderly as they age in their communities, the perspective of seniors and their families is the most important factor to consider. The experience drivers to the right summarize key considerations and provide points of departure to keep in mind as we imagine ways to ease tensions and improve experiences for people like John in the future.

# Experience Drivers

Forces influencing how seniors experience community.

## Living Arrangements

- ① Seniors struggle to give up their position as master of their own domain, but they also fear that living at home alone could lead to an absence of help when they need it most.

*How might we help seniors reconcile their desire to live independently with their need for readily available support?*

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## Community Models

- ② Community provides seniors with a sense of belonging, and it also gives them a sense of purpose as they work to create, shape, and sustain the social group to which they belong.

*How might we provide opportunities for seniors to take an active role in building new kinds of communities based on shared priorities?*

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## Systems of Care

- ③ Reciprocity is a key part of forming social bonds. To feel less dependent, seniors seek ways to give back to fellow community members, including formal caregivers.

*How might we help seniors identify and share their skills and knowledge in order to build deeper connections with other members of new communities?*

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## Social Spaces

- ④ Many seniors have localized social lives. For this reason, they often want to get out and participate in the activities and events offered in their neighborhood or community.

*How might we enable participation in communities beyond the block for seniors who live in areas lacking local events and activities?*





“We don’t heal  
in isolation, but  
in community.”

— S. Kelley Harrell

# Transforming How We Develop Social Clusters

The future of aging in one's community.



FORESIGHT SHIFTS



To understand how the aging population will come to redefine community, we must first identify and articulate “shifts”—that is, large-scale transitions that are taking place within society today. We use these shifts to help articulate the tensions that emerged during the research phase for this book, which included conversations with experts on aging in North America and Europe. Shifts allow us to frame new questions and establish future-oriented points of view, enabling us to imagine and create more meaningful realities for aging individuals.

## From Predefined Community Models to Creating Your Own Living Community

The elderly are beginning to proactively seek out more social living arrangements in order to form closer trusted circles where they can find both companionship and care.

### A Home Not Alone

Some insects, including a species of ants, don’t deteriorate with age. These creatures care for their young and hunt and forage for prey even into old age, their brains remaining sharp until the end. Researchers have been unable to isolate the gene responsible for this anti-aging feat, leading them to speculate that the reason for the insects’ continued vigor is social complexity: the fact that they live in highly organized colonies. Humans are strikingly similar social creatures. The social connectedness that comes from communal living is good for us too; it improves our mental and physical functioning, while social isolation (including isolation caused by physical immobility) is associated with higher rates of depression and dementia in seniors.

### Seeking Unity in a Polarized World

The Brexit vote and Trump election in 2016 can in part be understood as reactions against globalization. Those supporting these movements may have been rooted in a sense of nostalgia for the close-knit communities of the past, where most people knew each other, shared a religion, and had similar values as their neighbors. While the idealization of this past may be misguided, especially considering the exclusivity inherent to such homogeneity, we must acknowledge the real longing people have for spaces where they can congregate and feel part of a community united by a common purpose.

Today, seniors in search a shared community outside the home are more likely to gather at shopping malls or via online forums than they are to meet in places of worship, labor unions, or community-service clubs. Some are going to even more extreme lengths to foster greater social connectivity. Rather than resigning themselves to the isolation of living alone, or settling on a future of bingo and jellied vegetables in a retirement home, they are rewriting the rules around what living arrangements for the old look like by moving into places like co-ops and intentional communities. Whether it’s dorms in New York City, the women’s only Babayagas’ House in Paris, or connected-living pods in Japan, seniors are rediscovering the benefits of



Loneliness increases the likelihood of mortality by 26%. More than nine million people in the UK report often or always feeling lonely, and roughly 3.9 million or two-fifths of all older people in the UK say the television is their main source of company. To create policies that address this sad reality of modern life, the UK recently appointed a Minister of Loneliness.

— Loneliness Research, Campaign to End Loneliness

housemates. Having friends in close proximity gives them someone to rely on for company and support. Life transitions at any age are difficult, but these events are easier to manage if they are intended and planned for. Rather than having a move precipitated by a life crisis, such as the death of a spouse or the discovery that one has outlived one's savings, adults of all ages can now proactively start shaping how they intend to spend their golden years—and who they'd like to spend them with.

- **Co-dwelling for care:** Whereas many spaces for senior care tend to focus on age and physical ability, the Babayagas' House in Paris is based on common interests. Developed and run by a group of senior activists, the house is a collective for women who are looking for camaraderie and who want to live (and die) within a supportive community. The group obtained government funding for a six-story building that accommodates 21 women on the condition that the residents would all care for each other, meaning they wouldn't need care workers or state-run homes. The women all take care of the space together, and they also pool resources for doctors.
- **Safe communal spaces:** Growing levels of uncertainty and volatility in the social, psychological, political, and economic environments are creating opportunities to design the next generation of safe age-friendly spaces. Across many rural areas in the US, declines in civic infrastructure, whether governmental or religious, have created a vacuum for spaces of social support and communal gathering. Seniors often meet in places like Starbucks and McDonald's to replace the public spaces of the past. In the future, as malls become less commonplace and social spaces become increasingly privatized, there will be a need for new types of facilities that allow seniors to connect with one another in new ways.



— A widow to a widower,  
*Our Souls at Night*

“I mean, we’re both alone. We’ve been by ourselves for too long. For years. I’m lonely. I think you might be too. I wonder if you would come and sleep in the night with me. And talk.”

## From Isolated and Alone to Multigenerational Living Arrangements

Seniors, their children, and their grandchildren are navigating how to live together as they find themselves relying on each other for financial support, as well as for physical and emotional care.



Since 1997, the number of young adults (aged 18–34) living at home with their parents has increased by nearly 19%.

— U.S. Census Bureau

### West Meets East

While nuclear households are the most common family model in North America, many non-Western countries have long held multigenerational living arrangements as the norm. Over the next few decades, the growth of the aging population will lead to new types of living arrangements that offer better financial security for extended families. Today, in North America and Europe, multigenerational living arrangements are becoming more common; an increasing number of adult children are continuing to live at home, while elderly parents are packing up their homes and moving in with their children to share housing and help with childcare.

### Seeking Collectivity in an Individualistic World

Real estate developers are designing multigenerational homes in an attempt to address the spatial constraints that arise when older parents move in with their children, and when adult children continue living at home. For example, separate entrances and living quarters allow different generations to live independently under the same roof. When done properly, this type of arrangement allows for financial stability and a two-way flow of care and emotional support.

For example, grandparents who live with their children's families can care for younger children during the day or after school, eliminating daycare and nanny costs. They may also be able to perform school runs, or to simply connect and communicate with their grandchildren. Elderly parents, on the other hand, may find that living with their adult children enables them to receive extra help with activities of daily living, such as heavy lifting, maintenance, and



“Constant interaction with other people can be annoying, but overall seems to keep us engaged with life.”

— Thomas Perls, Geneticist,  
Boston Medical Center

medical support (driving to appointments, helping with mobility needs, etc.).

As more families are juggling work and family care, arrangements such as these can help relieve stress for the “sandwich generation”: those struggling to care for both their children and their elderly parents. Achieving greater interdependence through cohabitation appears to be an ideal choice, at least on paper. However, designing for the lifestyle considerations of different household members is key to creating functional spaces that balance the need for both autonomy and assistance.

- **Minimalist modular living:** Innovative housing solutions are emerging that aim to increase seniors’ participation and affirm their important role in society. One solution is the building of small senior-friendly homes, sometimes clustered together or located on the property of the residents’ children or caregivers. These modest structures, which appeal to retirees looking to downsize, are known as laneway houses, coach houses, tiny houses, or accessory dwelling units. Living in these smaller homes can help support seniors’ need for independence and mobility, as well as their desire for connection. For younger seniors who can still manage stairs and who like to travel, tiny homes can double as RVs and be placed on the

back of a trailer. In the UK, Australia, and even in the US, backyard “granny flats” are becoming increasingly popular, as they help to better integrate grandparents into family life.

- **Resilient caregivers:** Public and private healthcare providers are recognizing that family caregivers need more support. Caregivers often risk becoming invisible second patients due to the stress, anxiety, and financial hardship associated with caregiving. In an effort to increase felt ownership, and to give caregivers a greater role in decision making about how care and support are delivered, the Australian government recently introduced the Home Care Packages Program on a consumer directed care (CDC) basis. As part of the country’s Aged Care Reform, this program gives older Australians access to four levels of government-subsidized care. They can also choose what types of care and services they’d like support with, how and when these are delivered, and by whom. This shift toward reablement-focused home care is allowing a greater number of older individuals in Western countries to benefit from support in their homes, rather than in institutions. It also emphasizes the importance of the active involvement of caregivers, which leads to greater caregiver resilience.

## From Informal Care to the Formal Caregiving Economy

Fixing the care economy needs to be less about increasing efficiencies and improving productivity and more about valuing the work of caregivers, thereby improving access to emotional and physical support for those in need of care.

### Labor of Love

It's inevitable that many individuals will require extra care and support as they get older—someone to help them clean, get to doctor's appointments, or even to manage bathing. Whereas families have long been the locus of care for the old and infirm, today, adult children often live far from their elderly parents and/or are too busy with work or raising their own children to provide care. Spouses with aging partners, who may be coping with health issues themselves, aren't always able to provide the care their partner needs. Many become burnt out from the constant demand. With more elderly people than ever before in need of care, the issue of who should provide this—and how—is ripe for a rethink.

### Seeking Regulation in an Informal World

The caregiving role is being increasingly filled by paid caregivers. Women from developing countries such as the Philippines—often mothers themselves who have left their own families behind—represent one large, underpaid group that provides care for the elderly in North America. Recognizing that home care represents a huge market, startups like Hometeam in the US and Elder in the UK now offer personalized and on-demand services to help the elderly with everyday tasks, including nursing or companion care. In Japan and Sweden, tech companies are experimenting with robotic pets and housekeepers for home care. Using complex algorithms, virtual home companions are beginning to simulate distinct human personalities; in other words, we may soon have chatbots making conversation with the elderly while robots care for their physical needs. While robots are being used to help fill the caregiving gap, the labor of human caregivers often goes unrecognized. The global economy has created care chains in which the elderly in industrialized countries receive care at the expense of the elderly (and the children) in labor-sending countries. Like childcare, eldercare has traditionally constituted domestic—and therefore invisible—labor done by women. Today, this important work is still socially and financially undervalued; in many cases, it is also still unregulated, making caregiving a low-paying job with

high turnover. While robotics may offer a solution to the care shortage, the potential monetary benefits of mechanized companions must be weighed against the social costs. Rather than giving seniors greater independence, they may threaten seniors' already fragile sense of control. Mechanized companions are incapable of building empathy and trust, and they can't engage in human contact and communication—in other words, they lack the human qualities at the heart of care.

- **Countering skin hunger:** For years, healthcare practices have become increasingly dehumanizing; complex human systems have been reduced to tasks to be performed by specialized health professionals, who merely seek to eliminate dysfunction. We are now beginning to see a shift away from this mechanistic, materialistic, “body parts” approach to care of the elderly. For example, some psychologists now recognize the existence of “skin hunger.” Defined as the need for physical contact, skin hunger left unchecked can result in emotional, mental, and even physical implications. Professional cuddling agencies, such as Cuddlist.com, are beginning to pop up to meet the wide variety of intimacy needs people have. And this is not just a North American phenomenon—the business of cuddling is gaining popularity all over the world. In Japan, for example, “cuddle cafes” are known as *soineya*, or “sleep together shops.”
- **Carebots:** Professor Kate Devlin of Goldsmiths, University of London believes the future of robots in eldercare will include fulfilling the desire older adults have for human intimacy. Softbank Robotics's Pepper is the first humanoid robot capable of recognizing human emotions and adapting its behavior to the mood of its interlocutor. Based on voice, facial expressions, body movements, and choice of words, Pepper interprets emotions and offers the appropriate type of content or interaction for the given moment. Meanwhile, interactions with the robotic seal Paro, one of the most widely studied therapeutic animal-robots, have been shown to increase motivation, improve mood, and reduce stress in elderly people.



The in-home senior care market in the US was worth an estimated \$80 billion in 2015.

— Caregiving in the United States, AARP

– Geoff Watts, “The one-armed robot that will look after me until I die,” *Mosaic Science*

“The question is not ‘Do I want a robot companion to care for me?’ but ‘Would I accept being cared for by a robot?’”



TRANSFORMING HOW WE DEVELOP SOCIAL CLUSTERS

“People leave traces of themselves where they feel most comfortable, most worthwhile.”

– Haruki Murakami,  
*Dance Dance Dance*

## From Offline Local Relationships to Making Meaningful Connections Virtually

As digital platforms become the dominant medium for communication across socioeconomic, geographic, and age-based barriers, the diversity of those using technology to connect on-to-offline will redefine what connection means.

### Friends in New Places

Social connection gives people opportunities to communicate, which improves their mental health and reduces loneliness and depression. While these conditions are by no means limited to the elderly, they certainly afflict seniors as partners die, friends move away, and busy families struggle to find time for them. While today's youth are digital natives, seniors are stereotypically viewed as reluctant, clumsy tech adopters—latecomers to the world of the internet. However, as engagement with social networks increases among the general population, so too will the number of elderly people logging on to expand their social networks grow.

interviewed many seniors who said that learning to connect with others online brought new meaning to their lives. While there are many benefits to connecting virtually, people still require physical places where they can nurture their relationships. Expressions of self-disclosure, vulnerability, and empathy still work best face-to-face. In her 2011 book *Alone Together*, Sherry Turkle, a professor of the Social Studies of Science and Technology at MIT, warns that we should resist the temptation to conflate the benefits of virtual interactions with real face time, noting that “it is possible to be in constant digital communication and yet still feel very much alone.” Certainly, as we lie awake at 3:00 a.m.—that most lonely hour of the night—only the presence of a real person can relieve our solitude. However, given our “phygital” lives, in which our on and offline identities are increasingly interconnected, at issue is perhaps less the question of the advantage of one way of being over the other, and more the question of how to extend online connections into opportunities for in-person relationships.

- **Digital company:** Hoping to provide company to those dining alone, an Osaka-based ramen chain developed a promotion that allowed diners to eat a meal alongside a virtual companion. The restaurant provided patrons with a QR code that gave them access to one of five videos starring popular Japanese musicians eating ramen alongside in-store patrons. VR company Rendeever also wants to give seniors virtual access to parts of the world that they're missing. Their technol-



A study revealed that among older adults, nearly half (48%) of 70–74 year olds using social media, and more than a quarter (28%) of 96–99 year olds are online.

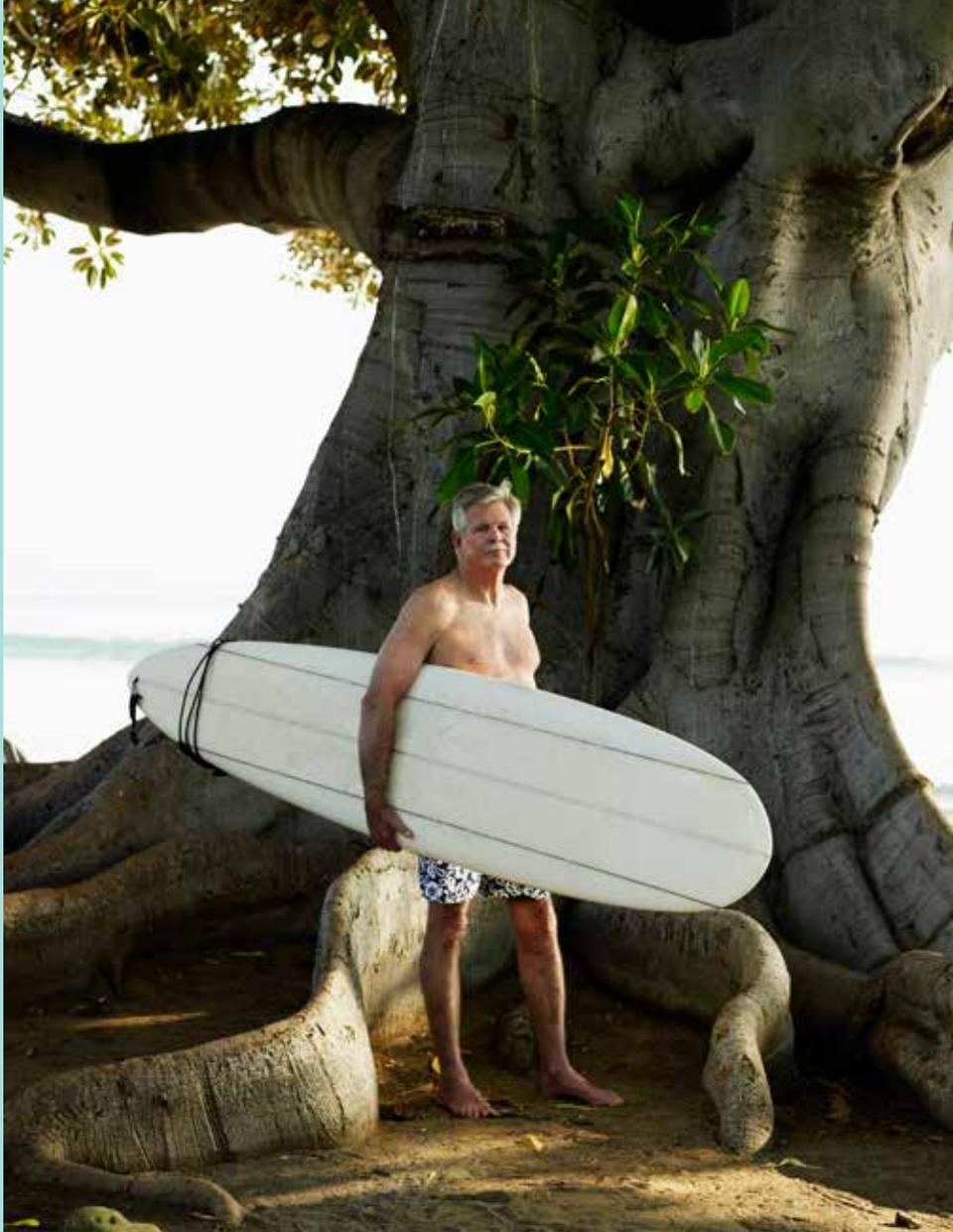
— “Study Reveals Trends in Seniors’ Internet, Social Media Usage,” *LeadingAge Washington*

### Seeking Intimacy in an Unfamiliar World

Seniors are increasingly turning to the internet in their search to grow new friendships and extend their social lives. They are connecting with others via Facebook and sites geared toward seniors seeking companionship, such as Senior Chatters, Over Fifties Friends, and Stitch. Social network algorithms help connect seniors to other people with similar interests (or even similar health concerns), allowing them to chat when they're lonely or bored and to exchange stories and health tips. These networks are especially important for seniors with mobility issues, as they allow them to connect with others and to check in with their families more frequently. For her *New York Times* article “Online, ‘A Reason to Keep on Going,’” Stephanie Clifford in-

ogy creates an environment where seniors can hike up Machu Picchu as a group, go on a walking tour of Paris, or work together to recreate Picasso's masterpieces—all without leaving the comfort of their homes.

- **Meal sharing:** Feastly, EatWith, Dinner Surfer, and Cookapp are all mobile apps that seek to facilitate local supper clubs with strangers. They aim to connect people over meals, unite people in a world of increasingly detached social interactions, and limit food waste. Several municipalities in countries like China, the United Arab Emirates, and Spain are also experimenting with the concept of community fridges: publicly placed fridges where local citizens can donate unused or leftover food for others to access.



“The most effective way to cope with change is to help create it.”

– L.W. Lynett

# Design the Future of Aging with Us

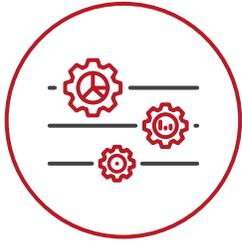
Unlocking the solutions to tomorrow's challenges.

NEXT STEPS



## How We See It

Sustainable, intelligently designed solutions are those borne from diverse, consciously designed environments. We create these solutions by drawing truths from various disciplines, then piecing them together to ensure every angle of a challenge is explored and addressed.



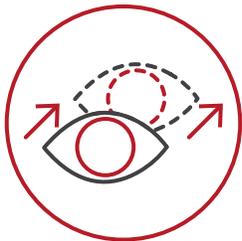
Systemic Perspective

We leverage systemic perspectives to better understand the systems, institutions, and infrastructures in place that shape a challenge. Typically coupled with a quantitative lens to create preliminary understanding around a population in question, these perspectives give us the foundation to understand the status quo before we make sense of the contextual human experience.



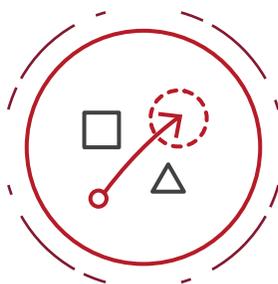
Experiential Insight

We use experiential insights to break down the human experience of a challenge. For example, we may use these insights to better comprehend the common and particular nuances that define an experience with a product or service. Considered the wheelhouse of ethnographers and anthropologists, experiential insights bring context, compassion, and human touch to the center of decision making.



Foresight Shifts

Foresight shifts are built out of the culmination of “signals”: moments and events of change (from conversations to startups) that give way to overarching social, technological, environmental, economic, political, or value-based transitions in society. Coupled with experiential insight and systemic perspective, the study of foresight enables us to begin considering future-proof design strategies.



Design Strategies

Design strategies represent tangible conceptualizations of our systemic, experiential, and foresight research. These strategies can come in the form of product and service concepts, frameworks, and tools. They act as the link between understanding and execution, thereby allowing us to translate research into targeted, actionable solutions.

## The Book

NEXT STEPS

*The Future of Aging* will be released in 2019. The book will explore five themes concerning aging individuals from systemic, experiential, and foresight-inspired perspectives. Most importantly, it will build out design strategies that will enable you to address the disruptive shifts transforming the relationship between aging individuals, organizations, and society at large.

- ① Aging in One's Community
- ② New Elder Health(care) Interventions
- ③ Gerontechnology to Maximize Independence
- ④ Rethinking/Reframing Being Older(er)
- ⑤ Economic Contexts of Aging

2019



DESIGN THE FUTURE OF AGING WITH US

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