



AUGUST 2025

# AGING SOCIETIES:

## Opportunities amid Challenges? Part 2

QUINTUS LIM



# ABOUT THE MILKEN INSTITUTE

The Milken Institute is a nonprofit, nonpartisan think tank focused on accelerating measurable progress on the path to a meaningful life. With a focus on financial, physical, mental, and environmental health, we bring together the best ideas and innovative resourcing to develop blueprints for tackling some of our most critical global issues through the lens of what's pressing now and what's coming next.

# ABOUT MILKEN INSTITUTE INTERNATIONAL

Milken Institute International extends the reach and impact of Milken Institute programs, events, and research by focusing on the roles that health, finance, and philanthropy play in addressing social and economic issues around the world. We leverage the Institute's global network to tackle regional challenges and integrate regional perspectives into developing solutions to persistent global challenges.

# ABOUT DBS FOUNDATION

Established in 2014, DBS Foundation is committed to uplifting lives and livelihoods of those in need. It provides essential needs to the underprivileged, and fosters inclusion by equipping the underserved with financial and digital literacy skills. It also nurtures innovative social enterprises that create positive impact. It aims to bring hope to those with less today, so no one is left behind and we can all face the future with confidence.

In partnership with DBS Foundation



©2025 Milken Institute

This work is made available under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International, available at <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

This paper does not constitute investment, legal, scientific, or regulatory advice of any kind. All efforts have been taken to ensure that information within is accurate at the time of writing.

# CONTENTS

1	<b>Background</b>
2	<b>Opportunity Area 1: Enhancing Quality of Life Through Innovation</b>
3	Technological Innovations
4	Social Innovations
5	Known Pain Points and Countervailing Collaborations
6	Costs
7	Adoption
8	Scalability
9	Efficacy
10	<b>Opportunity Area 2: Improving Access to Health and Care</b>
11	Government Must Lead Collaboration
13	Collaborate Earlier, Not Later
15	Collaboration in Access to Health and Care
15	Knowledge Partners
16	Long-Term Co-Provision
19	<b>Conclusion</b>
20	<b>Endnotes</b>
25	<b>About the Author</b>



# BACKGROUND

The Milken Institute has partnered with the DBS Foundation to author a series of three reports focused on longevity and population aging. This research is coordinated with the DBS Foundation Impact Beyond Award, which will award S\$1 million each to three businesses innovating longevity solutions.

Part 1 of the research series outlined longevity trends and challenges in key markets in Asia and five key opportunity areas for multi-stakeholder collaboration. This paper is Part 2 and will cover the first two opportunity areas: (1) Enhancing quality of life through innovation and (2) Improving access to health and care. Part 3 will cover the remaining three opportunity areas: social isolation, multigenerational workforces, and financial resilience.

Ultimately, the Institute hopes that its research, convenings, and partnerships will catalyze a broader movement among businesses and societal leaders toward an age-forward future.





# OPPORTUNITY AREA 1: ENHANCING QUALITY OF LIFE THROUGH INNOVATION

Multiple aging-related surveys ranked physical health as the top factor in quality of life.<sup>1</sup> This result is unsurprising—a healthy body enables seniors to continue living life fully without being overly constrained by illness or fatigue, while providing a foundation for mental and financial well-being.

Yet, as noted in Part 1 of this series, individuals across key markets in Asia are forecast to spend rising periods in ill health. For instance, by 2050, people in India and Singapore are expected to spend 12.3 years and 11.8 years, respectively, living with disability. To arrest the trend toward ill health cost-effectively, individuals must be empowered through innovative products and services to age healthily, live independently, and care for others around them.

And importantly, innovations are not always limited to or centered on technology. Social innovations also play a key role in tackling social isolation and addressing the social determinants of health.





# Technological Innovations

Existing innovations serve as an inspiring start. Bottles that “flavor” water through scent, or cutlery that uses electric currents to simulate saltiness, could help reduce sugar and salt intake and, in turn, the risk of chronic diseases.<sup>2</sup> Customizable electronic tattoos could make health monitoring more fashionable and, in turn, boost adoption. Other startups have built wireless networks that meet the requirements for handling personal health information, subsequently customizing operating systems and smartphones with pre-installed apps for telehealth and patient monitoring. Finally, whether medically advisable or not, individuals are already turning to generative AI for companionship and counseling alike, which will be explored in Part 3’s section on social isolation.

Especially helpful are innovations that serve the vulnerable communities in aging identified in Part 1 (i.e., low-income, socially isolated, women, rural, and immigrants):

## **Socially Isolated:**

Social isolation is difficult to detect yet critical to address. Enovus Enterprises in India focuses on positive aging by digitally connecting seniors to care and travel services, and their peers, through its senior-friendly phones and social media community. SingHealth, the largest health cluster in Singapore, is codeveloping a geospatial asset map of community resources with the government to better tailor its social prescribing services.<sup>3</sup> Virtual or augmented realities powered by AI could also help keep seniors entertained while socializing in place.

## **Rural and Low-Income:**

Rural and low-income seniors often lack access to health facilities and services and therefore must sacrifice a day’s income to travel to urban facilities. Some technologies may blunt the trade-off between income and health. Mobile computed tomography scanners enable screenings for chronic lung and heart diseases directly in the community. Drones can deliver medicines deep into challenging terrains. Miniaturized X-rays could enable closed-loop, home-based care after a fall. In China, for instance, Ping An’s home-based care model integrates the company’s finance, health-care, and technology functions to deliver more than 650 services at home.<sup>4</sup> Although Ping An currently targets neither rural nor low-income seniors, its model nonetheless shows the range of possibilities when approaching longevity in a holistic and integrated manner.

## **Women and Immigrants:**

Women and immigrants face the bulk of caregiving burdens, with the former at times having to sacrifice their careers. Technologies that help seniors regain functional independence have the added benefit of lessening caregiver strain, which, in turn, uplifts women and immigrants. Drugs to grow new teeth could help reduce the time spent feeding seniors. “Anti-gravity” treadmills, or clothing that aids in movement, can enable seniors to make their daily journeys unaccompanied. Similarly, QuantumTX in Singapore uses low-energy magnetic fields to replicate muscle responses associated with exercise, which could help improve muscle function in seniors.

# Social Innovations

Although technological innovations are impressive, they are insufficient. Social determinants are the dominant bottleneck in health outcomes, and most societies have struggled to get seniors to lead healthy or digital lifestyles, let alone synergize the two. However, moving the needle on social determinants is increasingly complex because traditional social structures are evolving. Across Asia, household sizes are shrinking, families are living apart, caregivers are scarce, and social isolation is prevalent among seniors.

At the same time, social interventions are desired: A global survey saw all age groups ranking “Spending time with friends/family” as their top current and future life goal.<sup>5</sup> To bridge desire and difficulty, societies must leverage social innovations to help build new relationships, diversify social and care circles, and strengthen community networks. This, in turn, lessens the strain on family caregivers.

Project V in Singapore is a joint initiative between the National Council of Social Service and the National Volunteer & Philanthropy Centre that aims to scale up, regularize, and sustain corporate volunteerism. It provides the large numbers of volunteers that community partners need to run programs for seniors (among others) while encouraging repeat volunteerism to build meaningful relationships. Financial institutions, property developers, and government agencies under Project V have all institutionalized employee volunteerism in various ways.<sup>6</sup>

China started to experiment with time banks in the 1990s in Shanghai. Chinese time banks encourage members of the public to provide services to seniors, accruing hours that they can subsequently exchange one-to-one for services in the future. For instance, the Bank of China created a platform on WeChat to curate services and match seniors with volunteers. By 2023, time bank trials had seen more than 10,000 participants providing nearly 130,000 hours' worth of services to nearly 16,000 seniors.<sup>7</sup> The Shanghai government is now scaling time banks citywide, and provinces such as Nanjing and Beijing have also followed suit.

Moreover, both the above examples on volunteering have the potential to serve vulnerable communities. For one, volunteered services have no labor costs and are affordable to low-income individuals. Repeat volunteerism, over time, can cultivate meaningful relationships that alleviate social isolation among seniors. Finally, mass volunteerism can substantially supplement overstretched caregiving workforces, granting women and immigrants much-needed respite.

# Known Pain Points and Countervailing Collaborations

The pain points of longevity innovations can be broadly classified into four categories: costs, adoption, scalability, and efficacy. Multiple efforts have been undertaken to address the above pain points, but doing so holistically often requires multi-stakeholder collaboration. The Milken Institute has broadly identified eight types of collaborations that seek to address these pain points and can be initiated by governments, corporations, and foundations alike.

Known Pain Points		Countervailing Collaborations
Costs	Seniors may be unable to afford innovative products and services, and funders cannot necessarily subsidize them indefinitely.	<ul style="list-style-type: none"><li>• Subsidies</li><li>• Crowding-in capital</li></ul>
Adoption	Poor awareness can hinder the inflow of innovators into the longevity space, as well as user adoption of innovations.	<ul style="list-style-type: none"><li>• Awareness</li><li>• Research</li></ul>
Scalability	Innovations can be costly to scale, and silos in fragmented health systems can impede deployment.	<ul style="list-style-type: none"><li>• Convenings</li><li>• Aggregators</li></ul>
Efficacy	Innovations may not necessarily improve outcomes, while innovation processes can be fragmented and duplicative.	<ul style="list-style-type: none"><li>• Service platforms</li><li>• Mindsets and incentives</li></ul>



## Costs

Gerontechnology (GeronTech) innovations can be costly, and broadening access will necessitate cost-sharing between patients and other stakeholders, particularly in developing markets. However, governments, corporates, and foundations alike will find it financially challenging to sustain subsidies for the many, especially where benefit-cost ratios are weak.

**Subsidies:** To address affordability, many governments have collaborated with service providers to co-fund GeronTech provision. More subtly, this gives subsidizers greater influence over service providers, which can be wielded to reorganize care pathways or pilot new solutions.

In 2017, Taiwan's Long-Term Care Plan 2.0 paid rural services up to 20 percent more and raised staff salaries. Subsequently, both service recipients and the long-term care workforce more than tripled in five years.<sup>8</sup>

The Hong Kong government has allocated HK\$2 billion (US\$256 million) since 2018 to its Innovation and Technology Fund to defray the costs of procuring or renting technologies in elder care facilities. In 2023, the government also allowed the use of community care subsidies to rent assistive technologies.<sup>9</sup>

**Crowding-In Capital:** With limited funds themselves, some stakeholders try to crowd-in more external funding. The Hevolution Foundation, for instance, estimates that for every dollar of prize money, participants cumulatively bring in up to \$10 from their donors or funders to participate.<sup>10</sup>

However, funders must be mindful not to hamper themselves. For instance, research has found that donors want to fund programs for seniors but not staff salaries.<sup>11</sup> Yet, staffing is the dominant expense in elder care, and such constraints will ironically force staff to spend more time fundraising their own salaries elsewhere, instead of caregiving.

Other donors may choose to avoid funding anything that generates profits. However, deprioritizing commercial discipline could dissuade potential partners downstream.

## Adoption

The reasons for poor user adoption can range from poor ease of use to technological aversion. One underappreciated factor is that GeronTech sometimes makes users look frail for no real reason. There is no reason why walking sticks, wheelchairs, orthopedic shoes, and mobility scooters must look so ugly when their analogues—gentlemen’s canes, baby prams, sneakers, and e-scooters—come in a wide range of sleek or luxurious designs that improve one’s personal image. One stakeholder even joked that ankle-worn devices to detect falls or wandering resembled the electronic tags fitted on convicts.

**Awareness:** Public awareness is key to attract innovators into the field of longevity, refine solutions to suit seniors’ tastes, and boost GeronTech adoption, and it can be built in diverse ways.

Since 2023 in Hong Kong, all “subvented nursing homes” (meaning supported by grant and comprising two in three nursing home places) are required to educate, promote, and assist their residents with GeronTech, particularly for community care. Our Hong Kong Foundation published a GeronTech report in 2017, detailing 24 gaps faced in various parts of the aging ecosystem.<sup>12</sup>

**Research:** Hackathons, innovation challenges, and research grants can help crowdsource ideas and feedback from the public, and any sector can initiate these.

In Singapore, it is positive that many hackathon finalists in 2024 were senior-focused, even though the Google and OpenAI hackathons did not explicitly focus on aging. The Singapore and New Zealand governments further issued a joint grant proposal call in 2024 for AI and healthy aging, with funding of up to US\$2.3 million.<sup>13</sup>

In complement, the Lien Foundation donated S\$5 million in 2022 to the National University of Singapore (NUS) for research on geroprotectors.<sup>14</sup>



## Scalability

Elder care is highly labor intensive and costly to scale. In some cases, technology can help supplement workforces. In Singapore, for instance, the social service agency Lion's Befrienders was able to extend its services to an additional 6,500 seniors with only 20 extra staff by leveraging technology. But not all technologies can be scaled cost-effectively—mobility devices, for instance, are not always shareable. Exacerbating matters, health system silos and fragmentation can prevent the scaling of solutions even when they are financially viable.

**Convenings:** Convenings are a useful way to showcase the spectrum of aging innovations to a wide range of stakeholders and potential partners. Should partnerships materialize, they can accelerate product distribution, especially across borders.

The DBS Foundation Impact Beyond Summit is a case in point, though many examples abound. Perhaps the largest example is Vitalist Bay, a pop-up longevity city located in Berkeley, California. For eight weeks in 2025, this mega-event, organized by nonprofit organization Vitalism, aims to convene more than 4,000 entrepreneurs, investors, policymakers, and others in the field of longevity for conferences, workshops, co-working, and even co-living.

In complement, foundations in the US have curated convenings of grantees, investors, businesses, and policymakers for networking. Some foundations gather lab tools, data, and biosamples to share with future grantees and even curate disease databases, patient registries, and clinical trial networks.<sup>15</sup>

**Aggregators:** At times, products originally designed for seniors may be pulled toward more lucrative sectors instead, given the small size of the silver economy. In Hong Kong, for instance, clothing that absorbs the impact of falls found more revenue in sportswear, while self-cleaning fabrics were more heavily adopted by luxury hotels rather than by seniors.<sup>16</sup>

Aggregators could help address issues of market fragmentation by accumulating market demand to better harness market forces for the development of senior-friendly products.

For instance, the Singapore government is working with commercial vendors to offer a fall detection package to households.<sup>17</sup> Offerings will be scaled up if residents are receptive.

## Efficacy

Aside from cost-efficiency, user adoption, and scalability, GeronTech must produce good outcomes. Achieving this goal requires a strong understanding of not only the product or underlying technology but also the health system in which the solution finds itself. The innovation process itself must do a better job of providing solutions that address real-life problems.

One primary shortcoming of many budding GeronTech solutions is their disposition toward proximal fixes or micro-optimizations that do not fundamentally address nontechnological bottlenecks. For instance, the utility of fall detection technologies rests on whether care protocol permits health workers to enter a senior's home after a fall, not their price or accuracy. Seniors who are already living in cramped nursing homes will not want a care robot further congesting their space. Long-term monitoring solutions may be stonewalled by the lack of WiFi in many nursing homes. Further, there is questionable use in crowdsourcing AI-based care if public volunteers cannot afford to serve and maintain AI models in perpetuity, let alone navigate the minefield of data privacy.

**Service Platforms:** To improve innovation efficacy, stakeholders have created platforms to provide complementary services or even provided GeronTech services themselves.

For instance, the Hong Kong government funded the establishment of the Gerontechnology Platform in 2021. The platform has provided start-ups with consultancy services, paired them with nursing homes for deployment, and codeveloped product evaluation frameworks with industry partners.<sup>18</sup> The Japanese government intends to create a similar platform in 2025.<sup>19</sup>

In parallel, since 2020, The Hong Kong Jockey Club Charities Trust has run its “age at home” Gerontechnology Education and Rental Service, a one-stop scheme providing gerontechnology services to the elderly.

**Mindsets and Incentives:** Stakeholders have also turned to research governance to more broadly improve innovation processes.

Previous Milken Institute research has highlighted many ways that foundations can encourage research and innovation, from interdisciplinary research teams led by industry veterans, through milestone-based funding, to making research data publicly available.

However, government, business, and philanthropic leaders alike must remember that grantees are the ones doing the real work and possess a deep understanding and trust of their constituents. Collaborations with innovators are a co-learning process, and large organizations must shift away from treating smaller partners like vendors or contractors.



## OPPORTUNITY AREA 2: IMPROVING ACCESS TO HEALTH AND CARE

A majority of seniors view health as the most important factor for aging well, and similarly, health ministries worldwide are looking to close the gap between lifespan and healthspan. Moreover, when implemented well, good health and healthy living can have surprisingly large benefits for both healthspan and health spending, even when interventions are targeted at older seniors. Perhaps most persuasively, the cost of inaction is high: For instance, women in Japan are more likely to leave the workforce because of the lack of elder care than childcare.<sup>20</sup>

The key to unlocking the opportunities of health access lies in making healthy living as easy as possible, especially for vulnerable communities, by investing in the living environment, targeting the social determinants of health, and collaborating to empower individuals and communities alike.

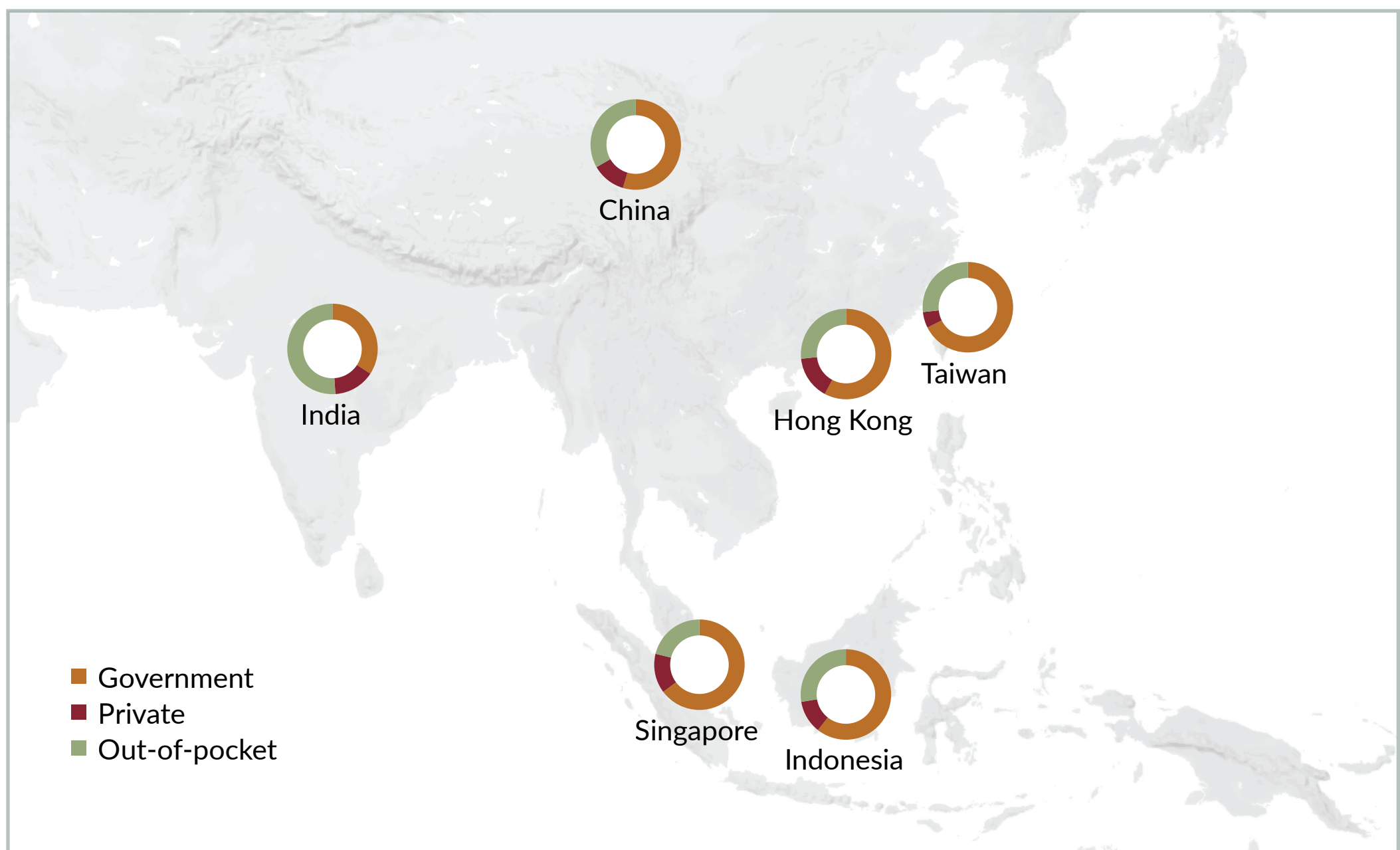


# Government Must Lead Collaboration

Tackling the social determinants of health involves a vast range of stakeholders. In health and care, governments must play a key leadership role, providing a clear vision and strategy of the health and care system; striking the balance among health innovation, equitable access, and financial sustainability; and defining the roles that other sectors should fulfill.

The reasons are simple: Government is the largest financier in health financing (Figure 1)—even more so for social services—and government alone can command, convene, or coordinate the sheer staffing required to implement programs in the labor-intensive fields of community services and outreach. Government also has a mandate to provide health access for the largest number of people possible, and culturally, many health systems in key Asian markets already take their cues from government direction.

**Figure 1: Government Is the Largest Financier in Health**



Sources: Milken Institute analysis of Institute of Health Metrics and Evaluation (2024) and Hong Kong Health Bureau (2024) data



Conversely, solo efforts by other sectors have encountered challenges.

**Private Sector:** It is often difficult for the private sector to develop elder care facilities and age-friendly living environments on their own. Cities such as Hong Kong and Singapore tend to be saturated in infrastructure, while high prices in the few land vacancies left can be prohibitive.

In Singapore, a public tender in 2019 for a dementia care village attracted only one bid, even after tender conditions were loosened midway. Even then, the government rejected the bid, deeming the price too low.<sup>21</sup> In Hong Kong, elder care units are often rented rather than owned, which can delay return on investment,<sup>22</sup> in turn pushing private developers to more lucrative areas at the expense of long-term care.

Moreover, locating away from central areas, where land is less expensive, may not be an option, given the limited mobility of some seniors. For instance, some facilities in Singapore were unable to fill their vacancies because of a lack of senior-friendly transport.<sup>23</sup>

On top of land prices, elder care is labor intensive. Many community programs in Singapore lean heavily on volunteers, and across developed Asia, households and elder care providers alike rely on scarce foreign domestic workers to keep costs affordable.

**Philanthropic Organizations:** Foundations were never meant to keep pace with population aging—nor should they be expected to. To produce impact at a societal scale, philanthropic solutions must find a home in the public and private sectors.

The nonprofit Hong Kong Housing Society (HKHS) has implemented its “Ageing-in-Place scheme” across 20 of its housing estates and completed four senior housing projects, comprising 952 units at discounted rent.<sup>24</sup> Nevertheless, Hong Kong’s 1.5 million senior population dwarfs the HKHS’s painstaking efforts. Cross-pollination is also lacking: The Elderly Commission recently suggested that the government reference studies by nonprofits on age-friendly building design.<sup>25</sup>

Likewise, the Tsao Foundation in Singapore has developed an integrated suite of care and community services for the elderly since 1993. However, for all its longstanding and trailblazing efforts, recipients number only thousands each year,<sup>26</sup> in comparison to Singapore’s 700,000 senior population. More broadly, a 2017 study estimated that only 9 percent of long-term care financing in Singapore is met by charitable contributions.<sup>27</sup>

Similarly, although 92 of Taiwan’s 480 hospitals are affiliated with foundations, charities, or religious groups, it was mainly the inclusion of for-profits in the government’s Long-Term Care Plan 2.0 that resulted in service recipients growing from 100,000 in 2017 to 470,000 in 2022.<sup>28</sup>

## Collaborate Earlier, Not Later

That government is the largest player does not mean that governments can or should go it alone because governments also have constraints and priorities. However, announcing these factors early enables other sectors to supplement public efforts. For instance, multiple private players in Singapore provided assisted living before the government did (although it has been available in prison since 2016).<sup>29</sup>

Concurrently, rapid population aging, rising public debt, and heterogeneous needs of seniors further necessitate collaboration with the private and philanthropic sectors. In fact, it can be in governments' interest to embark on collaborations earlier rather than later. On top of a longer runway to implement long-term strategies, early collaboration offers two key benefits.

**Providing Meaningful Choice:** Early collaboration exploits the highly predictable nature of population aging to develop expertise and match supply in advance, thereby providing meaningful choice. Conversely, last-minute attempts have seen limited efficacy.

For instance, in both Hong Kong and the UK, the introduction of consumer subsidies for care homes did not substantially widen consumer choice.<sup>30</sup> Empowering consumers to vote with their feet did nothing to uplift underperforming homes, yet the most popular facilities were already at capacity and unable to take in more residents.

Take the case of Hong Kong, where land and budget constraints saw the government purchasing places in private residential care homes for the elderly (RCHEs) under the Enhanced Bought Place Scheme (EBPS), instead of building its own facilities. Yet private RCHEs have much smaller living spaces than their public peers, and consequently, nearly 95 percent of seniors (in the relevant category) on the central waitlist did not want EBPS vacancies.<sup>31</sup> For perspective, 17 percent of seniors passed away while on that waitlist.



**Defining Quality Standards:** Early collaboration provides governments with greater leeway and insight in defining service and infrastructural standards that maintain quality. Governments can be selective about the available options without having to incur painful trade-offs in other areas.

For instance, the Singapore government had the flexibility to reject the sole bid for a dementia care village in 2019 because its aging challenges were not yet acute. Judging by the strong bids in 2023 for an assisted-living facility, the 2019 rejection did not protractedly deter private developers.<sup>32</sup>

Conversely, when trying to tighten standards during a crisis, governments can be forced to settle for suboptimal outcomes that set long-lasting precedent, or risk an industry exodus.<sup>33</sup> In Hong Kong, underutilization under the EBPS showed limited improvement despite government action because said action (subsidy withdrawal) was mild, counterproductive, and taken only after at least five warnings.<sup>34</sup> On average, EBPS unit sizes (9.9 m<sup>2</sup>) are less than half the size of government-built RCHEs and smaller than the 13 m<sup>2</sup> threshold that local researchers have associated with caregiver anxiety and depression.<sup>35</sup>

Recognizing the difficulties of altering existing infrastructure, the government is now taking the lead in building RCHEs in Hong Kong while purchasing RCHE spaces in mainland China, where unit sizes are much larger.<sup>36</sup>



# Collaboration in Access to Health and Care

Both short- and long-term collaborations are increasingly underway to improve access to health and care. The former includes research on seniors' preferences, aging policies, program evaluation, and age-friendly design, while longer-term collaborations include operations and infrastructure.

## Knowledge Partners

Research initiatives and knowledge partnerships and platforms are key collaborators in expanding access to health and care. Any sector can fund these projects and target vulnerable communities if needed. This series of reports by the Milken Institute and DBS Foundation serves as examples, although many others abound.

The Hong Kong Jockey Club's Age-Friendly City Project partners with geriatric institutes to assess the age-friendliness of districts and liaises with nongovernmental organizations to implement programs.<sup>37</sup>

In 2023, private developer Chinachem Group partnered with the Urban Land Institute, an international, nonprofit network of real estate developers, to study ways to raise private investment in senior housing in Hong Kong.<sup>38</sup>

Chinachem Group has also commissioned research by The Chinese University of Hong Kong to study the housing preferences of seniors with regard to aging-in-place.<sup>39</sup>

The Tsao Foundation has pioneered studies on social isolation in Singapore, the efficacy of various aging and long-term care programs, and financial security for low-income, older women in Southeast Asia.<sup>40</sup>

The Lien Foundation has studied palliative care systems and dementia readiness across different countries and conducted in-depth studies on Singapore's long-term care system.<sup>41</sup>

In 2024, the Singapore government announced a S\$2.9 million (US\$2.2 million) grant for researchers from NUS to study the influence of different types of senior housing on quality of life, to guide future housing planning.<sup>42</sup>

In 2024, the Singapore University of Social Sciences launched the Intercontinental Alliance for Integrated Care to foster cross-border collaboration and knowledge sharing and to convene stakeholders to cocreate innovative solutions in elder care.<sup>43</sup>



Notably, culture and preferences can shift surprisingly quickly in small, open, and rapidly aging economies such as Hong Kong and Singapore. Thus, ongoing surveys on seniors' preferences will be needed to ascertain whether and when such shifts occur.

More importantly, the benefits of repeated research collaborations extend beyond simply accumulating knowledge. Continued contributions signal competency and commitment to key stakeholders and build the trust needed for future collaborations.

## Long-Term Co-Provision

Care services and infrastructural development comprise longer-term collaborations in broadening access to health and care. On care services, Hong Kong has a long list of nonprofits stepping up to provide medical, health, and social services for the community.

The Tung Wah Group of Hospitals and St. James' Settlement each provide outpatient consultations and elderly services numbering in the millions each year, with the support of government subsidies.<sup>44</sup> In complement, the DBS Foundation partnered with the Hong Kong Council of Social Service to launch SilverConnect, an integrated tele-practice platform for home- and facility-based care. The program, launched in December 2024, aims to improve the long-term health and well-being of more than 52,000 elderly and caregivers.<sup>45</sup>

In addition, as governments across Asia increasingly try to push health care to the community level, GeronTechs are stepping up to transition seniors from facilities back into the community and to provide on-demand caregiving services that are both high quality and affordable. For instance, Evercare Health in Hong Kong, Life Circle in India, and Homage in Singapore all provide services to match seniors with caregivers on demand and in their own homes. In fact, according to Galen Growth's venture data, home health care is the most common offering of GeronTech in key Asian markets, with one in five GeronTech ventures providing home-based care solutions.

On infrastructural development, governments in developing Asia are also expressing a rising preference for private development of infrastructure (over state-owned enterprises) as they approach the limits of public spending. Previous Milken Institute research has explored various innovative financing mechanisms—bringing in governments, social enterprises, operators, land banks, and land trusts—that scale up affordable housing for middle-income older adults in the US.<sup>46</sup> Multiple governments worldwide have also started to incentivize private provision, tap into private-sector expertise, and help them scale (Figure 2).<sup>47</sup>



Figure 2: Government Efforts to Crowd-In Private Developments



Source: Milken Institute analysis of various sources (2025)



Singapore’s “Health District @ Queenstown” pilot offers another model for long-term collaboration. The pilot holistically combines research, services, and infrastructure in a multi-sectoral approach seeking to optimize healthy and purposeful longevity in place. The Tsao Foundation, multiple government agencies, nonprofits, and for-profits are also involved.<sup>48</sup> Conspicuously, the Ministry of Health is not a co-lead: This pilot will neither prioritize curative care nor seek to reorganize the health system in any major way. Instead, initiatives will focus on “amenable” determinants of health.<sup>49</sup>

For instance, the pilot will develop micro-jobs and promote trigenerational community engagement, among other outcomes, in pursuit of purposeful longevity. Preventive health and care will be optimized by experimenting with the size, composition, and ratio of community service teams. Effective communication and engagement are also priorities, especially to improve digital literacy, reduce fraud, and address misinformation.<sup>50</sup>

Moreover, these initiatives will be codesigned with seniors, target multiple determinants of health concurrently, and continuously be evaluated and iterated upon. The hope is to create virtuous cycles of healthy longevity that inspire and inform future development in the rest of Singapore.





# CONCLUSION

This report details multiple examples of collaborative approaches to support longevity innovation and broadened access to health. Together with Parts 1 and 3 (forthcoming), the Milken Institute hopes that documenting this vast range of case studies can help inspire other organizations seeking to contribute to the longevity space.

It is left to readers to assess which examples they may want to adapt or emulate because health systems are highly context-dependent. For instance, demographically young markets such as India and Indonesia may choose to focus on research and government awareness, rural regions may opt to prioritize infrastructural development, and mature urban markets such as Hong Kong and Singapore may lean toward convenings and service platforms to better integrate long-term care.

Stakeholders could start by identifying which collaborative approaches are most relevant to their health systems; determining available partners, resources, capabilities, and timelines; adapting the provided examples to local context; and getting started early on collaboration.





# ENDNOTES

1. *The HSBC Quality of Life Report 2024* (HSBC, 2024), <https://internationalservices.hsbc.com/quality-of-life/2024/>; Neeladri Verma, “Healthspan Barometer: Evaluating Public Perspectives on Healthy Ageing in Singapore,” *Economist Impact*, November 25, 2024, <https://impact.economist.com/perspectives/health/healthspan-barometer-evaluating-public-perspectives-healthy-ageing-singapore>.
2. “Ippudo Ramen Restaurant to Offer Low-Sodium Ramen for Tasting with ‘Salty’ Spoon Developed by Kirin HD,” *The Japan News*, December 3, 2024, <https://japannews.yomiuri.co.jp/business/companies/20241203-225875/>.
3. Joyce Teo, “WHO Recognises Singapore As Leader in Helping Patients by Connecting Them to Community Resources,” *The Straits Times*, November 28, 2024, <https://www.straitstimes.com/singapore/health/who-recognises-singapore-as-leader-in-helping-patients-by-connecting-them-to-community-resources>.
4. “Ping An Group: Pioneers in China’s Elderly Care and Financial Services,” Ping An, November 30, 2022, <https://group.pingan.com/media/perspectives/pingan-group-pioneers-in-chinas-elderly-care-and-financial-services.html>.
5. *The HSBC Quality of Life Report 2024*, pp. 13–14.
6. *Project V Pilot 2023* (National Council of Social Service, 2023), <https://www.ncss.gov.sg/programmes/people/volunteer-management/project-v>.
7. “‘Elderly Care Time Bank’ Scheme to Be Promoted Citywide,” Information Office of Shanghai Municipality, October 30, 2023, <https://www.shio.gov.cn/TrueCMS//shxwbgs/voices/content/20231030224335051.htm>.
8. “Long-Term Care Plan 2.0 Continues to Improve Elderly Care,” Executive Yuan, July 14, 2022, <https://english.ey.gov.tw/Page/61BF20C3E89B856/f47190a3-fba4-43d0-9da7-95f453fe27ae>; Chen-Fen Chen and Tsung-hsi Fu, “Policies and Transformation of Long-Term Care System in Taiwan,” *Annals of Geriatric Medicine and Research* 24, no. 3 (September 2020): 164–197, [https://www.researchgate.net/publication/345398205\\_Policies\\_and\\_Transformation\\_of\\_Long-Term\\_Care\\_System\\_in\\_Taiwan](https://www.researchgate.net/publication/345398205_Policies_and_Transformation_of_Long-Term_Care_System_in_Taiwan); Lee Hsin-fang and Jake Chung, “Health Ministry Expands Long-Term Care 2.0 Program by Nearly Fourfold,” *Taipei Times*, July 15, 2022, <https://www.taipeitimes.com/News/taiwan/archives/2022/07/15/2003781802>.
9. “LCQ20: Promoting the Application of Gerontechnology,” The Government of the Hong Kong Special Administrative Region, July 3, 2024, <https://www.info.gov.hk/gia/general/202407/03/P2024070300210.htm>.
10. Arkadi Mazin, “Mehmood Khan on Aging Policy and Collaboration,” *Lifespan.io*, December 3, 2024, <https://www.lifespan.io/news/mehmood-khan-on-aging-policy-and-collaboration/>.

11. Elaine Ho and Shirlena Huang, *Care Where You Are: Enabling Singaporeans to Age Well in the Community* (Lien Foundation, August 2018), pp. 111,  
<https://lienfoundation.org/wp-content/uploads/2024/10/Care-Where-You-Are-FINAL-Report-pdf-2.pdf>.
12. Stephen Wong et al., *Gerontechnology Landscape Report* (Our Hong Kong Foundation, June 12, 2017),  
[https://ohkfweb-backup.s3-hk.smartcloud.site/sites/default/files/media/pdf/healthtech\\_eng\\_cover\\_ss.pdf](https://ohkfweb-backup.s3-hk.smartcloud.site/sites/default/files/media/pdf/healthtech_eng_cover_ss.pdf).
13. “Leveraging AI for Healthy Ageing,” AI Singapore, accessed December 12, 2024,  
<https://aisingapore.org/technology/international-grant-calls/leveraging-ai-for-healthy-ageing/>.
14. “Prolonging Healthspan by Delaying Ageing,” Yong Loo Lin School of Medicine, National University of Singapore, September 8, 2022,  
<https://medicine.nus.edu.sg/news/prolonging-healthspan-by-delaying-ageing/>.
15. Quintus Lim, *New Models for Financing Translational Medical Research in Singapore: Update* (Milken Institute, August 30, 2023),  
<https://milkeninstitute.org/content-hub/research-and-reports/reports/new-models-financing-translational-medical-research-singapore-update>.
16. *Gerontechnology Landscape Report*, p. 8.
17. Si Ying Thian, “Singapore Launches Its First Community-Based Lab to Boost Assistive Tech Adoption Among Seniors,” *GovInsider*, March 18, 2024,  
<https://govinsider.asia/intl-en/article/singapore-launches-its-first-community-based-lab-to-boost-assistive-tech-adoption-among-seniors>.
18. “LCQ20: Promoting the Application of Gerontechnology.”
19. *White Paper on Strengthening Japan’s Healthcare Startup Ecosystem* (Ministry of Health, Labour and Welfare, June 2024), pp. 68–70, <https://www.mhlw.go.jp/content/10807000/001303599.pdf>.
20. Debbie Howard, “7 Reasons Why Japan Gives a Glimpse into the Future of Aging and Age-Tech,” *TheGerontechnologist*, accessed December 14, 2024,  
<https://theogerontechnologist.com/7-reasons-why-japan-gives-a-glimpse-into-the-future-of-aging-and-age-tech/>.
21. Salma Khalik, “Tweaks Made to Dementia Village Tender to Draw More Bidders,” *The Straits Times*, updated November 25, 2019,  
<https://www.straitstimes.com/singapore/health/tweaks-made-to-dementia-village-tender-to-draw-more-bidders>; “No Award of Tender for Site at Gibraltar Crescent for Dementia Care Village,” Urban Redevelopment Authority, May 19, 2020,  
<https://www.ura.gov.sg/Corporate/Media-Room/Media-Releases/pr20-18>.
22. Alan Beebe, May Chow, et al., *Senior Housing: A Business Case for Investment in Hong Kong* (Urban Land Institute and Chinachem Group, September 30, 2023), p. 13,  
[https://knowledge.uli.org/-/media/files/research-reports/2023/uli\\_senior-housing-report-2022\\_final.pdf](https://knowledge.uli.org/-/media/files/research-reports/2023/uli_senior-housing-report-2022_final.pdf).

23. Renald Loh and Navene Elangovan, “The Big Read: With More Seniors Needing Care, Is Assisted Living the Answer for S'pore's 'Missing Middle' and Their Caregivers?” *Today*, updated January 23, 2024, <https://www.todayonline.com/big-read/big-read-seniors-caregiving-assisted-living-singapore-caregivers-2198511>.
24. *Senior Housing: A Business Case for Investment in Hong*, p. 8; “HKHS’s First MiC Project ‘Chung Yuet Lau’ Completed Promoting Aging in Place and Optimizing the Use of Housing Resources,” Hong Kong Housing Society, April 14, 2024, [https://www.hkhs.com/home/upload/pdf/pr\\_20240414\\_CYL%20Completion%20Ceremony\\_EN.pdf](https://www.hkhs.com/home/upload/pdf/pr_20240414_CYL%20Completion%20Ceremony_EN.pdf).
25. *Minutes of the 114th Meeting* (Elderly Commission, March 27, 2024), p. 4, [https://www.elderlycommission.gov.hk/wp-content/uploads/2024/02/114th-EC\\_min\\_e-f.pdf](https://www.elderlycommission.gov.hk/wp-content/uploads/2024/02/114th-EC_min_e-f.pdf).
26. *Annual Report 2023*, pp. 32–33.
27. Wan Chen Kang Graham and Marcel Bilger, “Financing Long-Term Services and Supports: Ideas from Singapore,” *The Milbank Quarterly* 95, no. 2 (June 6, 2017): 358–407, <https://doi.org/10.1111/1468-0009.12264>.
28. “Statistics of Medical Care Institution & Hospital Utilization, 2022,” Ministry of Health and Welfare, updated January 13, 2025, <https://www.mohw.gov.tw/cp-6614-75351-2.html>; “National 10-Year Long-Term Care Plan 2.0,” Ministry of Health and Welfare, updated February 25, 2019, <https://www.mohw.gov.tw/cp-4344-46546-2.html>; “Statistics of Medical Care Institution and Hospital Utilization, 2022,” Ministry of Health and Welfare, updated January 13, 2025, <https://www.mohw.gov.tw/cp-6614-75351-2.html>; “Long-Term Care Plan 2.0 Continues to Improve Elderly Care,” Executive Yuan, July 14, 2022, <https://english.ey.gov.tw/Page/61BF20C3E89B856/f47190a3-fba4-43d0-9da7-95f453fe27ae>; Chen-Fen Chen and Tsung-hsi Fu, “Policies and Transformation of Long-Term Care System in Taiwan,” pp. 164–197.
29. Davinda Tham, “Behind Bars: They’re Elderly or Infirm—and in Jail. What Life in Changi Prison Is Like for These Inmates,” *Channel News Asia*, April 7, 2024, <https://www.channelnewsasia.com/singapore/prison-assisted-living-elderly-mobility-disability-physical-therapy-4003786>.
30. Carrie Yam et al., “Experience of a Demand-Side Subsidy Scheme for Residential Long-Term Care: Perspectives of Elderly and Their Carers,” *BMC Geriatrics* 23, no. 12 (January 7, 2023), <https://doi.org/10.1186/s12877-022-03692-2>; Stefanie Ettelt et al., “Explaining Low Uptake of Direct Payments in Residential Care: Findings from the Evaluation of the Direct Payments in Residential Care Trailblazers,” *Journal of Social Policy* 47, no. 3 (January 21, 2018): 505–522, <https://doi.org/10.1017/S0047279417000794>.
31. *Provision of Long-Term Care Services for the Elderly* (Audit Commission, Hong Kong), October 30, 2014, pp. 67–72, [https://www.aud.gov.hk/pdf\\_e/e63ch01.pdf](https://www.aud.gov.hk/pdf_e/e63ch01.pdf); “LCQ20: Statistical Information on Residential Care Homes for the Elderly.”



32. “No Award of Tender for Site at Gibraltar Crescent for Dementia Care Village,” Urban Redevelopment Authority, May 19, 2020, <https://www.ura.gov.sg/Corporate/Media-Room/Media-Releases/pr20-18>; Grace Leong, “Pilot 200-Unit Private Assisted-Living Project for Independent Seniors to Include Nursing Home, Clubhouse,” *The Straits Times*, updated November 21, 2024, <https://www.straitstimes.com/singapore/pilot-200-unit-private-assisted-living-project-for-independent-seniors-to-include-nursing-home-clubhouse>.
33. “LCQ20: Statistical Information on Residential Care Homes for the Elderly.”
34. *Provision of Long-Term Care Services for the Elderly; Regulatory Overview*, p. 85.
35. *Provision of Long-Term Care Services for the Elderly*; Crystal Ying Chan, “The Effect of Dwelling Size on the Mental Health and Quality of Life of Female Caregivers Living in Informal Tiny Homes in Hong Kong,” *BMC Public Health* 24, no. 2578 (September 27, 2024), <https://doi.org/10.1186/s12889-024-19915-7>.
36. *Report of the Subcommittee on Increasing the Provision of Residential Care Places for the Elderly* (Legislative Council Panel on Welfare Services 2023), LC Paper No. CB(2)659/2023, pp. 7–10, [https://www.legco.gov.hk/yr2023/english/panels/ws/ws\\_rcp/reports/ws\\_rcpcb2-659-e.pdf](https://www.legco.gov.hk/yr2023/english/panels/ws/ws_rcp/reports/ws_rcpcb2-659-e.pdf).
37. “Age-Friendly City,” Jockey Club Age-Friendly City, accessed July 24, 2024, <https://www.jcafc.hk/en/index.html>.
38. *Senior Housing: A Business Case for Investment in Hong Kong*.
39. Kar Him Mo et al., “Housing Preference for Ageing-in-Place: Are There Differences Among Emerging-Old, Young-Old and Old-Old Adults Living in Hong Kong’s Private Housing Estates?” *Journal of Aging and Environment*, December 13, 2023, <https://doi.org/10.1080/26892618.2023.2291762>.
40. Yang-Sheng Wong and Louis M. Verbrugge, “Living Alone: Elderly Chinese Singaporeans,” *Journal of Cross-Cultural Gerontology* 24 (September 30, 2008): 209–224, <https://doi.org/10.1007/s10823-008-9081-7>; “Research, Reports & Viewpoints,” Tsao Foundation, accessed November 19, 2024, <https://tsaofoundation.org/what-we-do/research-and-collaboration/research-reports-viewpoints>.
41. *Care Where You Are*; “All Work,” Lien Foundation, accessed November 19, 2024, <https://lienfoundation.org/work/>.
42. Isabelle Liew, “\$2.9m Study on Future Housing Types for Seniors Undertaken by NUS,” *The Straits Times*, June 5, 2024, <https://www.straitstimes.com/singapore/29m-study-on-housing-types-for-future-seniors-undertaken-by-nus>.
43. “SUSS Launches the IAIC to Tackle Global Healthcare Challenges,” *Taiwan News*, November 29, 2024, <https://taiwannews.com.tw/news/5983007>.
44. “Free Medical Services,” Tung Wah Group of Hospitals, accessed July 25, 2024, <https://www.tungwah.org.hk/en/medical/mh-introduction/free-medical/>; “About St. James’ Settlement,” St. James’ Settlement, accessed July 25, 2024, <https://sjs.org.hk/en/about/about.php>.

45. “Uplifting Lives and Livelihoods in Hong Kong: DBS Foundation Is Deploying Over HKD 40 Million for the City’s Vulnerable Communities, in Collaboration with HKCSS,” The Hong Kong Council of Social Service, December 16, 2024,  
<https://www.hkcass.org.hk/%E6%8F%90%E5%8D%87%E5%9F%BA%E5%B1%A4%E7%94%9F%E6%B4%B%E5%92%8C%E7%94%9F%E8%A8%88%E7%BC%9A%E6%98%9F%E5%B1%95%E5%9F%BA%E9%87%91%E6%9C%83%E6%8A%95%E5%85%A5%E8%B6%85%E9%81%8E4000%E8%90%AC%E6%B8%AF/?lang=en>.
46. Ashley Campany et al., *Innovative Financing and Care Models to Scale Affordable Housing Solutions for Middle-Income Older Adults* (Milken Institute, January 9, 2024),  
<https://milkeninstitute.org/content-hub/research-and-reports/reports/innovative-financing-and-care-models-scale-affordable-housing-solutions-middle-income-older-adults>.
47. “Low-Income Housing Tax Credit (LIHTC),” Office of Policy Development and Research, accessed August 21, 2024, <https://www.huduser.gov/portal/datasets/lihtc.html>; “State Environmental Planning Policy (Housing) 2021,” New South Wales Government, amended August 2, 2024,  
<https://legislation.nsw.gov.au/view/html/inforce/current/epi-2021-0714>; Kaylen Small, “Federal Government Announces \$12.5M in Funding for Seniors’ Housing Complex in Calgary,” *Global News*, April 8, 2021, <https://globalnews.ca/news/7745115/senior-housing-funding-calgary-temple/>; *Residential Long-Term Care Services for the Elderly in Japan* (Legislative Council Secretariat, 2023),  
[https://app7.legco.gov.hk/rpdb/en/uploads/2023/FS/FS01\\_2023\\_20230621\\_en.pdf](https://app7.legco.gov.hk/rpdb/en/uploads/2023/FS/FS01_2023_20230621_en.pdf); Zoey Ye Zhang, “China’s Tax Concessions for Elderly Care, Childcare, and Domestic Services Industries,” *China Briefing*, June 24, 2019,  
<https://www.china-briefing.com/news/chinas-tax-concessions-elderly-care-childcare-domestic-services/>; Janice Yau Garton, “Senior Housing in China: Older and Wiser,” *Hong Kong Lawyer*, March 2016,  
<https://www.hk-lawyer.org/content/senior-housing-china-older-and-wiser>.
48. “Health District @ Queenstown,” Housing & Development Board, October/November 2021,  
<https://www.hdb.gov.sg/about-us/news-and-publications/publications/dwellings/Health-District-Queens-town>.
49. David Allen, “Nurturing Community Metamorphosis—An Empirical Approach,” NUS Faculty of Arts and Social Sciences, YouTube, 1:49:10–1:49:30,  
<https://youtu.be/cQhOtp3T2Vc?si=HAnePLbEQ8ie-L0u&t=6550>.
50. David Allen et al., “Health District at Queenstown: Catalyst for Translational Research,” *Annals, Official Journal of the Academy of Medicine, Singapore* 53, no. 4 (April 29, 2024): 264–267,  
<https://doi.org/10.47102/annals-acadmedsg.2023369>.

## ABOUT THE AUTHOR

**Quintus Lim** is an associate director of policy and programs at the Milken Institute. He focuses on policy areas such as R&D financing and technology adoption across domains including health, food, and agriculture, as well as issues of ecosystem building. Lim holds a bachelor's degree in government and economics from the London School of Economics and a master's degree in analytics from the Georgia Institute of Technology.





LOS ANGELES | WASHINGTON | NEW YORK | MIAMI | LONDON | ABU DHABI | SINGAPORE