Overview

Japan became the world’s first “super-aged” society in 2006, when the share of the population age 65 and older exceeded the UN-defined threshold of 21 percent. Today, one in four Japanese is 65 or older, and by 2050, the share is projected to further climb to 36 percent of the total population, holding onto the country’s position as the world’s most aged society.\(^1\) Japan also boasts the world’s longest life expectancies, and with the seven million baby-boomer generation reaching the age of 75 in the coming decade, the share of the population age 80 and older is projected to double, from 7.8 percent today to 15.1 percent by 2050.

Japan stands out most because the population is not only aging but also shrinking. From 2010 through 2015, the country’s population shrank by almost one million people – the first time since the 1920s\(^2\) – and the decline is projected to continue over the next few decades. A falling birth rate and nearly zero net immigration have been the major contributors to this decline. Japan’s birth

\(^1\) UN Population Prospect 2015.


(Sources: World Bank, United Nations, OECD)
rate has long been significantly below the 2.1 per woman that is needed to sustain population levels — it currently stands at about 1.42 per woman, compared to the OECD average of 1.68\(^3\) — and the deficit is not made up by immigration either.

This shrinking, combined with the aging of the population, has led to declining workforce supply — Japan has lost roughly three million working-age people since 2010. Prime Minister Abe has cited “the declining birthrate and aging population at the root of the obstacles in economic growth”\(^4\) and has made Japan a leader in thinking about employment opportunities for older adults as a key component of the second phase of “Abenomics” to revitalize the Japanese economy. Partly due to the government’s efforts to assist job placement and extend the retirement age, Japan has among the highest older-age labor force participation among OECD countries. However, significant potential exists to further tap this productive opportunity — of the 70 percent of older Japanese who wish to work after age 65, only 20 percent are actually employed.

Japan is the only country with a national public holiday to honor and respect the country’s senior citizens. However, despite cultural reverence and strong community support, loneliness has emerged as a big issue in the Japanese society. The number of older adults living alone has increased by more than 60 percent over the last decade. The national government and local authorities have tapped into their existing infrastructures and institutions to tackle social isolation. Civil society organizations and senior citizen clubs also play crucial roles in enabling active aging and community-based engagement.

Japan has implemented one of the most generous long-term care systems in the world in terms of coverage and benefits available to create an environment where seniors can thrive and live autonomously. Supported by universal healthcare and long-term insurance, Japanese adults are living longer. However, with this longevity come health issues. For example, nearly half of those age 65 and older complain of symptoms of illness or injuries. The gap between life expectancy and healthy life expectancy for those ages 60 through 64 is also on the rise and increased by 14.5 percent from 1990 through 2015. The Japanese government has increasingly used Japan’s strong community ties to meet these healthcare needs as well as to raise awareness about dementia.

The Japanese government has embraced the changing demographic structure and recognizes the aging, shrinking population not as a burden for the world’s third largest economy but as an incentive to boost productivity through innovations like robots, wireless sensors, and artificial intelligence.\(^5\) Today, Japan is at the epicenter of robotics research, with the largest number of patents in the robotics field. While the initial focus was on closing the workforce gap, over the past few years, non-industrial robots have been designed to address healthcare and nursing needs of the senior population. Recognizing that the older adult market in Japan is estimated to be worth 100 trillion yen (approximately USD 1.27 trillion) per year, the business sector has also undertaken efforts to locate possible technological solutions that both address the social challenges of the changing demographic and exploit the associated economic opportunity.

Rapid urbanization and demographic shifts over the last decade have laid the groundwork for a lonely and isolated life for many older Japanese adults. This has provided the impetus to design a more age-friendly social infrastructure that supports the needs and wellness of seniors. Innovative solutions have been developed to utilize existing infrastructure to deliver services to older adults and to prevent social isolation. Housing and urban planning projects have attempted to accommodate a healthy and independent older population. One area of weakness is in mobility. While Japan has made great strides, public transportation services in suburban areas and barrier-free facilities in older buildings are still lacking.

Social Connection

Japan has witnessed a surge in the number of older people living alone over the past decade as its population has aged. While the share of older adults living alone has increased only marginally, today 6.25 million Japanese ages 65 and over are living alone, compared to 3.86 million in 2005. This gradual shift has been driven by the convergence of multiple factors, including a shrinking household size as a result of declining fertility, migration of younger population to large cities, as well as a decline in marriage rates. Older Japanese adults are also more socially isolated than their counterparts in other high-income countries, with infrequent contact with neighbors or children who do not reside with them. The numbers of those living alone, kodokushi (“solitary death”) and suicides are on the rise. In Tokyo, 2,869 older people died alone in 2013. Of those, one-third of the corpses were found more than a week after death. Indeed, older adults are worried about dying alone. The Cabinet Office conducted a survey on the aging society in Japan in 2014 and found that 44.5 percent of citizens age 65 and older who live alone are seriously concerned about dying alone. This proportion is especially high – 63.4 percent – for those who live alone and have a conversation with others only once or twice per month.

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7 Interview with the Asian Growth Research Institute. March 2017.


Experts also pointed to the vulnerable group of senior ex-inmates, who struggle with isolation, poverty, and loneliness. Roughly 20 percent of older ex-inmates resort to shoplifting and crime in Japan in order to return to prison, where they have companions as well as access to free meals, accommodation, and healthcare. Between 1991 and 2014, the rise in the number of senior repeat offenders has been striking – those imprisoned six times or more climbed by over 350 percent. Akio Doteuchi, a senior researcher on social development at the NLI Research Institute in Tokyo, has stated, “The social situation in Japan has forced the elderly into the need to commit crime. About 40 percent of the elderly live alone. It’s a vicious circle. They leave prison, they don’t have money or family, so they turn immediately to crime.”

Tackling Social Isolation

Local authorities are stepping up efforts to ensure adequate community support for the socially isolated. The Zero Isolation Project, which was established in 2013 in Adachi, a special ward located in Tokyo Metropolis, is a good example of community efforts to tackle social isolation. The project was launched in response to an incident in 2010, when public officials visited their oldest resident, who was believed to have been 111, and found a corpse. The local authority began using the citizens register to identify households with a single person over 70 who does not subscribe to a public health insurance program. With the support of more than 100 registered neighborhood associations, these households were visited to evaluate social connections of the residents.

Those who do not have a ten-minute conversation with someone from outside their household more than once per week, or who do not have someone to go to for help when encountering difficulty, are recognized as socially isolated and receive follow-up support, including regular visits by volunteers. Information on these households is also provided to the police and fire service to enable them to pay special attention to ensure their safety. By the end of 2013, 680 “isolated” older adults were identified, and around 500 local volunteers participated.

Andrew Stevens, Senior Researcher at the Japan Local Government Centre, praised the Zero Isolation project for having effectively leveraged existing resources and systems and mobilized community

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11 Interview with Masaya Shimmei, Research Fellow, Institute for Future Engineering, March 2017.
13 Interview with Ryoko Morozumi, University of Toyama, April 2017.
15 https://www.ft.com/content/fbd435a6-f3d7-11e5-803c-d27c7117d132.
17 Ibid.
18 Adachi enacted an ordinance in 2012 to allow the ward to provide personal information about older people to neighborhood and community association in order to protect them from isolation. To protect individual privacy, a limited number of people are authorized to access the information.
members to eliminate risk of isolation among older adults.\textsuperscript{20}

Another innovative solution that was developed to utilize existing infrastructure is the “watchover service,” which is built on the national network of Japan Post Group, a government-owned holding company. Japan Post first introduced the support services for older people in 2013 on a trial basis in six prefectures – Hokkaido, Miyagi, Yamanashi, Ishikawa, Okayama, and Nagasaki – and later expanded nationwide by the end of 2015. The initiative leverages the Group’s network of postal offices and staff to monitor the health and well-being of older people and report back to their family members. One can subscribe to receive one 60-minute home visit for 2,480 yen (around USD 20) or daily phone call check-ins for a monthly fee of 980 yen for landlines and 1,180 yen for mobile phones (around USD 8-10). Japan Post Group operates 24,000 post offices around the country and has a workforce of 400,000, hence it is uniquely equipped to deliver this service to virtually every older citizen in the country.\textsuperscript{21}

To improve the service quality and efficiency, the initiative is incorporating new technology. In 2015, Japan Post collaborated with IBM and Apple to provide older subscribers with free iPads loaded with IBM-developed apps, which help to connect older people with services, healthcare, community, and their families. The apps enable older subscribers to schedule medical appointments, hire home maintenance professionals, volunteer, and coordinate travel, among other functions. During postal employees’ home visits, they also help subscribers address technical issues with the apps. This new service entered the pilot phase in the second half of 2015 and aims to reach four to five million seniors in Japan by 2020.\textsuperscript{22}

Japanese senior citizens’ clubs are also working to promote older people’s social participation. Established soon after World War II, the clubs were designed to enhance the welfare of older citizens in the community. The clubs, which are independent organizations but work in tandem with local governments and are partially subsidized by neighborhood associations, offer wide-ranging activities, including sports, travel, volunteer work, performing arts, and exchanges with children and youth. Today, they have over seven million members around the country.\textsuperscript{23}

Senior citizens’ clubs are just one platform for promoting volunteerism among older people to strengthen their social connections. Older volunteers have also been mobilized to assist in disaster relief as the country is vulnerable to a variety of natural disasters. After the Great East

\textsuperscript{20} https://www.theguardian.com/society/2014/feb/19/ageing-population-uk-learn-overseas.
\textsuperscript{21} https://www.japantoday.com/category/national/view/japan-post-to-offer-home-visit-service-for-elderly.
\textsuperscript{23} Sheung-Tak Cheng et al. (2015).
Japan Earthquake in 2011, over 84 percent of those aged 60 or older contributed to support activities for the disaster-stricken areas. Apart from donations, national senior citizens clubs and communities prepared over 115,000 genki-bukuro, welfare packs stuffed with daily necessities and encouraging message cards, for the disaster victims.

**Physical Infrastructure**

Japan is a leader in Asia in encouraging universal accessibility, thanks to government efforts to incorporate barrier-free features into transportation and public facilities over the past decade. This continued improvement in physical infrastructure has benefited older Japanese citizens, who account for more than two-thirds of people with physical disabilities in Japan. According to data from 2014 for facilities seeing over 3,000 visitors daily, more than 80 percent of airports, passenger ship terminals, bus terminals, and train stations have installed ramps and elevators. In addition, disabled-accessible toilets are available at all airports, 71 percent of passenger ship terminals, 63 percent of bus terminals, and 80 percent of railway stations.

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24 Cabinet Office “Opinion Poll about Older People’s Economic Life” (2011).


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![Accessibility of Public Facilities in Japan](chart.png)

(Based on facilities that have daily passenger flow above 3,000)

(Sources: Ministry of Land, Infrastructure, Transport and Tourism; Nippon)

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Japan first enacted the Transportation Accessibility Improvement Law in 2000, aiming to promote easy access to public transportation for older adults and people with disabilities. However, the law’s impact was limited because it only advised, rather than required, bus companies to make efforts to increase accessibility. In 2006, it was incorporated into the New Barrier-Free Act, which aimed to create a comprehensive plan for accessible infrastructure. This law, revised in 2011, now stipulates that any passenger station that serves 3,000 people or more per day should implement designs with the target of achieving universal access by 2020.

The 2020 Tokyo Olympics and Paralympics Games has become a catalyst for further improvement of accessibility in Tokyo and other cities. According to Masaya Shimmei of the Institute for Future Engineering, in March of 2017, “Japan is actively preparing for the upcoming Tokyo Olympic Games in 2020, with a focus on improving accessibility. Nationwide, railway and bus companies are increasing installation of barrier-free facilities.”

Despite the progress, small retailers and towns have yet to implement universal access designs due to financial and infrastructural limitations. In addition, according to Shimmei, sidewalks are generally too narrow for those with disabilities to move around with ease.

Like their counterparts in other countries, many large cities in Japan provide their older adults a certificate for free or reduced fare for public transportation. However, in suburban areas, automobiles continue to be the main form of transportation because of a lack of accessible public transportation. Driving becomes a necessity for some, leaving them vulnerable to traffic fatalities – in 2015, over half of all road accident deaths involved senior drivers. To address this risk, municipal governments in some suburban towns have implemented a variety of programs to provide free bus shuttles to supermarkets and hospitals. Although these local services have come to the aid of older adults, cost and infrequent availability are issues.

In some neighborhoods, local civic groups have stepped up to run community bus projects through self-sustaining financial models. For example, in the Hori district of Fukushima city, a civil group called Zeene started a program called “Round and Round Bus” in 2008, offering free rides to older adults. The project covers its operating costs with revenues from advertisements on the bus as well as donations from residents. The bus circulates five times per day along three routes. Local civil societies have initiated

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30 Interview with Masaya Shimmei, Research Fellow, Institute for Future Engineering, March 2017.
34 Interview with Yoshihiko Kadoya, Hiroshima University; Masaya Shimmei, Research Fellow, Institute for Future Engineering, March 2017.
similar programs in other towns, but these community efforts remain limited. Residents often have to make bookings in advance, and buses do not go beyond the town.

Local governments are also looking to ICT solutions to address these issues. In towns, such as Tango on the west coast, the local government is allowing Uber’s ride-sharing services to meet seniors’ travel needs. Uber has been largely banned in Japan to restrict non-professional drivers from offering taxi services. In Tango, however, where public transport is limited, and over 40 percent of Tango’s residents are over age 65, Uber was authorized to provide services in late 2016. Masami Takahashi, president of Uber Japan, views ride-sharing as a potential solution to address the transportation needs of older residents in rural areas, which are underserved by public transport network, and to ensure their convenient and safe mobility. Uber has handed out tablets to seniors without access to mobile devices and is aiming to cater to this market across the country.

Incorporating Older Adults’ Needs into Housing and Urban Planning

As over half of older Japanese prefer to spend their golden years at home, the Japanese government has sought ways to enable older Japanese to continue to live within their community. Supplying independent housing specifically equipped for seniors is one strategy, led by the Ministry of Health, Labor and Welfare’s longstanding Silver Housing Project. First introduced in 1987, the project provides subsidized public rental housing for those age 60 or older and is designed for their needs — with services including life-support advisors for counseling, consultation, safety, temporary home help, and emergency response. In 2011, the project was expanded to establish senior houses with healthcare, nursing care, and long-term care services. As of 2014, the project had provided 25,523 housing units on 1,007 housing estates.

Beyond housing, Japan is a global leader in urban planning to design cities that enable independent living. In 2014, as part of the Basic Policies for the Economic and Fiscal Management and Reform, the Japanese government declared a push into compact city development to allow older residents to have easy and comfortable access to retail and medical services. A compact city is an urban planning and urban design concept that promotes relatively high residential density with mixed land uses. Under this initiative, the national government provides financial incentives such as a preferential tax to municipalities for the construction of facilities that promote compact city development. One particularly interesting model of developing compact cities is from Toyama City in Toyama Prefecture, which has promoted urban development to facilitate convenient and comfortable access to functions that are necessary for daily living. A range of facilities, including housing and medical services, are consolidated within walking distance and along public transit network routes.

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39 [https://www.mlit.go.jp/common/001157851.pdf](https://www.mlit.go.jp/common/001157851.pdf)
40 Interview with Yoshihiko Kadoya, Hiroshima University, March 2017.
41 Interview with Ryoko Morozumi, University of Toyama, April 2017.
Productive Opportunity

Japan has the world’s most rapidly shrinking population ages 15 through 64, a trend that has elevated the importance of mobilizing the older workforce to boost economic growth and to meet the public pension obligations of the growing retired population. This economic imperative aligns with the interests of Japanese seniors, who have a strong interest in remaining employed. The government has adopted a variety of policy measures to increase workforce participation among older people, ranging from reforming the retirement system to assisting older people with job seeking. However, employers have yet to recognize fully the productive potential of the older population, thus far tending to hire older workers out of social or legal obligations. As a result, a mismatch persists between the skills and abilities of older job seekers and the nature of job positions available to them, leading to a missed opportunity for the economy as a whole.

Workforce Participation of Older Adults

Japan has a higher workforce participation of older adults than most OECD countries. As of 2015, nearly 65 percent of Japanese ages 60 through 64 and 22 percent of

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those age 65 and older were active in the labor market, compared with the OECD average of 50 percent and 14 percent, respectively. This is driven by older adults’ own desire to continue working beyond age 60 as well as the recent government reforms. These factors include: (1) cultural value placed on remaining productive, (2) healthier and longer lives, (3) financial necessity, and (4) government efforts to employ older adults to boost the nation’s economy.

First, older Japanese adults, on average, do not consider themselves old and wish to be employed longer. In a 2014 survey, the average age that people use to define “older people” was 73.7. A 2015 survey indicated that more than 40 percent of people between ages 65 and 74 do not consider themselves “older people.” They also have demonstrated a high motivation to work: roughly two-thirds of people wish to work beyond age 65. The motivation is coupled with a high social value placed on remaining an active member of society and the workforce, particularly for men.

Second, longer and healthier lives have allowed older Japanese adults to remain economically active. The absolute number of healthy and active older persons has risen substantially and will continue to rise (from 18.9 million in 2000 to 30.3 million in 2025), allowing them to work longer.

Third, and, according to some experts, most importantly, many older people continue to work out of economic necessity. Japan ranks in the bottom half of OECD countries for the economic well-being of its older population. As of 2012, nearly one-fifth of Japanese age 65 and older had income below half of the household median. Furthermore, pension cuts and higher employee contribution to boost the economy and contain ballooning welfare costs are hurting the older workers who are leaving the workforce with smaller personal savings and reduced pensions from the government. This problem is expected to worsen as more of Japan’s part-time workers with fewer benefits (currently accounting for more than one-third of the workforce) reach retirement age.

Finally, the government also plays an important role in facilitating the workforce participation of older workers. Population aging, aggravated by workforce shrinkage, has pulled down the potential growth rate and placed greater burdens on the social security system. Increased social security costs are a major cause of Japan’s fiscal deficit – public debt exceeded one quadrillion yen (approximately USD 10.46 trillion) in 2013, more than twice the annual gross domestic product of Japan. The shrinking working population

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44 OECD Statistics.
47 Ogawa et al., 2005.
48 OECD Statistics.
bears a heavier burden to keep the system solvent. There were 3.3 workers aged between ages 15 and 64 supporting each person age 65 or older as of 2005, but that proportion will decline to 1.3 workers for each senior person in 2055. In order to meet the pension obligations as well as boost the number of people working, the government has been continually reforming the retirement system to prompt employers to hire older workers.

Reforming the Retirement System to Extend Older Worker’s Stay in the Workforce

Japan is one of very few countries facing a shrinking working population. The share of the traditionally defined working ages (ages 15 through 64) in the total population has decreased – from almost 70 percent in the early 1990s to today’s 61 percent – and it is projected to fall to around 51 percent by mid-century. To address this trend, the Japanese government has been promoting an “ageless society” philosophy whereby Japanese adults can stay in active service throughout their lives. One key target of this agenda is to achieve a labor participation rate of 65 percent among those ages 60 through 64 by 2020, up from 60 percent in 2011. The primary strategy the government has used is retirement system reform, which serves the dual purpose of reducing the public pension obligations as well as ensuring the economic security of older workers.

Experts applaud the Japanese government for actively encouraging employers to retain older workers, particularly highlighting its amendments to the Act on Stabilization of Employment of Older Persons in 2004 and 2012. The law was first introduced in 1971, aimed at promoting employment of seniors while contributing to the development of the economy and society. By the early 1990s, the mandatory retirement age in Japan increased from 55 to age 60, but even that was insufficient to ensure that working adults had saved enough for retirement. As Thomas Klassen of York University, a specialist in Japanese labor markets, explains, “Even by 60, older adults had been unable to save enough to permanently withdraw from the labor force and were forced to begin post-retirement employment which was almost always low-paying and precarious, without benefits.” This only added pressure to the social security system.

In order to address this as well as boost workforce numbers, the Japanese government amended the act in 2004, requiring employers to secure employment until age 65. It allowed employers to increase the retirement age by either setting a minimum mandatory retirement age of at least 65 (from 60, effective in 2013), abolishing the mandatory retirement age altogether, or introducing a continued employment scheme, under

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55 Interview with Thomas Klassen, York University, April 2017.
which employees older than age 60 are re-employed. Among the three options, post-retirement employment schemes became the most popular among employers.\textsuperscript{56} The latest survey by the Ministry of Health, Labor and Welfare showed that only 3 percent of companies abolished their retirement system and that about 16 percent raised their retirement age, while more than 80 percent opted to adopt a continuous employment system.\textsuperscript{57} As hoped, the workforce participation of the age group 60 through 64 increased from 54.6 percent in 2004 to 60.5 percent in 2012.\textsuperscript{58} 59

The act was further strengthened in 2012, adding the requirement for employers that have adopted the continued employment scheme to employ all employees who are willing to work until at least age 65. The government also provides counseling and financial incentives for employers to hire older workers, in recognition of the high costs of implementation for small and medium-sized companies. The incentives include subsidies to businesses employing 300 or fewer workers, that raise the retirement age or introduce a continual employment scheme;\textsuperscript{60} grants proportional to the implementation costs for companies that introduce activities to improve working conditions; and advice to companies to revise pay and retirement-benefit systems by the Public Employment Security Offices. In addition, the government provides subsidies to small companies that have at least three workers age 45 and older and plan to continue to create job opportunities for older adults.\textsuperscript{61}

To facilitate implementation, the Act allows an employer to transfer employees who are eligible for continued employment to a subsidiary, a parent company, or other affiliated companies.\textsuperscript{62} This is a loophole that employers have used to their advantage. According to Klassen, “Large employers in Japan have created subsidiaries that employ older workers doing work that – quite often – is menial work and of little importance to the firm.”\textsuperscript{63} This is also corroborated by a survey conducted by the Japan Organization for Employment of the Elderly, indicating that fewer than 9 percent of companies maintain the same job conditions with re-employed workers’ previous ones. Nearly 43 percent modify conditions with shorter hours, reduced duties, and lowered expectations.\textsuperscript{64}

\begin{footnotesize}
\begin{enumerate}
\item Naoki Mitani, 2012.
\item OECD Statistics.
\item Ministry of Health, Labor and Welfare, 2010.
\item Ibid.
\item The amendment does not change the fact that there are no statutory rules or regulations concerning the employment terms and conditions that will apply during the re-hiring period. This means that the type of employment (e.g., permanent employees or contract employees), working arrangements (e.g., full-time, part-time) and employment conditions (e.g., salary, benefits) for post-retirement-age employment are all up for agreement between the employer and the employee.
\item Interview with Thomas Klassen, York University, April 2017.
\item Japan Organization for Employment of the Elderly, Persons with Disabilities, and Job Seekers, Current and Future Wage Trends for Elderly Workers, 2015.
\end{enumerate}
\end{footnotesize}
Overall, the reforms in the retirement system have been successful in ensuring working opportunities for older adults beyond the traditional retirement age of 60. However, their success was not borne out of an appreciation by employers of the productive potential of older adults, but because of the social and legal options. Experts are not optimistic about the amendment’s actual impact as these incentives might not be sufficient to alter the preferences of employers. Toshio Obi, a professor at Waseda University, contends that while many older workers have extensive experience and expertise and are suitable for high-skill jobs, after they reach retirement age they are often replaced by younger workers and put in routine, low-skill jobs.

Assisting Job Placement for Older Adults

A mismatch has persisted between older adults’ interest in economic participation and employers’ perception of their productive potential – although nearly 70 percent of older people wish to work beyond the age of 65, only 20 percent of are actually employed. The government is assisting these older people’s job-seeking efforts. As with other age groups, older workers can use services provided by Hello Works, a nationwide public employment service with no age restrictions – the number of successful placements for people age 60 was about 207,000 in 2013. Meanwhile, the government has also established a tailored platform called the Silver Human Resource Center (SHRC) dedicated to older job seekers.

First launched in 1974, SHRCs are fully subsidized by the national and municipal governments. They are intended to provide community-based temporary and short-term job opportunities for older adults by matching job orders from private companies, civil societies, and households with older job seekers. In addition, the SHRC has operated a Senior Work Program since 2003, which helps to improve the employability of older adults by providing free skill training and job-interview preparation, in cooperation with various associations of business owners and public institutions.

As of March of 2015, there were 1,272 centers around the country with approximately 720,000 members. In Tokyo, 10 percent of employment referrals of older adults have gone through the SHRC. Experts have widely deemed SHRC successful, although jobs provided through the network often involve light work and pay low-wages. While SHRC

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65 Interview with Thomas Klassen, York University, February 2017.
66 Interview with Thomas Klassen, York University, March 2017; Interview with Toshio Obi, Waseda University, April 2017.
67 Interview with Toshio Obi, Waseda University, April 2017.
69 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4956197/.
71 Harigane et al., 2009.
72 Interview with Thomas Klassen, York University, April 2017.
is rarely successful in helping older adults find jobs that are the same as they had before, beneficiaries gain opportunities to redeploy their skills and experience into new work. Small businesses in Japan, which are at a disadvantage compared to large companies in the competition for young talent, have proven particularly keen to recruit these older workers.\textsuperscript{73}

\textbf{Intergenerational Conflict}

Extending working lives has provoked some tension between generations, particularly concern that the country is at risk of creating a new pool of young, part-time workers who are struggling to find job security.\textsuperscript{74} These employees are poorly paid and receive very little training. This underemployment leads to reduced ability to marry and start a family, thus feeding into the vicious cycle of the shrinking working-age population itself.\textsuperscript{75} The jury is out as to whether this holds true – some experts argue that the high rate of part-time workers among the younger population is a manifestation of stagnation in the economy and that hiring older workers does not, in itself, imply fewer opportunities for younger workers.\textsuperscript{76}


\textsuperscript{74} ILC, 2012.

\textsuperscript{75} Aging, Economic Growth, and Old-Age Security in Asia, Asian Development Bank 2012.

\textsuperscript{76} Interview with Thomas Klassen, York University, April 2017.
Technological Engagement

With over half of its population age 60 and older online, and the nation’s competitive edge in information and communications technology (ICT), Japan is better positioned than most other countries to capitalize on new technologies for older consumers. The government has been seeking ICT-driven solutions in various aspects of older adults’ lifestyle, ranging from healthcare and social welfare to economic participation. The government, as well as the private sector, is also seeking to secure competitive advantages in the booming global older-age market, evidenced by the forceful movement to develop robotics that serve needs of older people and caregivers.

Digital Diffusion Among Older Adults

Older Japanese adults are, on average, relatively technology savvy, compared with counterparts in most other countries. Nearly three-quarters of Japanese citizens ages 65 through 74 are online, around 50 percent higher than the OECD average. The prevalence of digital technologies among older adults has also been catching up with that of the general population over the past decade. From 2002 through 2015, the Internet-usage rate of people ages 60 through 69 increased by 50 percentage points, and the rate for the age group 70 through 79 rose by 45 percentage points.

Smart phones have contributed to the expanded Internet usage among older people. As of 2015, nearly 16 percent of Internet users age 60 and over access the Internet through smart phones, up from 9.5 percent in 2014. During the same period, smart phone ownership grew from 16.2 percent to 28.4 percent for ages 60 though 69 and from 5.3 percent to 9.2 percent for ages 70 through 79. This growing uptake is mostly need-based and has been fostered by the incorporation of universal design principles by mobile phone manufactures, who realized the potential market opportunities inherent in meeting the needs and lifestyle aspirations of an aging society. In 2013, NTT DoCoMo launched a Raku-Raku (“easy-easy”) smart phone targeting consumers age 60 and older, who account for nearly one-quarter of its customers. The smart phone has larger fonts and icons with simplified steps for sending e-mails. Key features include pre-installed apps that are designed for an aging user’s lifestyle, such as an emergency safety button that notifies a friend or family member of the user’s GPS location.

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77 2013 White Paper on Information and Communications in Japan.
79 Communication Usage Trend Survey by Ministry of Internal Affairs and Communication 2014.
83 Obi et al., 2012.
Even with these tailored devices, like their counterparts in other countries, older people in Japan fall behind the younger population in terms of adopting new technologies, with usage declining with age. Among the older population, those in their 70s or older tend to lack relevant knowledge and face more difficulty adopting new technologies than those in their 60s who had a higher chance of picking up digital skills at the workplace. Limited success in narrowing the digital divide because in addition to the challenge of lack of knowledge, other factors (including high costs and physical difficulty of operating devices such as personal computers) are important barriers to the use of new technology.

Boosting Economic Growth through Technology Development for Older Adults

In light of a shrinking workforce, Japan also seeks to utilize ICT to enable economic participation of seniors, with a major recent focus being telework. As of 2015, only 2.7 percent of Japanese workers worked from home remotely for at least one full day per week, compared with 10 to 20 percent of...
their counterparts in western countries, according to the Ministry of Land, Infrastructure, Transport and Tourism. The Abe administration has put emphasis on using telework to increase employment opportunities for older adults, women, and people with disabilities, and established in its 2013 Revitalization Strategy the goal that by 2020 over 10 percent of workers telecommute at least one day per week. However, additional investment in equipment, infrastructure, and digital security solutions can prevent employers from implementing telework, particularly for small and medium-sized enterprises, which often lack the necessary internal capacity and financial resources.

ICT is also being leveraged to open up new economic opportunities for older workers. In Kamikatsu, a small rural town in Katsuura District, Tokushima Prefecture, nearly half of the population is older than 65, and 86 percent of homes are connected to the Internet through a fiber-optic network. It is the site of “Irodori,” a cooperative selling brightly colored leaves. Through the “Irodori” project, local farmers sell some 320 different kinds of leaves grown in the local mountains and fields, which are used for Japanese-style table settings. Senior farmers can access market information, receive orders, and manage shipments via special trackball-controlled computers placed in agricultural cooperatives, and more recently, through the use of special tablet devices that were developed in partnership with telecom operator NTT DoCoMo. Kamikatsu now has a market share of 90 percent for the Irodori leaf and has become a model for how ICT can be leveraged not only to contribute to the economic development of the town but also to have economic participation from older women.

Promoting the “Silver Market”

While “Irodori” uses ICT to tap the productive potential of older workers, the primary focus of the private sector has been on developing ICT-based products to tap into the emerging “silver-market” segment. Examples of practical applications developed by local companies for targeting older adults include services to improve convenience such as provision of online shopping for technology-savvy older adults. These e-commerce services, such as an easy and accessible online grocery service, are offered by major e-commerce sites (including Ito-Yokado, Amazon, and Rakuten). Older adults, especially those who find it difficult to go to the supermarket because of limited mobility or isolation in rural communities, actively use these services.

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90 Interview with Toshio Obi, Waseda University, April 2017.
91 Kenji 2012.
93 Interview with Takanori Shibata, Institute of Advanced Industrial Science and Technology, Tokyo Institute of Technology, April 2017.
94 Interview with Toshio Obi, Waseda University, April 2017.
Companies have also developed ICT products that directly assist older adults’ mobility, including smart canes and wheelchairs with built-in GPS systems. Japanese manufacturer Fujitsu was the first to produce a smart walking stick with a built-in navigation system that not only provides the user with arrows to point them in the right direction toward their destination, but also allows others to track the walker’s movements. These canes can also monitor heart rate and temperature and, if necessary, can call for assistance.\(^\text{96}\)

**Establishing an E-Aging Society**

In light of the convergence of digital and aging trends, projects are under development to promote an e-aging society where ICT is incorporated into all aspects of life, including education, government, smart homes, disaster management, pension and finance, health, transportation, and agriculture. One municipal pilot project that has partially incorporated elements of an e-aging society is the Otsuki project. It was launched in Otsuki City in 2014 by the local government, in collaboration with NTT DoCoMo and Waseda University, and funded by the Ministry of Internal Affairs and Communications. Otsuki City, approximately 80 kilometers from Tokyo and located near Mt. Fuji, has 35 percent of the local population age 65 and older, many of whom are engaged in farming. The project has three main components: e-Agriculture, e-Health, and e-Tourism.

E-Agriculture connects the local farming industry with consumers residing in urban areas, like Tokyo, through digital technology. People residing in Tokyo can rent farming fields in Otsuki, and by using sensors, the Internet, and digital cameras, they monitor the fields remotely and communicate with local farmers who are entrusted with daily maintenance. E-Health uses digital networks to enable local people, including seniors, to use a digital device to monitor health status and send data to medical care providers. Pilot funding ended in 2016 as planned, but the local government has continued with the program in recognition of tangible benefits achieved during the pilot phase.\(^\text{97}\)

**Pressing Ahead on Robotic Strategy**

Recognizing that productivity improvement is a vital component of managing a shrinking workforce, the Japanese government is investing heavily in robotics, aiming to make Japan the world’s leader in this emerging sector. In the revised 2014 Japan Revitalization Strategy document, which is part of the structural reforms element of Abenomics, the government established a goal to realize a “New Industrial Revolution Driven by Robots.” This was further updated in 2015 to investigate how technology, including robotics, can assist in long-term care. Under this plan, the government developed a five-year strategy to support the development of robots in different sectors of the economy, particularly setting one-third of the budget (JPY 5.3


\(^{97}\) Interview with Toshio Obi, Waseda University, April 2017.
billion (approximately USD 47.3 million) for funding research and development of robots for nursing and medical use.

Japan has been a leader in the global robotics industry, and Japanese companies are at the forefront of developing robotics to cater to older adults’ needs, partly thanks to their proximity to a tremendous domestic older-age market and older Japanese adults’ high acceptance of robots. According to a survey conducted by NK Works Co., about 80 percent of respondents welcomed the prospect of robots looking after them when they need care, saying they would feel more at ease than if human caregivers were present. Today, robots are increasingly employed at nursing homes and medical institutions in Japan in order to ease caregiver needs. At homes, smaller robots are used to help provide mobility support or to act as communication partners to older people; for example, PARO, an interactive robot in the shape of a baby seal, is gaining traction as a companion to help reduce anxiety and depression among older adults living alone.
Healthcare and Wellness

Already the global leader in longevity, the share of people age 80 and older among the senior population will increase by more than one-third to 42 percent by 2050.\(^9^8\) To keep up with the healthcare needs of the aging population and to ensure fiscal sustainability, the Japanese government has constantly adapted its long-term care insurance program with an aim to help older people lead more independent lives and to relieve the burdens of family caregivers. More recently, the Abe administration has also incorporated supporting caregiving into its strategy of strengthening workforce supply in the face of a shrinking domestic workforce.

Health Status

Japan boasts of the highest longevity and “health span” of any major country. An average Japanese person age 60 through 64 was expected to live another 25.7 years as of 2015, with 20.7 years in good health. Since 1990, however, the differential between life expectancy and healthy life expectancy for Japanese person age 60 through 64 has increased by 14.5 percent and reached five years as of 2015.\(^9^9\) So, while Japanese adults are living longer, health issues are growing – nearly half of older adults complain of symptoms of illness or injuries.\(^1^0^0\)

Japan has one of the most accessible health care systems, characterized by universal coverage and choice between public and private health care providers.\(^1^0^1\) All residents are required to join the public health insurance scheme, and in exchange they receive access to government-approved procedures and prescriptions, for which they pay only 30 percent of the cost or less. A further public healthcare insurance program for people age 75 and older was established in 2008 to address the unequal payment burden, compared to younger people.

Utilizing Digital Technology to Meet Healthcare Needs of the Aging Population

The Japanese government is aware of the potential of digital technology to meet the needs of a super-aged society in various aspects, with healthcare having long been a primary focus. The Abe administration recognized opportunities offered by ICT

\(^{9^8}\) UN Population Prospect 2015.
\(^{1^0^0}\) Ministry of Health, Labour and Welfare “Comprehensive Survey of Living Conditions” (2013).
\(^{1^0^1}\) Interview with Miharu Nakanishi, the Japan Chapter of the World Young Leaders in Dementia, Dementia Friendly Japan Initiative, and Tokyo Metropolitan Institute of Medical Science. April 2017.
in nursing and healthcare of the older adult population with its first Revitalization Strategy in 2013. Under this strategy, the government is promoting the use of ICT and big data to provide diagnosis support and innovation of new drugs (through integration of medical records across institutions), personalized healthcare services, and improvement of the quality of nursing care (through focus on productivity and robotics).

Japan has been the thought leader in pushing e-health initiatives – as early as 1993, the Ministry of Health, Labor and Welfare initiated Japanese policies on e-health with the creation of the Health Care Information Systems Advisory Committee under the Director General of the Health Policy Bureau. The initiative has been continually expanded and revised in order to allow digitalization of healthcare reports, a computerized physician-order entry system, and fully online processing of all medical insurance claims. In particular, telemedicine is at the forefront of Japanese ICT-enabled health provisions and is a prioritized direction of health-care service delivery for seniors.

E-health particularly helps to reduce the medical care gap between rural and urban areas and to benefit older people living in remote areas. As urbanization evolves, and young people migrate to cities, and older people tend to be left behind, population aging occurs more rapidly in sparsely populated areas than in urban areas. At the same time, only medical institutions in urban areas tend to have advanced medical facilities. As a result, senior patients who live in rural areas need to travel further to obtain treatment, which is problematic, given possible mobility concerns. In response, local governments have established telemedicine network centers that use advanced telecommunication equipment to meet citizens’ medical treatment needs. By 2010, Japan had implemented over 1,000 telemedicine projects primarily focused on teleradiology (37 percent) and home telecare (33 percent). The latter are used to monitor the health condition of older people at home by transmitting health-related data to a remote medical institution via a telecommunications network. However, the high operating cost tends to prevent the expansion of telecare systems.

Long-Term Care Measures

Improved longevity, as well as an expanded gap between lifespan and “healthspan,” has led to increased need for care services and has prompted the government to strengthen the country’s long-term care system. Japan is one of the very few countries in the world to require a long-term care insurance (LTCI, known as Kaigo Hoken) system. The LTCI was introduced in 2000 in an effort to improve the provision of care for older people as an increasing number of them moved to single households and became victims of neglect. The LTCI also aimed to curb escalating hospital costs because of “abandoned” older people who were effectively resident in hospitals, termed “social hospitalization.”

According to Professor Nanako Tamiya of the University of Tsukuba, Japan’s LTCI

\[102\] Obi et al., 2012.
\[103\] Kviselius et al., 2010.
\[104\] Akematsu et al., 2010.
is “one of the most generous long-term care systems in the world in terms of coverage and benefits – in fact, it is too generous.” The scheme made long-term care an entitlement for all people over 65 (regardless of need or income) or those who are 40 through 65 and have been disabled by a stroke or age-related diseases like early-stage dementia; benefits are also plentiful and include in-home and institutional facilities but no cash allowance for family care. Depending on the extent of disability, the program allows from roughly ¥ 55,550 to ¥ 388,940 (approximately USD 500 to USD 3,500) per month for community-based care, with 10 percent paid by recipients. Experts applaud the user-oriented system whereby older adults can choose the services and providers they want, including the use of for-profit companies. LTCI is also aimed at being equitable. The single reimbursement fee schedule and single benefit package for all social insurance programs create a foundation for equity in access.

However, as the Japanese population continues to gray, the demand for long-term care services exceeds the available supply. Since 2000, the number of users of facility services has risen by more than 70 percent, and it had reached 0.9 million by the end of the fiscal year 2015. The

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105 Interview with Nanako Tamiya, University of Tsukuba, March 2017.

106 Interview with Ayuk Kristen, Friends of IFA. March 2017.

107 Reich and Shibuya, 2015.

108 Including intensive care home for older people, long-term care health facility, and sanatorium medical facility for older people who require long-term care.

capacity of institutional care has lagged – the waiting time for welfare facilities for the older people requiring long-term care (i.e., nursing homes) is three to five times longer than prior to implementation of the LTCI system. At the same time, the government’s spending on long-term care has ballooned. Its expenditure on long-term care accounted for 2.1 percent of GDP (up from 0.7 percent) and 4.5 percent of total public expenditure (up from 1.8 percent). This will become a more pressing issue as the nearly seven million baby-boomer generation reaches the age of 75 in the coming decade. A 2011 projection by the government indicated that the country’s public spending on LTC would rise further to 4.4 percent of GDP by 2050.

To ensure the sustainability of the LTCI system, the government has increased the insurance premium every three years since 2000 and has started to reduce benefits for those with less severe needs and to introduce a means-tested standard for copayment. Starting in 2014, new admissions to intensive care homes under the LTCI were limited to people with medium or high levels of care needs, excluding those with lower levels of needs, who accounted for nearly 37 percent of total long-term care users as of 2014. Means testing was also added to the system – for people with income above a certain level, the government has covered only 80 percent of needs since August of 2015, compared to 90 percent before then.

At the same time, in light of the shortage in the institutional care capacity, the Japanese government has increasingly focused on home- and community-based care and prevention programs, in order to improve long-term care services while containing budgetary pressures. It started to focus on expanding community care in 2005, by creating new community-based services, such as communal nursing care (day care and short-stay care) and dementia support, all regulated by municipalities. From 2006 through 2014, the number of in-home and community-based service users increased by 50 percent, while the number of facility service users rose by only 13 percent.

The government has also strengthened preventive care measures through the provision of services at facilities, homes, and communities, which aim to reduce individual needs of long-term care.

117 For people whose pension benefits amount to more than ¥2.8 million (USD 25,000) per year and for couples (households) whose cumulative benefits amount to more than ¥3.6 million (USD 32,000) per year.  
Older adults are gradually recognizing the importance of prevention activities for retaining physical strength and functioning. While the preventive care services are intended to help sustain older people’s health, experts note that they may not yield effective results because bringing seniors to these prevention and support activities before they become seriously ill remains a challenge as they do not even consider themselves to be old.

Leading the Way in Support for Dementia Patients

Japan is a global leader in confronting dementia. Dementia is increasing across the globe but as an age-related disease, the first waves have crashed over Japan. It is estimated that 15 percent of people age 65 or older have dementia in Japan – there were more than 4.62 million dementia patients as of 2012. Furthermore, another four million older adults suffer from a mild cognitive impairment.

LTCI attempts to cater to people with dementia, with the aim of meeting their social welfare as much as their medical needs through its provision of group homes. The scheme was intended to provide improved, and theoretically fairer, access to care for eligible dementia patients with only 10 percent copayment. In fact, most care recipients at community-based services have dementia – these services promote active living in a supported environment. According to a 2007 study comparing models for long-term care, Japan stood out as the only country that had developed special approaches targeting the quality of institutional care for dementia patients.

However, LTCI is insufficient to provide social support to seniors suffering from dementia as well as to their family caregivers, who often have had little or no training. In response, the government introduced the “community general support centers” in 2008. According to the Ministry of Health, Labor and Welfare 2016 data, there are about 4,300 “community general support centers” in Japan. These centers link available support service, communities, and families (family caregivers) as well as seniors with dementia. They are the focal contact point for seniors and, once diagnosed, act as a bridge between medical and nursing care in cooperation with the dementia medical centers and supporters of dementia patients. According to Miharu Nakanishi, chief researcher at the Toyo Metropolitan Institute of Medical Science, the community support centers are intended to provide comprehensive care for dementia patients and their families.

120 Interview with Miharu Nakanishi, the Japan Chapter of the World Young Leaders in Dementia, Dementia Friendly Japan Initiative, and Tokyo Metropolitan Institute of Medical Science, April 2017.
121 Interview with an expert at the Asian Growth Research Institute. February 2017.
122 FY 2011–2012: Health and Labour Sciences Research Grant Comprehensive Research Project on Dementia Countermeasures “Dementia Prevalence Rate in Cities and Responses to Functional Disabilities Due to Dementia”
123 Interview with Nanako Tamiya, University of Tsukuba, March 2017.
125 Interview with Ayuk Kristen, Friends of IFA. March 2017.
126 http://dx.doi.org/10.1016/j.jalz.2013.06.005.
Institute of Medical Sciences specializing in dementia, “The most important healthcare reform was the establishment of the Community General Support Center that serves as a first contact point for elderly persons in each city.”

Understanding the need for more widespread support, the government, in partnership with an NPO (Community-Care Policy Network), ran a ten-year nationwide public-awareness effort, the “Campaign to Understand Dementia and Build Community Network.” Under this campaign, which first ran from 2005 through 2015, a fully funded 90-minute training session was offered for all age and income groups to learn about dementia. These trained volunteers, known as “dementia friends,” set up support programs and other services for older adults and caregivers, and they can be found everywhere from supermarkets and cafes to shopping centers and dental clinics. The campaign continues to run in partnership with the British government. Nearly seven million people have completed training as volunteer supporters for the country’s dementia-affected population. However, there is little evidence as to whether dementia supporters actually contribute to the establishment of dementia-friendly societies.

To cater to the growing dementia needs of the country, in 2012, the Ministry of Health, Labor and Welfare announced the Orange Plan to intensify health care and social care for persons with dementia. The plan was updated in 2014 under the “National Strategy on Dementia” to further bolster measures against dementia. Under this strategy, ¥16.1 billion (USD 146 million) was allocated for dementia measures, including the introduction of dementia diagnosis training and research and development into prevention and treatment, a system for early diagnosis of the illness. It also introduced a scheme to enhance cooperation among primary care doctors, specialists, and people involved in nursing care to provide support for dementia patients.

Supporting Formal and Informal Caregivers

Older adults in Japan receive high-quality care. According to Professor Yoshihiko Kadoya, director of the Hiroshima Institute of Health Economics Research, “The quality of caregiving for older adults in Japan is top-notch in the world. The training requirements for a certified caregiver are 1,800 hours in Japan, roughly 24 times that of most OECD countries. Caregivers in Japan are thus very well trained, and they know the needs of the older adults the best.” However, the supply of caregivers has fallen short of the rise in demand for these services. The number of care service users has increased over three-fold since 2000, reaching more than 4.9 million in 2014.

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127 Interview with Miharu Nakanishi, the Japan Chapter of the World Young Leaders in Dementia, Dementia Friendly Japan Initiative, and Tokyo Metropolitan Institute of Medical Science, April 2017.
128 Ibid.
129 Ibid.
130 Interview with Yoshihiko Kadoya, Director of Hiroshima Institute of Health Economics Research, March 2017.
but the labor market has failed to respond to these needs. Lack of adequate support for caregivers, a shortage of the working population, low wages, and the perception of caregiving as “shadow work” are some reasons for this shortage.

This shortage of caregivers, as well as the aging of caregivers themselves, is raising concerns regarding ways to ensure older people’s access to quality services. As in most other countries, the role of caregiver in Japan is primarily assigned to women, in both the formal and informal sectors. As families become smaller, women struggle to balance work and care responsibilities, driving some to leave the workforce. Although LTGI aimed to relieve the workload of care on patients’ family members, it has been relatively unsuccessful in this regard. Research shows that LTGI, in terms of freeing up family caregivers to work and have more free time for themselves, has only marginally benefited caregivers. Roughly 440,000 people are estimated to have left their jobs between 2007 and 2012 to care for their ill or incapacitated parents and other relatives, with workers in their 40s and 50s accounting for a majority, according to the Ministry of Internal Affairs and Communications.

In response, the government has stepped up to strengthen support for caregivers.

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During the second phase of Abenomics (after Abe’s re-election in December 2014), the government has introduced steps to provide support for working caregivers and recently amended the Child Care and Family Care Leave Act in 2016. The law was first introduced in 1999 and allowed a three-month annual leave for caregiving with a compensation rate of 40 percent of salary. The 2016 amendment improves the flexibility of the program by allowing this three-month leave to be divided into three periods, and the benefit rate for the leave period was also increased from 40 percent to 67 percent of salary, which is intended to strengthen the incentive for people to remain in the workforce. While acknowledging the government’s good intentions, experts contend that more needs to be done, and they particularly call for a national strategy dedicated to both formal and informal caregivers.

132 Interview with Mai Yamaguchi, Carers Japan. March 2017.
134 Tamiya et al., 2011.
135 Interview with Mai Yamaguchi, Director of Carers Japan. February 2017.
Two other efforts have been introduced – immigration reforms to meet the shortage of workers, and utilization of technologies to improve productivity of the existing workforce. The government approved the creation of a new category of visa for foreign caregivers. As caregiving in general remains manual in nature, there has been limited growth in productivity of caregiving that could have helped cover the shortage of caregivers.\textsuperscript{137} As a result, use of technology through mechanical swings to carry patients as well as telecare services has been actively sought in recent years to meet these demands.\textsuperscript{138}

\textsuperscript{137} Interview with Yoshihiko Kadoya, Director of Hiroshima Institute of Health Economics Research, March 2017.

\textsuperscript{138} Interview with Nanako Tamiya (University of Tsukuba); Takanori Shibata (Institute of Advanced Industrial Science and Technology). March and April 2017.