



Savills World Research
Japan

Spotlight **Japan healthcare: New opportunities in an ageing society**

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Spotlight

Japan healthcare: New opportunities in an ageing society



“As the traditional asset market continues to tighten, some investors are exploring new asset classes to seek higher returns. With Japan experiencing significant demographic change over the next few decades, the healthcare sector, particularly the senior housing market, may be a suitable choice as a long-term investment.”

Introduction

Japan is on the cusp of a major demographic shift. The first country in the world to be dubbed a “super-aged” society, Japan is projected to see its over-75 population increase from 16 million to 22 million between 2015 and 2025, while the over-85 demographic will more than double by 2035. Concurrently, household sizes are shrinking and a larger proportion of senior citizens are living alone¹. To ensure the health and safety of Japan’s senior citizens, new housing and healthcare options are increasingly necessary.

Domestic enterprises and entrepreneurs have recognized the business opportunity presented by

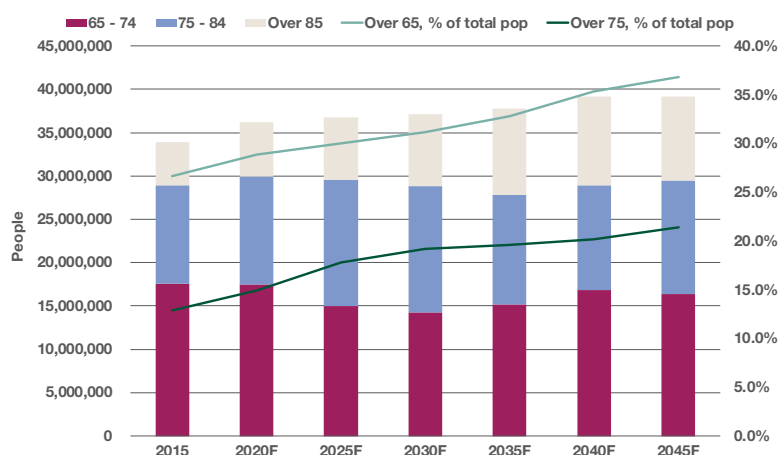
these demographic changes, entering the long-term care and senior housing market at a rapid pace. While publicly-operated long-term care facilities still lead market supply, the number of private nursing homes and senior housing units has expanded greatly over the past decade. Given the government’s financial restrictions, high-performing private facilities are increasingly critical: relevant laws and regulations in the healthcare sector and government oversight of the senior housing industry provide for added stability.

The Japanese healthcare real estate market is nascent, however. In the U.S., for example, the market is much more matured and diversified, with

SUMMARY

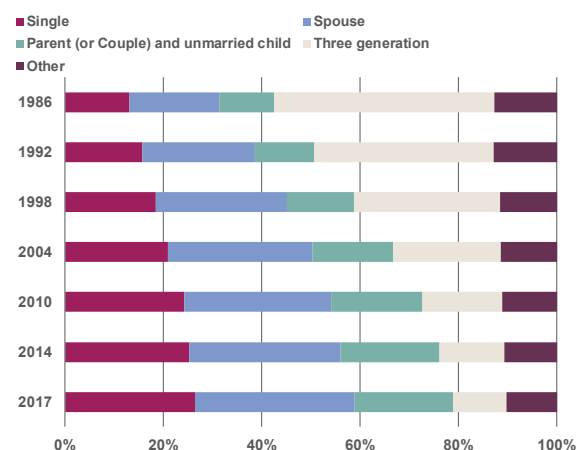
- Japan’s over-75 population will balloon from 16 million to 22 million between 2015 and 2025.
- Capacity in the private senior housing market has expanded by over 160% since 2011, while public senior housing has only grown 19% over the same period.
- Cap rates for healthcare assets have compressed rapidly since the emergence of healthcare J-REITs in 2013.
- Consolidations, business transfers, and major shifts in healthcare demand may lead to a wave of new investment opportunities in the sector.
- Japanese hospitals remain a largely untapped market for real estate investors, though interest is likely growing, with the first J-REIT acquisition occurring in November 2017.
- Technological innovations over the next decade could help mitigate the expected labour shortage and improve the working environment in the healthcare industry.

GRAPH 1
Over-65 population, 2015 – 2045F



Source: Ministry of Internal Affairs and Communications, Savills Research & Consultancy

GRAPH 2
Structure of households including an age 65-or-older member, 1986 – 2017



Source: Ministry of Health, Labour and Welfare (MHLW), Savills Research & Consultancy

TABLE 1

Outline of senior housing and long-term care facility types and services

Ownership	Name of development	Services provided	Monthly fee (JPY 1,000)	Length of stay	Supportable residents			Hospice care	Total capacity
					Independent	Support required	Care required		
Private	Fee-based senior housing with nursing care (kaigo-tsuki) 介護付有料老人ホーム	Long-term care provided by permanent in-house staff	120-400	Lifetime	Varies	Yes	Yes	Yes	518,507 (10/2017)
	Residential-type fee-based senior housing (juutaku-gata) 住宅型有料老人ホーム	Long-term care provided by external services	100 - 300 (w/o care fees)	Lifetime	Yes	Yes	Yes	Yes	
	Health-type fee-based senior housing 健康型有料老人ホーム	Generally for those who can live independently; provides recreational activities	100 - 350	Varies	Yes	Varies	No	No	
	Senior housing with support services (satsuki) サービス付き高齢者向け住宅 (サ高住)	At minimum provides a disability-friendly environment with safety check and consultation services; other services are generally outsourced	60 - 300 (w/o care fees)	Varies	Yes	Yes	Yes	Varies	231,973 (6/2018)
	Group home グループホーム	Shared living space for dementia patients	80 - 300	Lifetime	Varies	Varies	Yes	No	193,400 (2016)
Public	Special care nursing home 特別養護老人ホーム (特養)	Primary low-cost option for those who require a high-level of care	60 - 150	Lifetime	No	No	Yes	Yes	542,498 (10/2017)
	Intermediate nursing home (roken) 介護老人保健施設 (老健)	Temporary rehabilitation with the aim of returning patients home	80 - 170	3 - 6 months	No	No	Yes	No	372,679 (10/2017)
	Long-term care sanatorium 介護療養型医療施設 (療養病床)	Transitioned from "elderly care hospitals;" well-equipped to provide rehabilitation and medical care	80 - 200	Long term	No	No	Yes	No	53,352 (10/2017)
	Care house ケアハウス (軽費老人ホーム)	Low-cost facility for those with low incomes / lack family support	30 - 100	Fixed term	Yes	Yes	Yes	No	93,712 (2015)
	Silver housing シルバーハウジング (高齢者用住宅)	Handicap-accessible publicly operated senior housing	30 - 150	Fixed term	Varies	Varies	No	Yes	24,836 (3/2016)

Source: Tsukui Corporation, Benesse Style Care, Minna no Kaigo, MHLW, Savills Research & Consultancy

Note: "Private" indicates operation mainly by joint-stock companies (kabushiki gaisha), medical corporations (iryou houjin), and other for-profit organisations. "Public" refers mainly to operation by social welfare service corporations (shakai fukushi houjin), which are classified as charitable organisations under Japanese law, as well as public entities. Fees for public facilities are largely covered under long-term care insurance.

large investors purchasing senior housing, hospitals, life science, and medical office buildings. For senior housing specifically, private, independent-living facilities are the most popular. On the other hand, recent reports have also indicated that certain U.S. markets have become oversaturated, with a boom of senior housing and long-term care supply occurring well in advance of the demand that will be generated by the ageing baby boomers. In contrast to this, current projections suggest that Japan's senior housing supply will not be able to keep up with the demand generated by its ageing population.

The domestic industry does, in fact, face several major challenges that could limit supply. Among the most prominent of these is a projected shortage of healthcare workers, as well as the sustainability of the Japanese social insurance system, including long-term careⁱⁱⁱ (Graph 3). Successful reforms of the work environment along with improved efficiency and flexibility in the provision of care services will be necessary to ensure the long-term success of this industry. Fortunately, advancements in medical and long-term care technology, as well as diversification of care options, show potential in meeting this challenge.

Market growth and investor activity

Institutional investment in Japanese healthcare real estate remains limited, though activity has picked up substantially over the past five years. The 2000s saw the first major players enter the market: Mitsui Fudosan's Hospitality Residence Fund and Singapore's Parkway Life REIT. Just as the sector was drumming up investor interest, however, the global financial crisis struck and new players were discouraged from entering the market or expanding their portfolios.

An exception to the above, Parkway Life REIT solidified its presence during

→ the Crisis, making a total of 39.8 billion yen worth of acquisitions between May 2008 and January 2011, and now standing as one of Asia's largest listed healthcare REITs, maintaining 46 assets worth 55.2 billion yen in the Japanese market^{iv}.

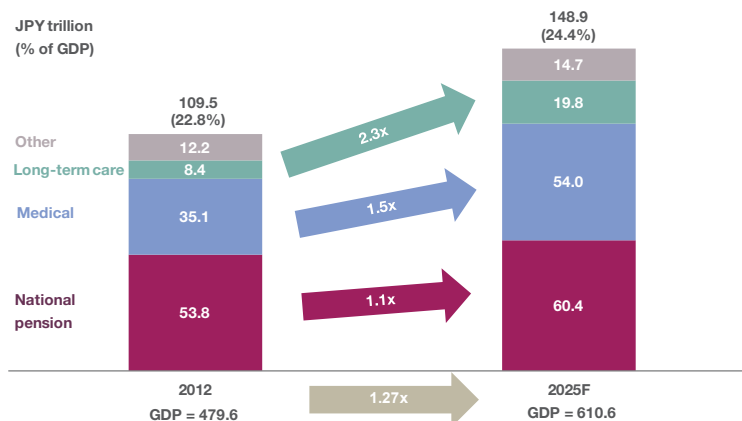
After securitization of healthcare real estate was proactively discussed in 2013, three healthcare J-REITs were soon established: Nippon Healthcare REIT ("NHI"), Healthcare & Medical Investment Corporation ("HCM"), and Japan Senior Living ("JSL"). These REITs have primarily acquired private kaigo-tsuki, juutaku-gata, and satsuki facilities (see Appendix A for details on these asset types), with prices typically ranging from 500 million to two billion yen.

Capacity in the private senior housing market has expanded by over 160% since 2011, mainly driven by the introduction of satsuki and a doubling in the capacity of fee-based senior housing^v (Graph 4). Public senior housing capacity, on the other hand, has only grown 19% since 2011. Despite this boom in supply of private healthcare assets, operators tend to be small and dispersed, while quality assets suitable for institutional investment remain limited.

Based on REIT disclosures, key indicators of asset quality include the portion of the asset's net sales derived from nursing care fees, which are ideally limited to 50% or less, while the portion derived from amortization of advance fees tends to be less than 5%. Disclosures also show an EBITDAR^{vi} to leasing fee ratio of between 1.2x and 2.0x for a majority of portfolio assets. When acquiring a property, REITs also look to the quality of the services provided at the location to ensure that they match the advance or monthly fees paid by residents.

With few sizeable operators and limited assets that meet the above criteria, healthcare J-REITs have struggled to further expand, which has in turn led to some consolidation. JSL, for example, merged with Kenedix Residential REIT in March 2018, transferring its 15-asset portfolio to the rebranded Kenedix Residential Next ("KDR")^{vii}. For KDR, this represented an opportunity to diversify into healthcare in the face of a low residential yield environment. Other major residential REITs have also

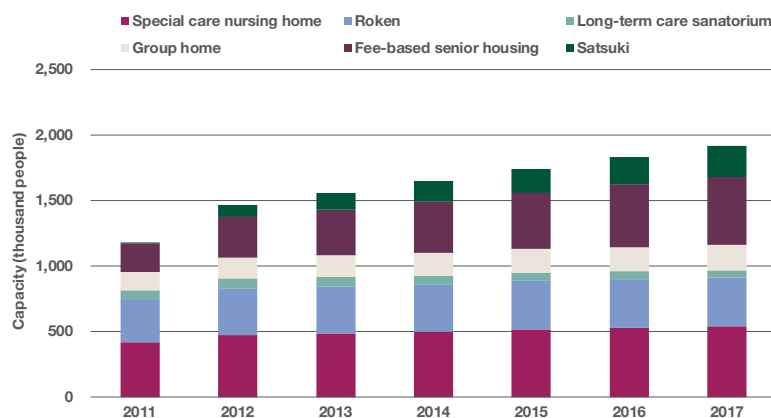
GRAPH 3
Annual expenditures for social programs, 2012 vs. 2025F*



Source: MHLW, Savills Research & Consultancy

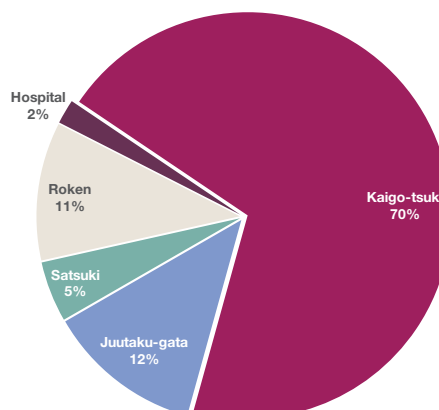
* Amounts presented are based on the International Labour Organisation's standards for calculating social expenditures.

GRAPH 4
Senior housing capacity, 2011 – 2017



Source: MHLW, Senior Housing Promotion Organization, Savills Research & Consultancy

GRAPH 5
Portfolio breakdown by acquisition value of top three healthcare-investing J-REITs

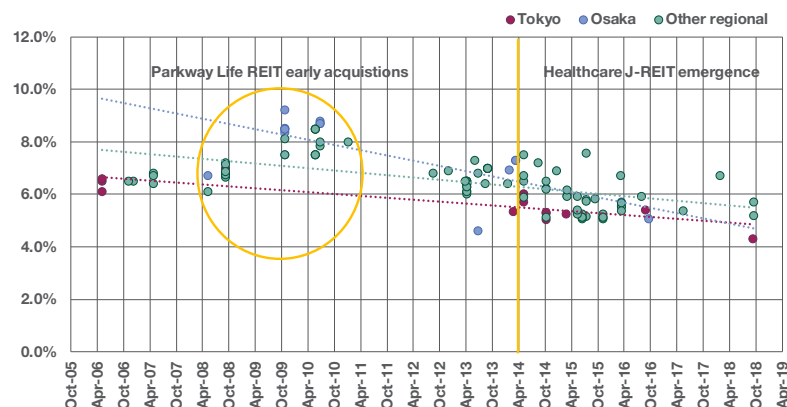


Source: NHI, HCM, KDR, Savills Research & Consultancy

Note: Portfolio data (70 properties) for NHI, HCM, and KDR is as of July 1st, October 1st, and August 2nd, 2018, respectively. Assets for KDR only include those designated as healthcare assets.

GRAPH 6

Senior housing and long-term care facility transaction cap rates

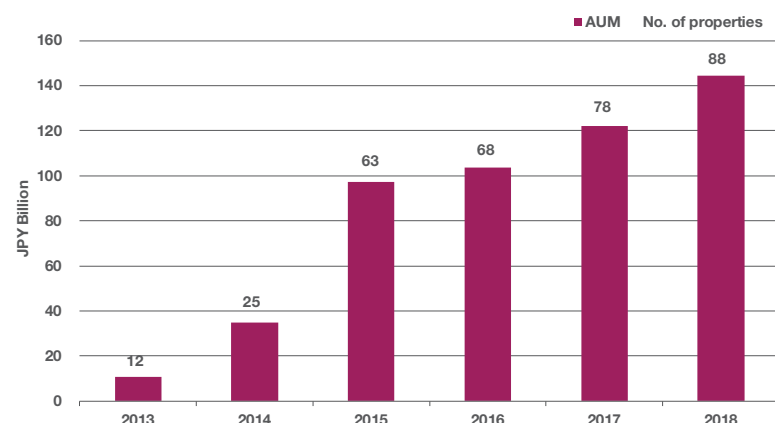


Source: Real Capital Analytics (RCA), Savills Research & Consultancy

Note: The above data includes RCA-listed transactions for which a cap rate was disclosed. In principle, the data does not include transactions among related parties.

GRAPH 7

J-REIT healthcare AUM by acquisition value, 2013 – 2018*



Source: ARES J-REIT Databook, Savills Research & Consultancy

*2013 – 2017 values are as of December 31st of the respective years. 2018 values are as of October 31st.

→ begun diversifying into the sector, both in anticipation of Japan's demographic changes and for a lack of opportunities in the core markets.

This merger has also been followed by an expansion outside of the private senior housing market. In August 2018, KDR acquired five roken in Osaka and Hyogo, two of which are integrated with kaigo-tsuki and satsuki locations, for around 11.7 billion yen. The properties are leased under 20-year fixed-rent agreements by Hakushinkai Group, a medical corporation^{viii} operating 11 facilities in the Greater Osaka area.

Cap rates have compressed rapidly since 2013 as a result of this increased

activity (Graph 6). While J-REIT holdings have expanded greatly, healthcare assets still represent only 0.8% of J-REIT portfolios by acquisition value, or 144 billion yen, as of October 2018 (Graph 7). Even so, current disclosures suggest some investment pipeline among healthcare REITs^{ix}. Other J-REITs, particularly residential, may continue to increase their exposure to the healthcare sector.

Limited opportunities for acquisitions in the residential market have reduced cap rates to tight levels, severely limiting the availability of accretive acquisitions in the sector. In this environment, healthcare assets, which have some residential characteristics, allow residential REITs to grow further

and improve overall portfolio yields. To wit, KDR further revised its healthcare asset target upward from 20% or less of its portfolio at the time of the merger with JSL, to 30% or less as of September 2018, while reducing its target for residential assets to around 60%. Overall, investors have so far responded positively to KDR's pivot to healthcare^x.

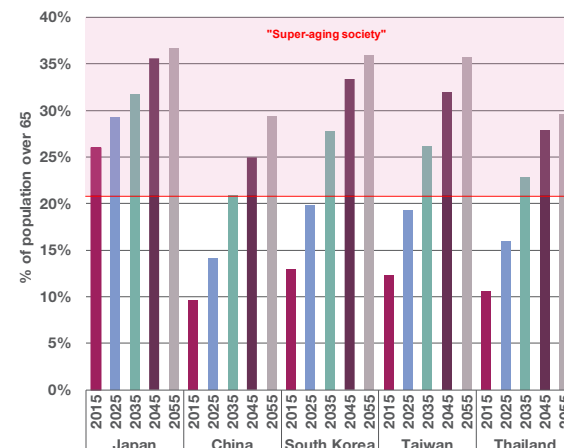
Looking ahead, Japan's demographic changes will necessitate a large supply of senior living facilities over the next decade. Generational business transfers, operator consolidation, and the need for capital expenditures to meet changes in healthcare demand will encourage disposition of real estate, potentially leading to a wave of new investment opportunities. Moreover, while Japan is currently the only Asia-Pacific nation considered super-aged, other nations in the region are expected to age at a far more rapid pace over the next few decades (Graph 8). Investors with a solid track record in the Japanese healthcare market should find ample opportunity to export successful strategies to other countries.

Operators and leasing strategies

Though the market itself has grown rapidly, investment opportunities are few. As the industry is still relatively new, the sustainability of operators remains a key concern. To mitigate

GRAPH 8

Forecasted ratio of elderly population in Japan, China, South Korea, Taiwan, and Thailand, 2015 – 2055



Source: United Nations Department of Economic and Social Affairs, Savills Research & Consultancy

Note: Probabilistic population projections based on the World Population Prospects: The 2017 Revision. The above data represents the median (50 percent) prediction interval.

→ risk, REITs have often targeted listed operators or subsidiaries of listed companies, while paying close heed to the corporate history and years of operation when dealing with unlisted companies. REITs have been careful to diversify their tenants, with no single operator accounting for more than 30% of a healthcare portfolio, while further diversification efforts appear to be underway.

Each REIT owns facilities run by Sampo Care Inc. and Benesse Style Care Co., Ltd., the two largest operators in the industry, both of which are subsidiaries of large, publicly-listed firms. According to disclosures, KDR selects operators based on management philosophy, scale of operations, and financial soundness. Monitoring activities continue even after acquisition, however. NHI, for example, conducts bi-annual evaluations of properties and their operators via its property manager, examining items including responses to residents, employee training programs, and status of governance, conducting a similar evaluation as at the time of acquisition.

Leasing periods are long term, typically ranging from 10 to 30 years, with fixed rents. Not surprisingly, the provisions of longer leases tend to limit downside risk and upside potential, with rental reviews only permitted for significant changes in the economic climate or inflation and interest rates in some cases. Certain leases with shorter terms, on the other hand, have rent revisions every 3 to 5 years. All healthcare J-REITs, as well as Parkway Life REIT, also conclude some form of management back-up arrangement or agreement with current operators, either with a specific back-up operator in place, or at the very least develop contingency plans with current operators regarding a potential handover.

Despite the clear preference for large, listed firms, REITs have also acquired properties with smaller operators, possibly as there is more potential to increase the value of such properties by supporting new development deals, providing M&A information, and assisting with fund procurement. For example, in 2015, JSL entered into a 50-year leasing agreement for Yuimaru Hijirigaoka, a juutaku-gata property operated by Community Net Inc., a

non-listed operator managing ten facilities.

Overall, temporary fluctuations in operator performance should be less of a concern for prospective investors. More than simply boosting near-term profits, successful investors should focus on areas that will have long-term impacts on operator sustainability, such as workforce retention, employee training measures, credit risk, and partnerships with external parties. New opportunities should emerge over time as the industry continues to mature and consolidate. Small operators in particular may seek capital upon refurbishing a facility or a generational transfer of the business, or even an exit via acquisition by expanding firms.

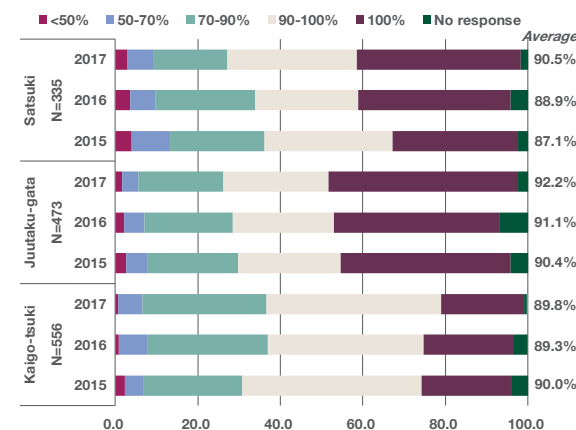
Hospitals

Japanese hospitals remain a largely untapped market for real estate investors, though interest appears to be growing. According to a report by KPMG, the hospital real estate market was valued at 23 trillion yen as of June 2016, representing 51% of the entire healthcare real estate market (Graph 11). For comparison, as of 2018, hospitals only accounted for about one third of the healthcare real estate market in the U.S.

Despite the size of this market, investment opportunities remain somewhat limited. Most Japanese hospitals are owned by the operators, and many of these operators are medical corporations owned by a single doctor. There are also tax incentives which encourage ownership of real estate by the operators, further reducing the incentive to sell. However, as demand shifts and current facilities age, there is likely to be more impetus to liquidate real estate.

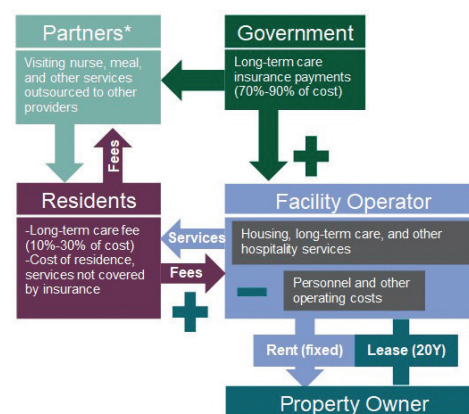
According to a March 2017 report by the OECD, Japan had the highest number of hospital beds per capita of member countries, at 13.2 beds per 1,000 people, nearly three times the OECD average. The average length of stay in Japanese hospitals was also listed at 17.2 days, more than double the average of OECD member countries. Even with such capacity, recent surveys of hospital utilisation in each prefecture have shown that hospital functions are not balanced adequately to meet future patient demand^{xi}.

GRAPH 9
Surveyed occupancy rates of senior housing by type, 2015 – 2017



Source: Nomura Research Institute, Savills Research & Consultancy

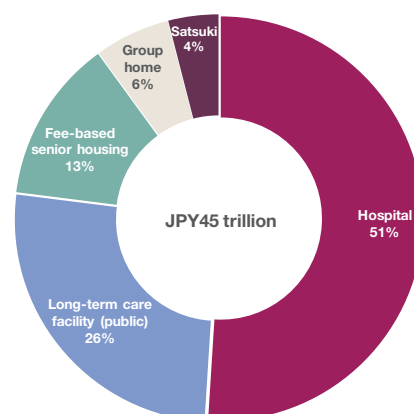
GRAPH 10
Profit structure for senior living facilities



Source: NHI, HCM, KDR, Savills Research & Consultancy

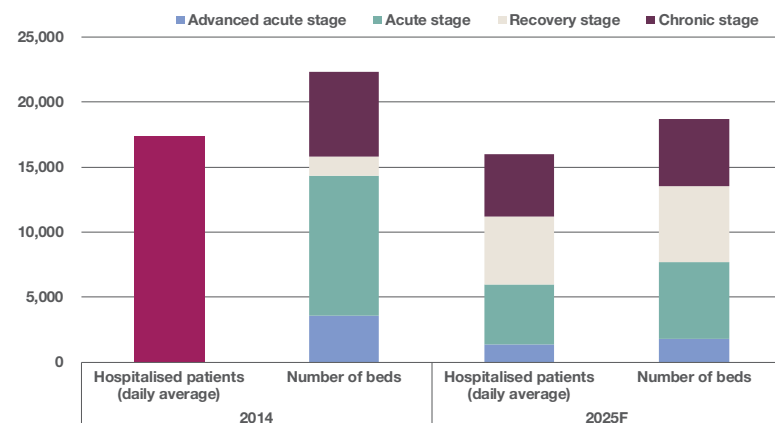
*Generally applies to satsuki and juutaku-gata facilities.

GRAPH 11
Healthcare real estate market share, 2016



Source: KPMG, Savills Research & Consultancy

GRAPH 12

Niigata Prefecture hospital bed utilisation, 2014* vs. 2025F

Source: Niigata Prefectural Government, Savills Research & Consultancy

*Breakdown of patient utilisation by hospital bed function not indicated for 2014.

→ Niigata Prefecture represents one such case; it has been estimated that the number of beds dedicated to rehabilitation and recovery as of 2014 would only cover 28% of estimated demand in 2025 (Graph 12). Noting this, HCM acquired the Niigata Rehabilitation Hospital in November 2017 for 2.1 billion yen, becoming the first REIT to enter the hospital market. The appraisal direct cap rate on the acquisition was 6.6% and HCM entered into a fixed-rent, 30-year lease agreement.

Improved efficiency in the medical industry will have synergistic effects on the long-term care industry, as lighter levels of care can be provided at lower cost, while hospitals will have more flexibility to focus on specialized medical care. Investors have already recognized this: prior to its hospital acquisition, HCM acquired a kaigo-tsuki facility run by the same operator. Indeed, real estate investment will play an important role in supporting comprehensive care networks; local residents will also benefit from more diverse care options and reduced costs.

Operators will increasingly need to reconstruct their ageing facilities, in many cases downsizing and adapting functionality to meet upcoming demand. Further, some family-owned medical corporations may seek an exit in lieu of transferring the business to an heir. These adaptations and potential mergers should present additional opportunities for real estate investors,

as hospital operators will need to finance costly reconstructions and other capital expenditures in order stay competitive. Further inquiries regarding dispositions to large, stable asset owners such as REITs could lead to a wave of new opportunities in the market.

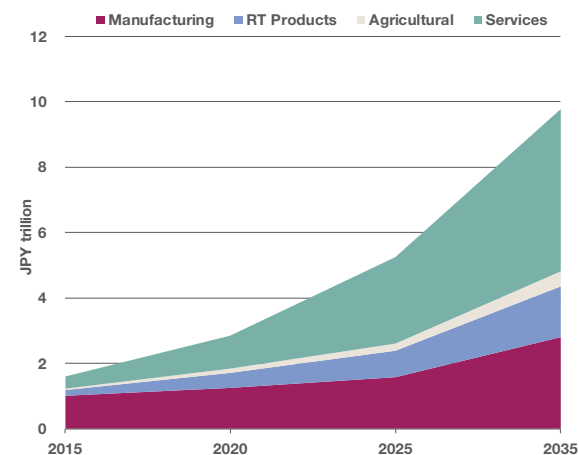
Tech innovations to improve the working environment

Technological developments in the healthcare sector over the coming decades will serve to mitigate the industry's impending labour shortage and reduce operating costs for service providers. In particular, the industry stands to benefit greatly from the introduction of care robots to assist with physical labour and ICT systems to improve information management and observation capabilities (see Appendix B). The market size of the entire Japanese robotics industry is projected to reach 9.7 trillion yen by 2035, of which service robots are projected to account for around 5 trillion yen, with medical and long-term care robotics expected to see a boom over the same period (Graphs 13 & 14).

If new technologies that ease physical labour and improve communication can be successfully implemented, the industry will increase productivity and become more sustainable. In another encouraging sign for labour, the number of foreign students enrolling in nursing care schools has nearly doubled this academic

year, fostered by a legal amendment passed last September that made it easier for certified caregivers to obtain residential status. With the government moving to further reduce immigration restrictions, the number of students should continue to expand. Better communications technology could also mitigate the challenges, particularly linguistic ones, faced by foreign workers, while reductions in strenuous labour and improvements in efficiency should also improve domestic workforce retention. ■

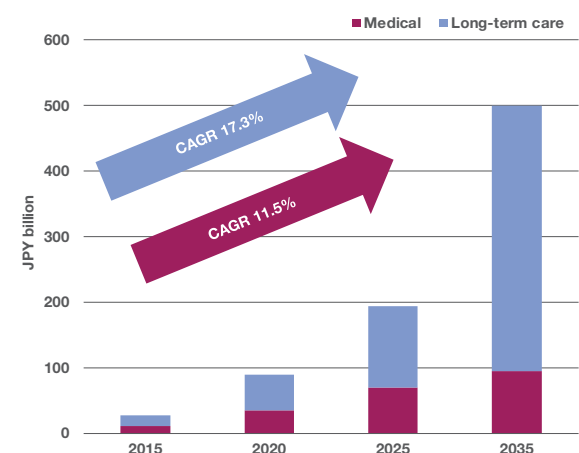
GRAPH 13

Japan robotics market volume, 2015 – 2035*

Source: New Energy and Industrial Technology Development Organization (NEDO), Savills Research & Consultancy

*All annual market volumes presented are estimates.

GRAPH 14

Japan medical and long-term care robotics market volume, 2015 – 2035*

Source: NEDO, Savills Research & Consultancy

*All annual market volumes presented are estimates.

OUTLOOK

The prospects for the market

The healthcare real estate sector experienced a false start with the onset of the financial crisis. The emergence of healthcare J-REITs in 2013 helped bring new energy to the market, rapidly compressing cap rates. With Japan on track to see a massive boom in the over-75 population over the next decade, investor interest will likely intensify. Some large investors, such as KDR, have already diversified their portfolios by acquiring healthcare assets in anticipation of these changes.

As technological developments in the sector progress, more operators may look to sell real estate in order to fund the acquisition and introduction of cutting edge equipment and technology. Generational business transfers and upcoming changes in the hospital sector, including

mergers and facility reconstruction to meet new demand, may also open up more opportunities for real estate investors.

Indeed, investment capital will be necessary to fuel the sustainable growth of the Japanese healthcare industry. Investors should enjoy stable returns while operators should use the additional funding to improve efficiency and strengthen cash flows. Forming constructive partnerships with operators is the key to success in this sector. Prospective investors must also observe the unique conditions and needs of the communities in which they choose to invest. Successful partnerships with operators can yield positive results in productivity and added value to the asset. Parkway Life, for example, has completed two asset recycling initiatives after working with operators to improve efficiency, utilizing net proceeds from divestments

to acquire additional healthcare assets with higher yields.

To be sure, the Japanese healthcare market will face major challenges over the coming decades. In addition to labour concerns, policy risks including the triennial long-term care insurance review have the potential to adversely affect operator profits, though revisions to payments have generally been positive for long-term care facilities so far. Improvements in efficiency and the work environment will be essential to the industry's long-term viability, leading to higher productivity and drawing more investment. Supported by strong demand fundamentals, those who can successfully navigate this sector will find a stable source of income. Early challengers can then export their successful methods to new assets and create additional value in other countries.

Endnotes

- i. A "super-aged" society, according to the World Health Organization, is a country where more than 21% of the population is aged 65 or older.
- ii. As of 2017, almost 60% of households with a senior citizen consisted of an individual living alone or a couple. According to a recent survey by the Ministry of Land, Infrastructure, and Transport, the number of single-member elderly households is expected to expand by one million over the next ten years. Of these, around 220,000 are expected to be living in privately-owned rental apartments.
- iii. Based on the 2002 Long-term Care Insurance Act, all long-term residents of Japan are eligible for national long-term care insurance upon reaching age 65. Those over age 40 are also eligible if, via an application process, the government recognizes that they are in need of care. Patients are typically responsible for one tenth of the cost of care; however, the payment amount is adjusted every three years and copayments vary based on income. In 2018 for example, it was determined that those with annual incomes exceeding 3.4 million yen would be responsible for one third of the cost of long-term care.
- iv. As of July 2018, Parkway Life's portfolio in Japan mainly included kaigo-tsuki locations, with several group homes as well as a pharmaceutical manufacturing and distribution center.
- v. Primarily kaigo-tsuki and juutaku-gata facilities.
- vi. "EBITDAR" is defined as the asset's operating income + depreciation + rent.
- vii. Daiwa House has also ventured into the market, notably launching the "D-Festa" brand of satsuki locations, in addition to being the top shareholder of medical and care robotics manufacturer Cyberdyne Inc.
- viii. Medical corporations are essentially treated as non-profit organisations under Japanese law.
- ix. NHI has secured preferential negotiation rights for 10 billion yen worth of assets, while HCM alone has a disclosed a pipeline of 30 billion yen with a mid-term aim of achieving a total healthcare AUM of 100 billion yen, more than double its current level.
- x. Despite a secondary offering of investment units in July, unit prices for KDR have increased by just under 20% for the year since the announcement of the JSL merger on November 10, 2017, outperforming the TSE REIT Index by around 10% over the same period.
- xi. MHLW determined that by March 2018 all prefectural governments were to establish a "Regional Healthcare Vision," whereby each government produced an estimate of local medical services demand and the required number of hospital beds by service type necessary to meet such demand in 2025, followed by measures to ensure that such demand is met.

Appendix A

Detailed description of private senior housing facilities

Fee-based senior housing with nursing care (Kaigo-tsuki)

These facilities create customized care plans for their residents, providing a set of necessary care services with the approval of the resident and his/her family. Each facility is required to have at least one care worker or nurse for every three residents. They tend to be run by larger operators as they are responsible for providing a wider range of services. The monthly cost is typically higher than for satsuki and juutaku-gata. Also, a large lump-sum payment is typically required at move-in, with the amount being determined based on expected length of residence. On the other hand, as long-term care is included in this cost, the care portion of the monthly fee is covered by national care insurance.

Investment in the private senior housing market, as well as the healthcare sector overall, has gravitated heavily towards kaigo-tsuki assets, which account for 70% of the healthcare portfolios of the top three healthcare-investing J-REITs. Kaigo-tsuki assets are more prevalent, well-established, and regulated than other senior housing types. Also, because care services are provided internally, operators can directly receive long-term care insurance payments, providing strong downside protection. On the other hand, the asset has an upside limit and is more exposed to the risk of cutbacks in government spending.

Residential-type fee-based senior housing (Juutaku-gata)

These residences are designed to accommodate both independent residents as well as those who require some degree of care, generally providing more recreational activities and facilities catered to those in relatively

good health. Though base fees tend to be lower than for kaigo-tsuki, the facility can become more costly as a resident requires more comprehensive care services, which are generally provided by external sources. Similar to kaigo-tsuki, a large lump-sum payment is required in advance, with the amount depending on the expected degree of care required and length of residence.

Juutaku-gata assets are the second most popular among J-REITs. With less strict labour and other requirements than for kaigo-tsuki properties, the added flexibility of this asset may attract institutional investors who want to limit government policy risk. Moreover, a survey by the Nomura Research Institute has shown that juutaku-gata residences have had stronger occupancy than kaigo-tsuki or satsuki assets over the past three years, posting 92.2% nationwide as of 2017.

Senior housing with support services (Satsuki)

In order to expand housing supply, the Japanese diet passed a bill in 2011 establishing a framework and registration system for satsuki. These units provide a more independent living environment and offer residents flexibility in choosing care service providers. Satsuki are required to provide, at minimum, periodic safety checks as well as health and lifestyle consultation services. Operators are not required to provide additional services, such as food, care services, travel, and daily assistance, though most provide these services either internally or through outsourcing. Not surprisingly, rents for these facilities can vary widely depending on the level of services provided.

Given that the satsuki market is relatively new and remains fragmented among numerous small operators, this asset still comprises

a small portion of J-REIT portfolios. On the other hand, the diversity of this market could yield unique opportunities. For example, a luxury market appears to be emerging. At the very high end, Mitsui Fudosan recently registered the most expensive satsuki unit in the country, providing 161 sq m of exclusive space. Located in the Suganami Ward of Tokyo, the monthly rent for this apartment has been set at a startling 2.8 million yen. Demand for luxury facilities would likely be supported by those who rely far less on government or private pensions in retirement, thereby avoiding some of the risks of fiscal austerity.

Appendix B

Further background on tech innovations

Through collaborations between MHLW, the New Energy and Industrial Technology Development Organization (NEDO), healthcare providers, and the robotics industry, Japan is working to standardize and promote the development of care technologies that match industry needs while meeting safety standards.

Local governments are also supporting operators in the acquisition and implementation of new technologies. Osaka, for example, will launch a program to provide financial support and advisory services in the purchase and introduction of technologies to improve efficiency. Hokkaido currently offers up to 300,000 yen per item for the purchase or lease of designated care

equipment. Recent innovations in the sector include HAL, an exoskeleton developed by Daiwa House-backed Cyberdyne that assists care workers in lifting patients, as well as safety confirmation sensors and information technology that streamlines care planning.

Orix Living stands out among operators in adopting new technologies to improve efficiency and reform its work environment. In 2015, the firm initiated a trial run of a robot lift system to assist residents with movement around their rooms, improving safety for residents while reducing physical strain on workers. The company also established a partnership with Logic, Ltd. to give a trial run of "Care Wing" in 2016, an information management system that streamlines patient information management and care

worker scheduling, which is still largely paper-based throughout the industry. The company found that the new system reduced the time spent exchanging information and decreased miscommunication. As a result, Orix announced in 2018 that it would introduce this product to 24 facilities.

As an additional boon to the industry, Japanese public sentiment towards the use of robots in nursing care appears more favourable than other highly industrialized nations. According to a survey of those aged 16-69 conducted by the Nomura Research Institute in 2015, while 27% of U.S. respondents and 24% of German respondents stated that they "don't want to use [a nursing care robot] at all," only 8% of Japanese respondents stated as such.

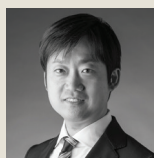
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