Global Healthcare Report

2023

Ageing demographics and the need for long term care present themselves as key factors in the interest for healthcare globally.

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Contents

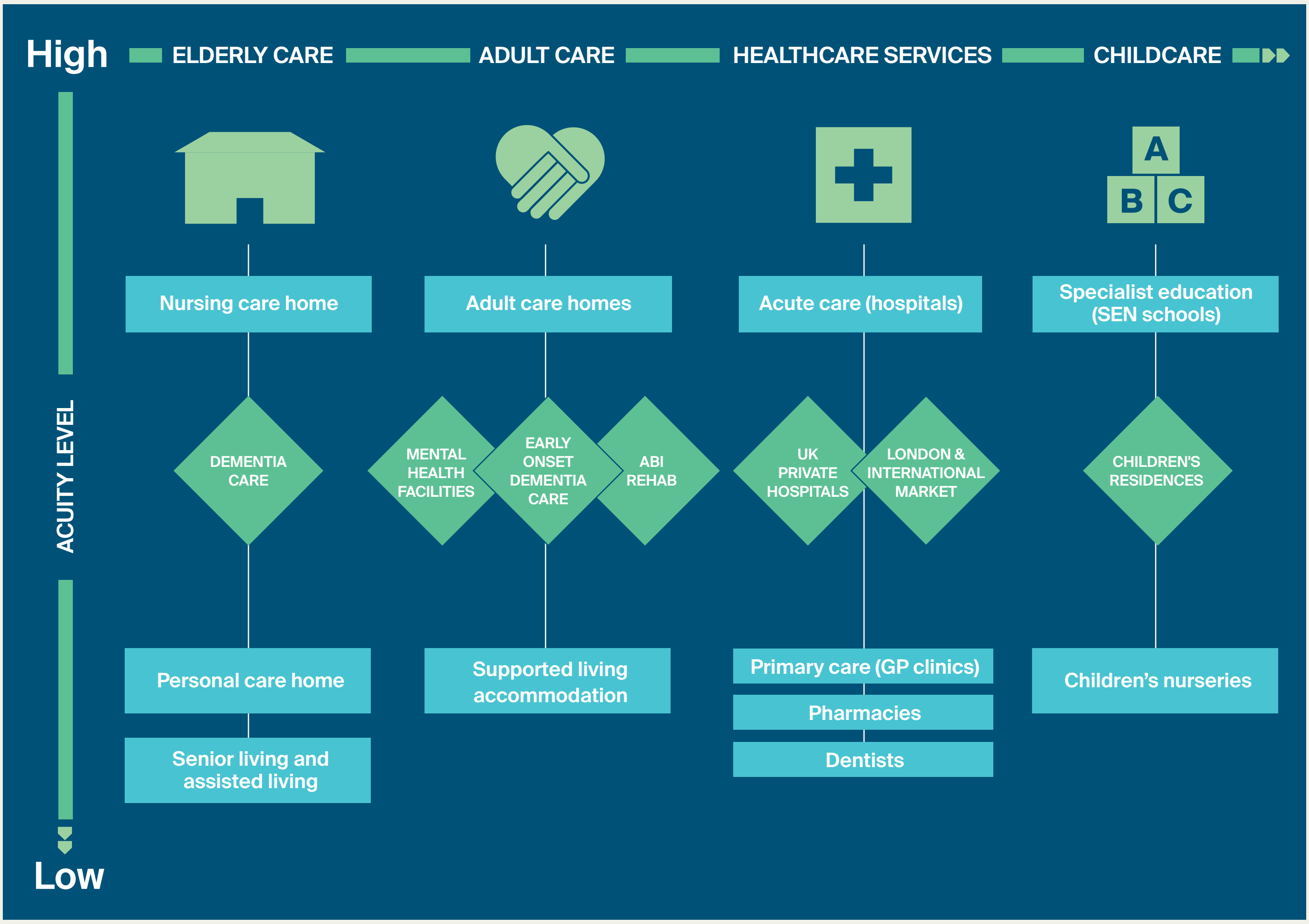
Introduction

Global flows into care related real estate in the 12 months to June 23 amounted to circa $38bn.

The care sector encompasses all operational care-related assets spanning elderly care, adult care, primary care (GPs and dental surgeries) and childcare / special educational needs, essentially any person-centred operational business. These sub-sectors can then be further split based on acuity to include more specialist settings such as dementia care homes. The graphic below presents a visual representation of the market's broadness, including any relevant overlaps respective to acuity levels.

INVESTMENT CASE
Broad in its coverage, the case for investment remains consistent not only across the various sub-sectors but also across geographic borders. Firstly, the emergence of a global pandemic highlighted not only the

"As private equity, REITS and institutional investors continue to chase the strong, long income generated, there is growing interest in healthcare's capabilities to aid ESG investing strategies."



robustness of healthcare as an asset class but also its genuine significance as a sector. As private equity, REITS and institutional investors continue to chase the strong, long income generated, there is growing interest in healthcare's capabilities to aid ESG investing strategies. Globally, across the board, the fundamentals that create the case for investment flows into healthcare are evident. The graphic below highlights seven factors that continue to contribute towards the case for healthcare.

Fig. 1 highlights some of the many forms that capital is being allocated to healthcare real estate globally. Whilst there are differences in deployment style, with some investors opting for an indirect and therefore more passive strategy, it is clear, that there is a global appetite for the sector.

The case for healthcare as an investment

Investment performance

Returns are historically stable, offering investors protection and diversification.

Demographic shift

An ageing population means increasing demand for residential care, primary care and acute hospital services.

Demand for safe havens

Healthcare's long-term and often government-supported income offers further defence.

Secure income

Operator revenue is reinforced by a healthy mix of self-funded care and publicly-funded care.

Income is supported by high occupancy and patient demand across the healthcare arena.

Structural change in real estate

Real estate investors already de-risking from traditional sectors such as retail into alternatives like healthcare.

Long-term income

Weighted average unexpired lease terms (WAULT) average 25-30 years in the residential care and hospital sectors.

Leases are commonly indexed-linked to inflation.

Social impact

The influence of impact or ESG investing in real estate is growing at a faster pace than ever.

A range of investors are now focusing on social infrastructure investments, and healthcare is part of this.

Fig 1: Global perspective

Australia average deal size

$1–3m

What this looks like

A pharmacy or optometry practice, or a small medical centre

UK average deal size

$2.5–17m

What this looks like

40–100 beds

Spain average deal size

$2–20m

What this looks like

100 beds for elderly care settings or clinics in multi-owner assets

Singapore

Usually invested indirectly

Source: Knight Frank Research

SECTOR UPDATE

Globally capital deployed into care related real estate equated to circa. $38bn for the four rolling quarters to June 23 as per Fig. 2, which accounted for approximately 4.3% of all global real estate flows.

North American capital was the biggest contributer to the sector, accounting for almost 68% of funds deployed last year whilst France and Belgium received the most cross-border inflows. Private capital was overall the most active amongst the various buyer types. However, on a net buyer basis cross-border, institutional and REITS emerged as net buyers.

Key contributors to the market include the likes of Healthcare Realty Trust, Welltower and Aedifica. The top 10 can be seen in Table 1.

Fig 2: Global transaction volume

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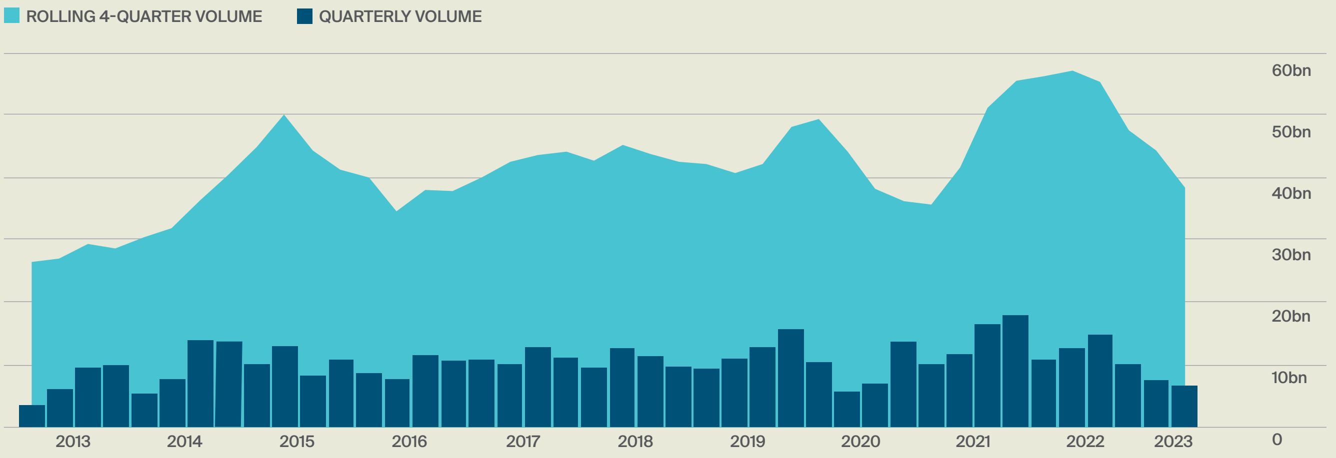
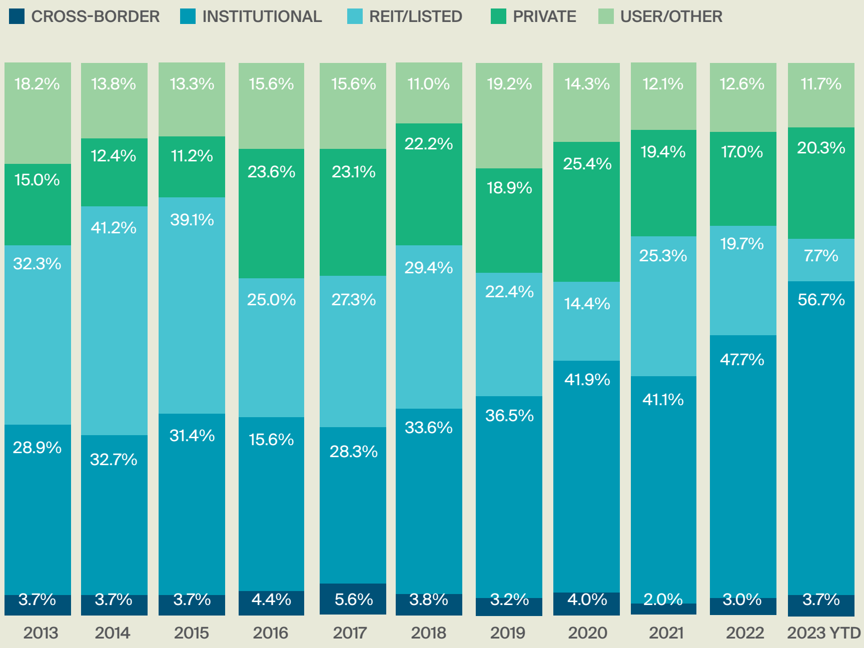


Source: Real Capital Analytics

Fig 3: Global buyer composition



Source: Real Capital Analytics

Table 1: Top Buyers (by acquisition value in 2022)

RANK	INVESTOR	GEOGRAPHY
1	Healthcare Realty Trust Inc (fmr HTA)	USA
2	Welltower	USA
3	Remedy Medical Properties	USA
4	Primonial REIM	FRANCE
5	NREP	SWEDEN
6	Kayne Anderson	USA
7	Pierval Sante #SCPI	FRANCE
8	EQT AB	SWEDEN
9	Montecito MedicaL	USA
10	Aedifica	BELGIUM

Source: Real Capital Analytics

How artificial intelligence is transforming healthcare

ROBERT ALLMAN,
SVP EMEA, TTEC DIGITAL

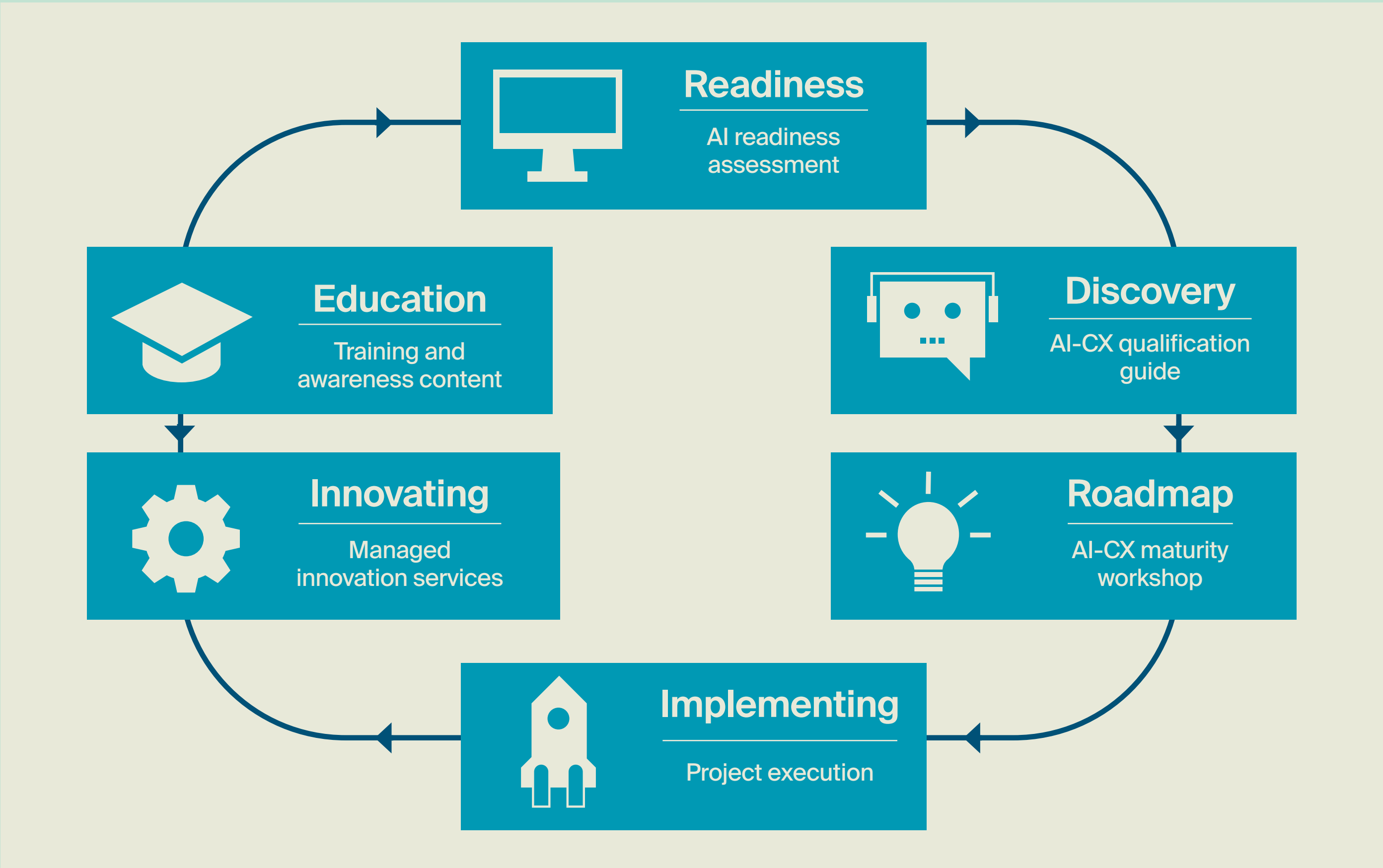
Today, you can't read the news without seeing a headline about artificial intelligence (AI). AI is creating a buzz, but the truth is that AI itself isn't really new. Generative artificial intelligence entered our collective consciousness in 2022 when ChatGPT was introduced, but other forms of AI and machine learning (ML) have been around for a long time, making a positive impact in many areas – especially in healthcare.

There are multiple complexities introduced by ageing populations, changing workforce demands and increasingly diverse patient requirements that place pressures on the healthcare sector. The socio-economic environment for personalised, proactive, propensity- and predictive-based gains in patient care and organisational productivity will be addressed profoundly by AI.

The foundational AI use cases are already out there to make diagnoses more accurate, care more accessible, and medications more effective. In this article, we'll share four ways hospitals and clinics can improve their care and patient outcomes through AI adoption.

1. AI-enabled Condition Diagnosis and Early Detection

From breast cancer to kidney injuries, AI is helping healthcare providers identify at-risk groups, and both track and treat their health over time. For example, mammograms often run a risk of producing false positives, which can lead to unnecessary biopsies. By using AI to assess data related to hormones, genetics, and breast density, doctors can reach a verdict faster and with greater accuracy



— reducing the need for avoidable biopsies. Beyond breast cancer, AI-enabled screening solutions can parse patient data to find patients who are at greater risk for many conditions.

2. Promoting Expedient Care with AI

In emergency medical situations, AI is helping doctors predict and prepare for uncharted territory. At some hospitals, predictive AI techniques are helping to improve the efficiency of patient operational flow. By calculating peak times of day and peak times throughout the year, as well as closely monitoring patient admittance and length of stay, medical teams are better predicting when beds will open up and adjusting staffing levels to meet patient needs.

AI is also shifting some of the intake burden from clinical teams. Virtual assistants can take on some of the initial hospital documentation, triage, and note taking — freeing nurses, medical assistants, and other clinical staff to focus on high-touch patient care.

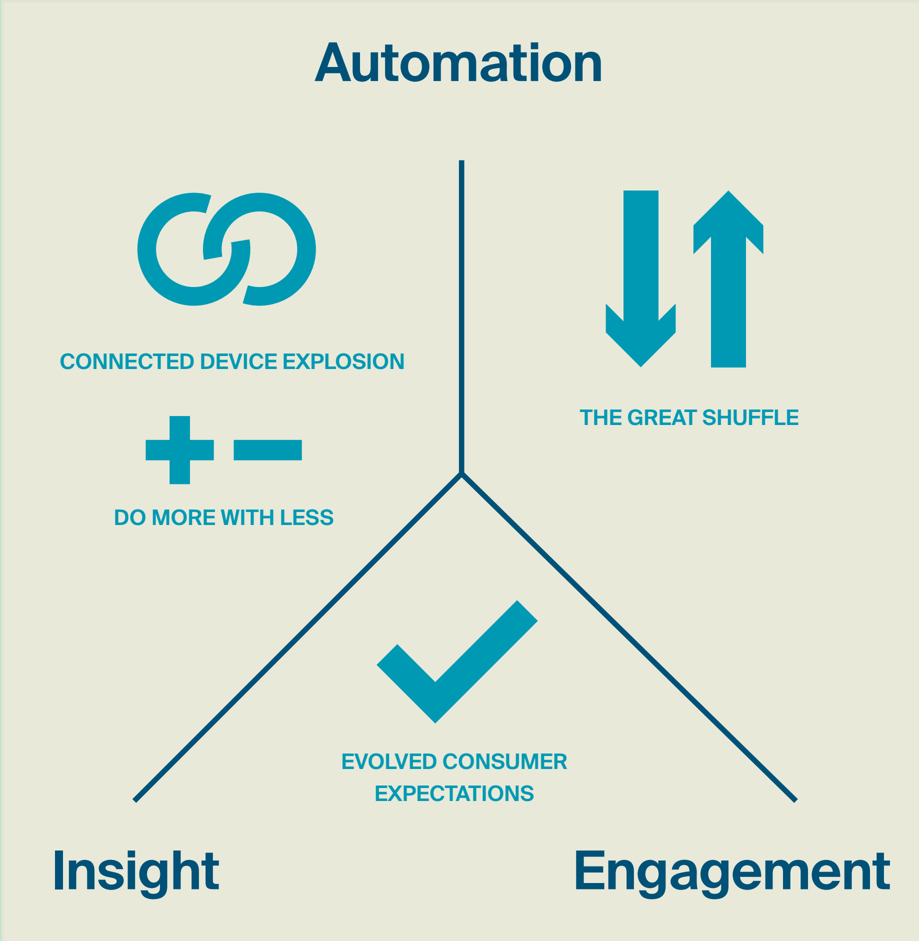
3. AI's Impact on Health Program Adherence

Once diagnosed with a disease, many patients routinely struggle to keep up with their new chronic care management plans. Across the healthcare landscape, lapses in program adherence result in over 125,000 deaths a year as patient conditions worsen. AI is one way doctors can keep patients engaged with their care plans. Through personalized apps and gamification, patients can complete their care regime and tick each box on their healthcare to-do list.

Hospitals and clinics can also use AI to help at-risk patients re-engage with the healthcare system after noted lapses in their care plan. For example, patients with hypertension or Type 2 Diabetes who meet specific segmentation parameters can be notified to schedule a new appointment or sent a reminder to refill an outstanding prescription.

4. Healthcare Digital Twins (HDT)

Digital twins are making their way into the patient experience. Healthcare digital twins (HDT) is a quickly emerging technology for better understanding patients, healthcare assets and behaviours, providing healthcare organizations with real-time reporting for data-driven decisions. AI is enabling two types of healthcare digital twins, which can produce the following benefits:

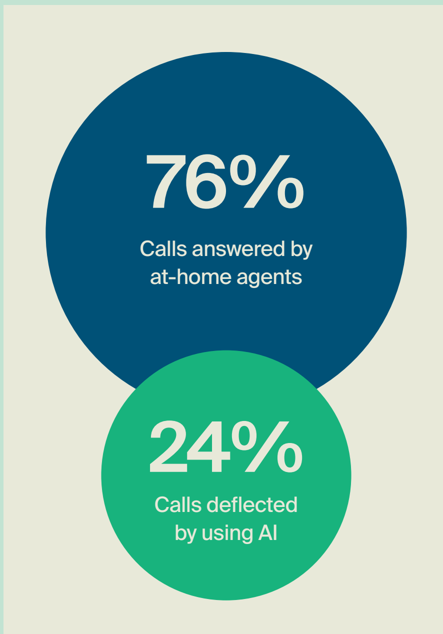


- **Digital Twin of a patient:** Ensuring the dynamic application of new research, policy procedure and care standards to a patient's condition.
- **Digital Twin of a community:** A digital twin of a community helps healthcare organizations create better data models to predict demands and requirements for defined populations or groupings proactively.

Next Steps for AI Integration in Healthcare

As healthcare leaders think about ways to improve operations and patient outcomes with AI, it's important to understand AI's current risks, weaknesses and strengths, as well as organizational readiness to implement this technology.

To learn more about how TTEC Digital can help you get started with your AI journey, visit our website: https://ttecdigital.com/services/artificial-intelligence.



Europe

Overview

Eurozone GDP growth slowed to 3.5% in 2022 from 5.3% growth in the previous year, due to record high inflation and rising borrowing costs. There was, however, significant divergence across the region. Of the largest economies, Spain (5.5%) and Italy (3.7%) outperformed the Eurozone GDP average, supported by a strong tourism season, while France (2.6%) and Germany (1.8%) expanded more moderately. The economic outlook for Europe and globally is relatively soft driven by sticky core inflation, weakening demand and tighter financial conditions. To support economic growth, European governments may increase expenditure driving up fiscal deficits through increased borrowing, putting pressure on already stretched budgets in many countries.

The Eurozone economy created almost 3.7 million jobs in 2022 and unemployment is at the lowest rate on record. The healthcare sector is seeing particularly acute staff shortages which have been exacerbated by the pandemic. Europe has also seen an increasing number of strikes among healthcare workers due to challenging working conditions, low pay, and insufficient resources.

As some European countries are finding it increasingly difficult to attract and retain young people in the healthcare professions, national healthcare systems are struggling to keep up with the rising demand for healthcare.

Over the next decade, EU employment in health and social work is predicted to grow by less than 3%, down from double-digit growth in the previous two decades. At the same time, the population in the EU aged 75 and over is expected to grow by 26%.

With Europe seeing a rapidly ageing population, complex care needs are increasing as diseases such as dementia become more prevalent (Fig. 4). Long-term care expenditure varies significantly across Europe, while there are also regulatory and cultural differences which mean investors, developers and operators of healthcare real estate will need to have a country-specific approach.

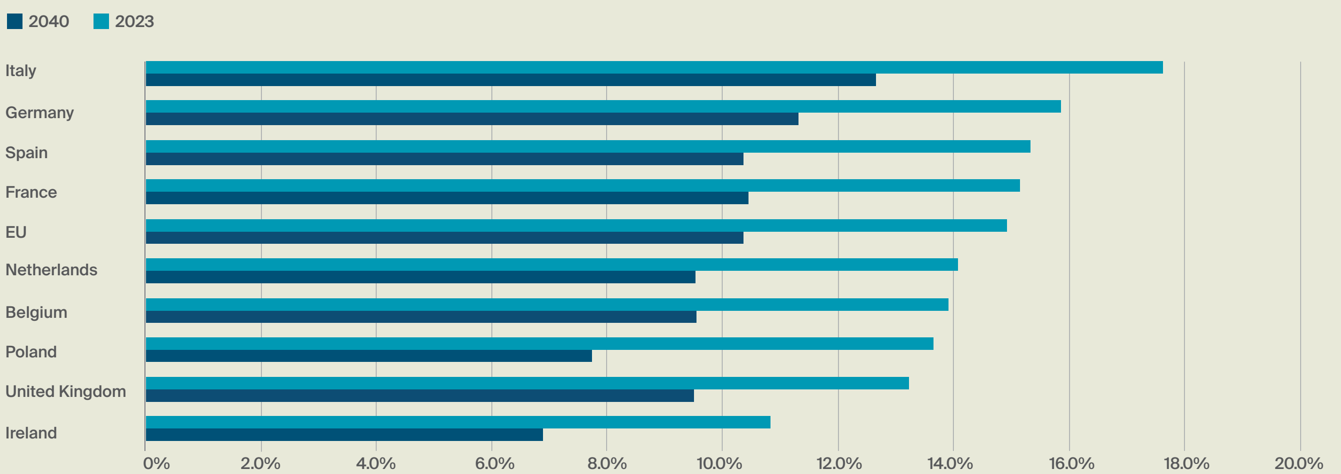
3.7m

The Eurozone economy created almost 3.7 million jobs in 2022 and unemployment is at the lowest rate on record

Persistent high inflation is putting further demands on operating costs of care homes, in the form of higher utility bills and upward wage pressure, leading to higher costs for residents. The relaxation of state control and growing cost pressure at both central and local government level will likely lead to more privatisation in the elderly care sector, offering opportunities for investors in the sector.

Sources: WHO, Oxford Economics, Trading Economics, Knight Frank Research

Fig 4: Percentage of population over 75



Source: Knight Frank Research

MARKET VIEW

Bruce Walker

UK Country Manager - Aedifica

Q: In your opinion which countries currently present the greatest opportunity or challenge for healthcare in Europe?

The UK is still fundamentally an attractive market for healthcare real estate due to the under provision of care beds and the need to upgrade the quality of beds provided.

Germany has some headwinds at present due to increased costs without the fee inflation seen in the UK but this should pass and return to stability.

Finland continues to be a good market as it is well funded.

Q: Have increased build costs impacted the development aspect of your strategy?

Yes, it is more difficult to make new build opportunities work with increased build costs. Uncertainty over build costs has also been an issue, however there are some indications that build costs may be stabilising.

Q: What are your thoughts on the sector's post-pandemic recovery?

The UK care operators have bounced back well with occupancy back to pre-pandemic levels. Costs have been difficult to manage for many – especially staff and energy - but due to strong fee increases from both private and local authority sources, margins have been protected. Investment in staff recruitment, training and retention is bearing fruit for some operators with staff costs being more manageable.

Q: How are you currently managing the issue of rising debt costs? And has this caused the liquidity requirements of your strategy to change?

The cost of capital has changed for everyone and this flows through the whole market, even a well-capitalised business such as ours. The key issue is that interest rates will need to stabilise and the volatility in debt costs to abate before investors feel confident to make major new commitments.

Q: What is your current strategic focus and has this changed significantly from this time last year? Or even pre-pandemic?

Strategic focus remains generally one of constant improvement of the portfolio, which is consistent but the how to deliver it does change with the circumstances.

Q: What would you suggest are the key considerations for extracting or creating value in the current climate?

Same as ever in this sector – the right property in the right place with the service provided by the right care provider.

Q: How would you suggest your capital structure – e.g. equity vs debt, supports your strategy during the current climate?

We are fortunate to be a very well-funded listed REIT with a strong balance sheet and a 125% dividend cover. We can be patient.

Q: What areas of healthcare do you feel present the greatest opportunity for investors? And what sub-sectors are of most interest to your current strategy?

Value is increasingly being recognised in care OpCos, whether they are freehold or leasehold. Care homes with the ability to deliver high quality care for higher acuity continue to be interesting.

Q: What would you say poses the biggest challenges for care operators and what do you look for when considering a stable operator.

Staff recruitment and retention continues to be the most challenging issue for most operators. Strong quality culture and a clear sense of what the organisations values and focus are.

Q: How has the importance of ESG within your current strategy grown over the last few years?

ESG has always been a high priority for Aedifica. We measure energy performance at an individual home level and work closely with operator partners on improving the energy performance on an on-going basis.

Q: What would you say that you are currently monitoring or most conscious / worried about on the macro side?

The interest rate cycle influences all investment decisions, it is more important that stability and predictability is reached rather than the actual level of rates. The market will adjust once there is confidence that interest rates will be stable.

Q: Do you feel as though there are any relevant areas of caution within the sector? If so, what are these and how are you positioning for resilience?

There are always areas to be wary of such as regulation, quality, operator leverage. We monitor the market and particularly our tenants with a high degree of rigour.

Q: What is next for European Healthcare as a sector?

Hopefully some "normalisation" after difficulties in France and Germany.

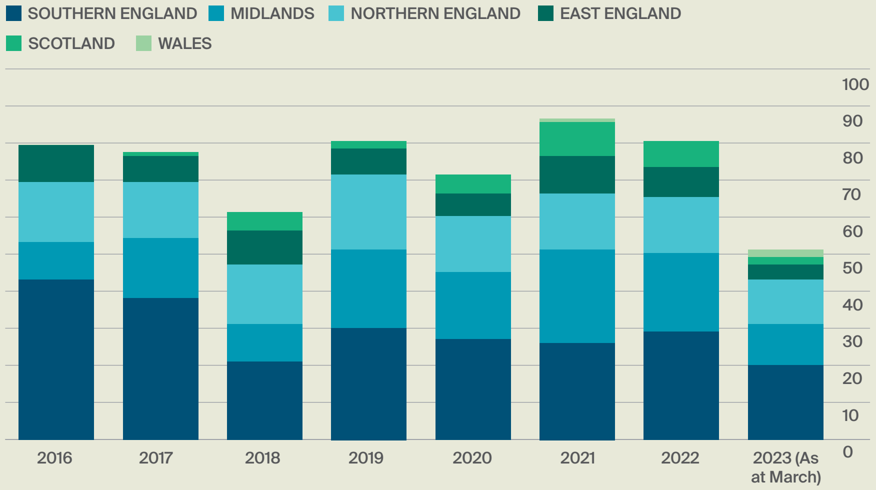
UK

BED SUPPLY

2023 has benefitted from an overspill in completions from 2022, and appears as more promising in terms of the number of site completions. The majority of projects in the current development pipeline is set to be achieved via refurbishment or extension to existing stock as opposed to new builds. This does, however, present investors, as well as owner occupiers, with the chance to consider optimisation of their respective portfolios. With growth opportunities now more likely to stem from asset management rather than acquisition, there may also be further chances to explore ESG options.

2022 saw circa 10,000 new beds granted via planning applications which would be a substantial addition to the current supply of circa 480,000 beds. Not only will completion / build out of these new beds be a welcome addition to pure availability, but also improve the quality of overall stock moving forward.

Fig 5: UK new purpose-built care homes completed

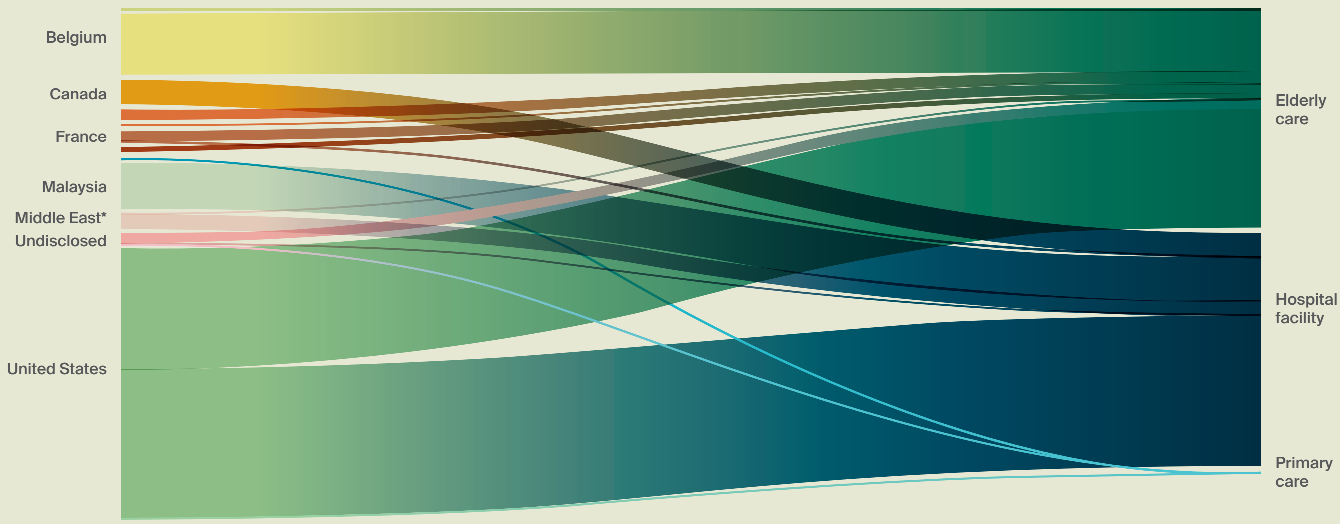


Source: Knight Frank Research

INVESTMENT

Reported transactions have been fairly muted, with key market participants seeming to be gauging markets and pricing. We have seen private capital fairly active in the year to date. A number of investors will likely use this time to explore asset management / value-add opportunity across their portfolios whilst awaiting new opportunity at the right levels. Fig. 6 highlights the target market areas from overseas capital over the last two decades. Focusing on the location of capital and the sub-sector it flows into, we can see that US-based capital placement within the UK has historically been split between elderly care and private hospital assets, whilst European capital has seen more focus on elderly care.

Fig 6: Overseas capital into UK healthcare by sub-sector

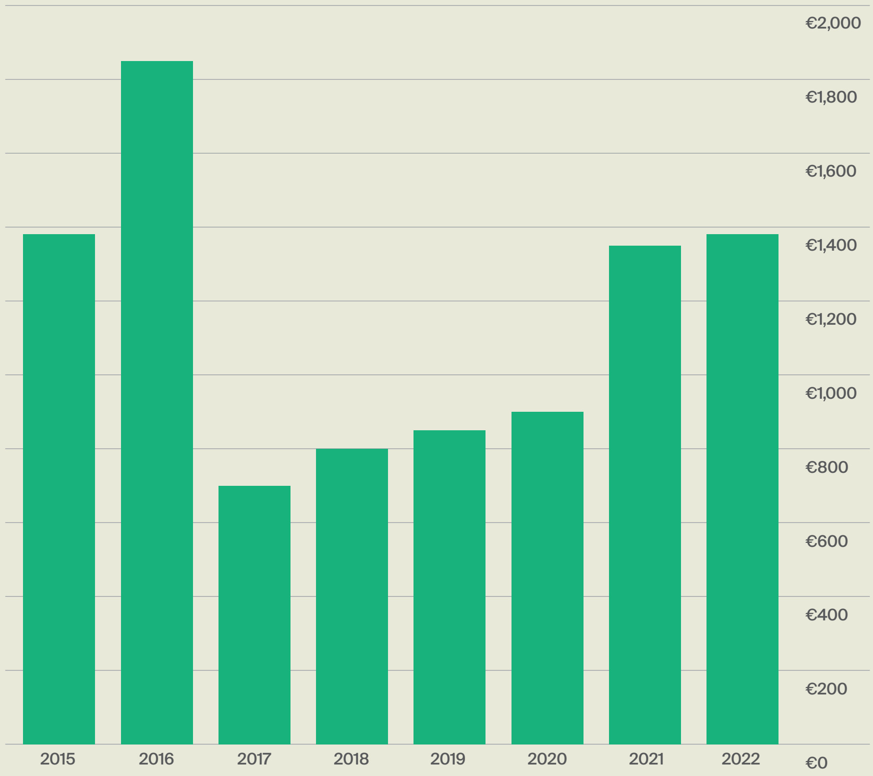


Source: Knight Frank Research

France

The enthusiasm for healthcare property is reflected in relatively high investment volumes which, unlike other asset classes such as offices, have risen steadily over the past five years. From a total of €700 million in 2017, investment in France has almost doubled, reaching €1.4 billion in 2022, boosted by several disposals of mixed portfolios totalling over €500 million, such as the Heka portfolio (12 properties leased to Korian and Ramsay), sold to Primonial REIM for €135 million. The French healthcare investment market has remained buoyant in 2023, and this will most likely continue over the next few years. It will continue to be very popular with investors seeking to diversify their portfolios in favour of secure asset classes. This has been supported by deals such as Icade recently completing the first stage of the sale of Icade Santé to Primonial REIM for €1.4bn, with Icade's remaining stake to be acquired before the end of 2025. In addition, private operators and clinics continue to hold significant assets, providing investors with many opportunities for property outsourcing.

Fig 7: Healthcare investment in France
in €million



Source: Knight Frank Research

Table 2: Main healthcare operators in France

	Main activities	Number of beds / facilities	Number of employees	Turnover in 2022
Korian	Nursing home / Clinics / Senior housing / Home care	+ 90,000 / + 1,200	67,000	€4,534 m
Orpea	Nursing home / Clinics / Senior housing / Home care	90,860 / + 1,000	76,000	€4,681 m
Domus Vi	Nursing home / Senior housing / Home care	- / + 500	+ 50,000	> €1,500 m
Colisée	Nursing home / Senior housing	+ 32,000 / 350	19,000	€1,162 m (in 2021)
Ramsay Santé	Medical, surgical and obstetrics centres / Clinics	- / 350	36,000	€1,300 m
Elsan	Medical, surgical and obstetrics centres / Clinics	- / 140	28,000	€2,600 m
Vivalto Santé	Medical, surgical and obstetrics centres / Clinics	- / 91	20,000	€2,200 m

Belgium

Fig. 8 plots out the evolution of investment volumes in Belgian nursing and care homes since 2018, which had somewhat cooled on the back of the global pandemic over 2020-2021.

In 2022, at least €492 million was invested in Belgian healthcare real estate i.e. more than €178,000 per bed.

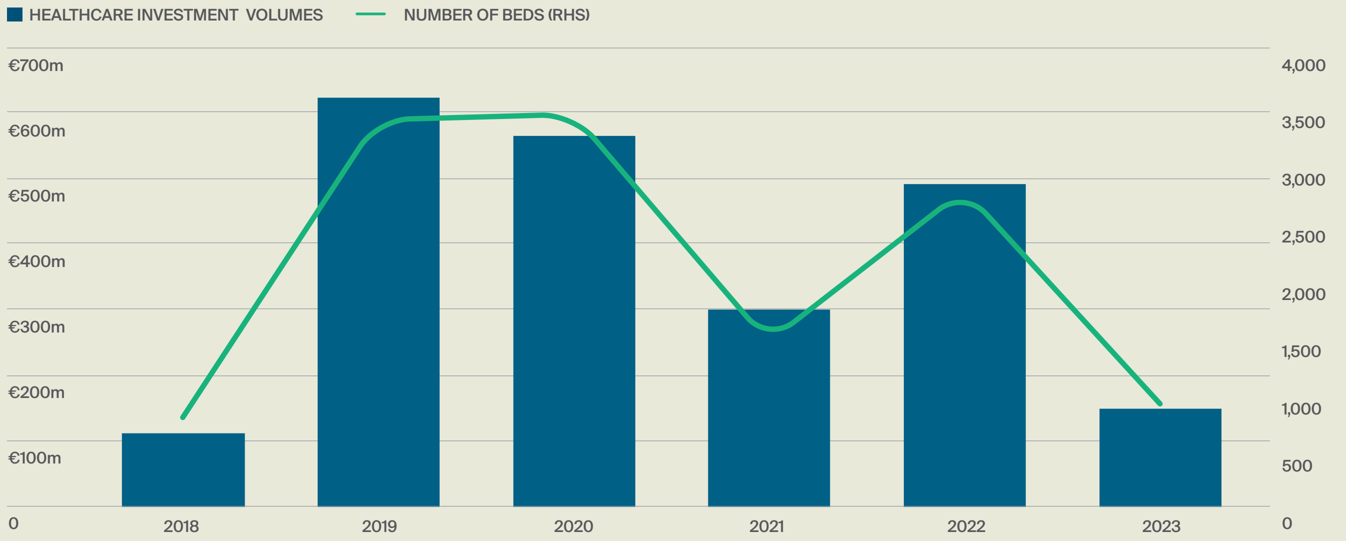
This total excludes a corporate acquisition by AG Real Estate of the operator Anima Care, which includes its real estate of five nursing homes totalling 510 beds. The sale has generated €300 million in cash for Ackermans & van Haren, the holding company behind Anima Care.

Across the first five months of 2023, three investment deals (including two portfolios) involving nursing and care homes have been registered for a total of €149 million allocated to 896 beds.

The most notable acquisition so far this year has been the €100 million purchase of a portfolio including five nursing homes (510 beds) in Flanders by BNP Paribas REIM from Baltisse at a yield above 4.50% on a triple-net lease.

> "In 2022, at least €492 million was invested in Belgian healthcare real estate i.e. more than €178,000 per bed."

Fig 8: Invested volumes - Belgian nursing and care homes



Source: RCA, Knight Frank Research

Table 3: Largest investment deals 2019-2023 YTD

Year	Property name	Beds	Number of properties	Price €	Yield	Owner /buyer	Seller
2019	Cofinimmo acquires BEL care portfolio 2019	1,576	15	€297m	4.50%	Cofinimmo	
2020	Cofinimmo acquires BEL Snr hsg portfolio 2020	562	6	€105m	4.50%	Cofinimmo	
2021	Cofinimmo Belgium Senior Housing 2021	484	5	€103m		Cofinimmo	
2020	Care Property Inv acuires BEL Snr hdg protfolio 2029	366	13	€86.9m		Care Property Invest	DG Infra Yield/ Zorginfra nv
2022	L'EcrinVert - Domitys	108	1	€50m		CRIM	Bassem Certificates

Germany

The German care market is caught between increasing care needs due to an ageing population and ensuring an adequate supply. High energy costs and rents, as well as rising wages for care workers, have led to an increased cost burden.

Since 2022, there has been a legal obligation to pay nursing staff a standardised wage rate to increase interest in care jobs. This is due to the shortage of skilled workers placing a strain on the sector and the availability of care places. The standard wage is expected to be raised in 2024/25.

There has also been an increase in insolvencies among operators. We are currently seeing consolidation with more international operators becoming visible in the German market. Of the 20 largest nursing home operators, eight have a European background, with French operators leading this statistic. With the acquisition of Vitanas by Oaktree Capital in 2017 there is also an element of US capital represented.

Today, inpatient care stands alongside other alternative concepts. Depending on the region, there is still a lot of catching up to do also in the outpatient sector and in making care settings barrier-free in particular.

The real estate sector is in demand with more diverse and flexible concepts. In addition to structural adjustments, a close interconnection of services will be needed to make the care sector as a whole more sustainable.

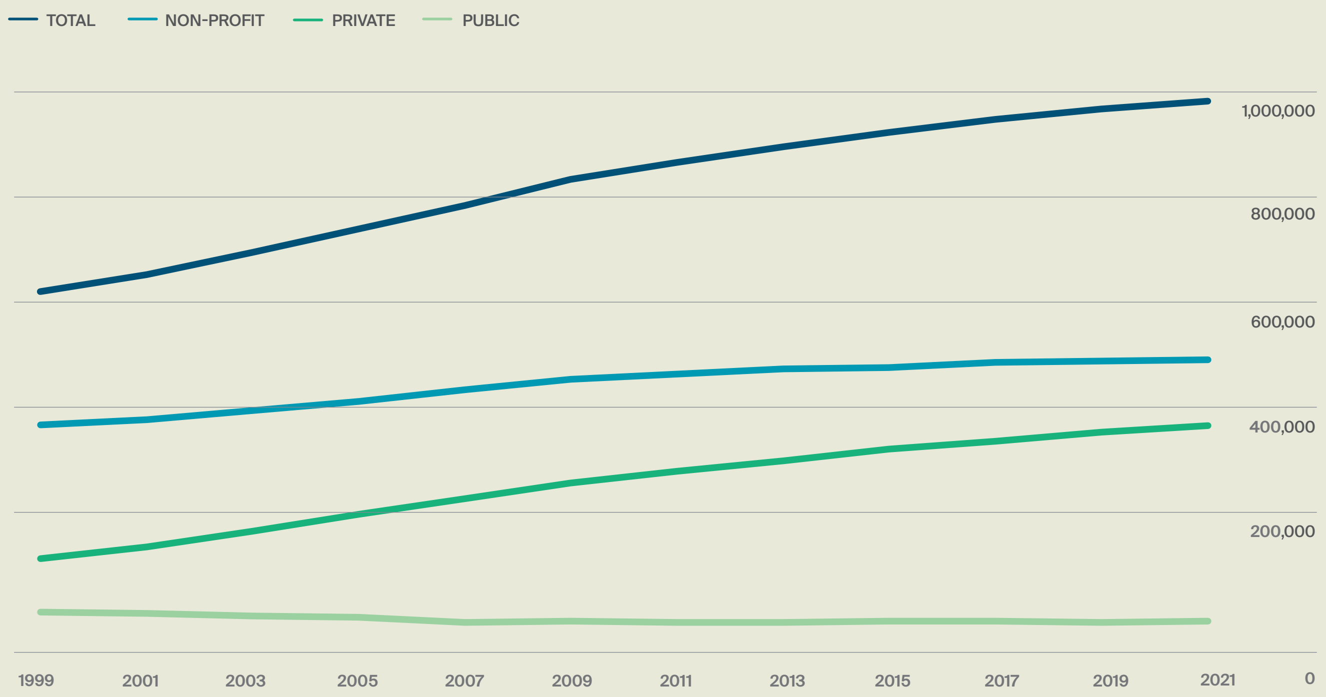
Table 4: Main healthcare operators in Germany

Top 5 operators	Beds (000s)
Korian Deutschland GmbH	25
Alloheim Senioren-Residenzen SE	24
Victor's Group	15
Orpea Deutschland GmbH	13
Kursana Residenzen GmbH	10

Source: www.pflegemarkt.com

> "In addition to structural adjustments, a close interconnection of services will be needed to make the care sector as a whole more sustainable."

Fig 9: Nursing home bed stock by provider type



Source: © Statistisches Bundesamt (Destatis), 2022

Ireland

The healthcare investment market is an evolving one in Ireland. Nursing homes and care homes accounted for the majority of heathcare spend in recent years.

Over the last five years, Belgian investor Aedifica, have invested €78.5m with the purchase of four care homes; three in the Greater Dublin area and one in Sligo.

They also purchased Project Sapphire in 2022, investing €161m. The transaction involved the sale and leaseback of three nursing homes in Dublin and one forward commitment.

Ireland has a private and public healthcare system. The public healthcare system in Ireland is regulated by the Health Service Executive (HSE). Acute public and voluntary hospitals in Ireland are divided into seven hospital groups. The services delivered include inpatient scheduled care, unscheduled/emergency care, maternity, and outpatient and diagnostic services. Private hospitals, of which there are 19 in Ireland, receive no state funding.

Currently, there are an estimated 460 registered nursing homes in Ireland, capable of accommodating more than 25,000 residents. These facilities consistently maintain occupancy rates exceeding 90%. It is anticipated that an additional 45,000 nursing home beds will be required to meet the expected demand driven solely by demographic shifts by the year 2031.

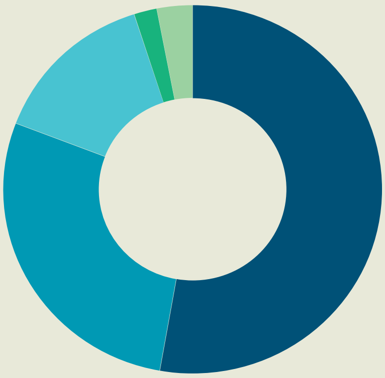
Table 5: Main healthcare operators in Ireland

Type	Key Operators
Nursing Homes	Orpea Groupe, Mowlan Healthcare, Care Choice, Virtue Integrated Elder Care, DomusVi (Trinity Care)
Childcare	Giraffe, Comhar Naíonraí na Gaeltachta (CNNG), Little Harvard Childcare Ltd, Cocoon Childcare Ltd

Currently, there are an estimated 460 registered nursing homes in Ireland, capable of accommodating more than 25,000 residents.

*Source: Health Services Executive (HSE)

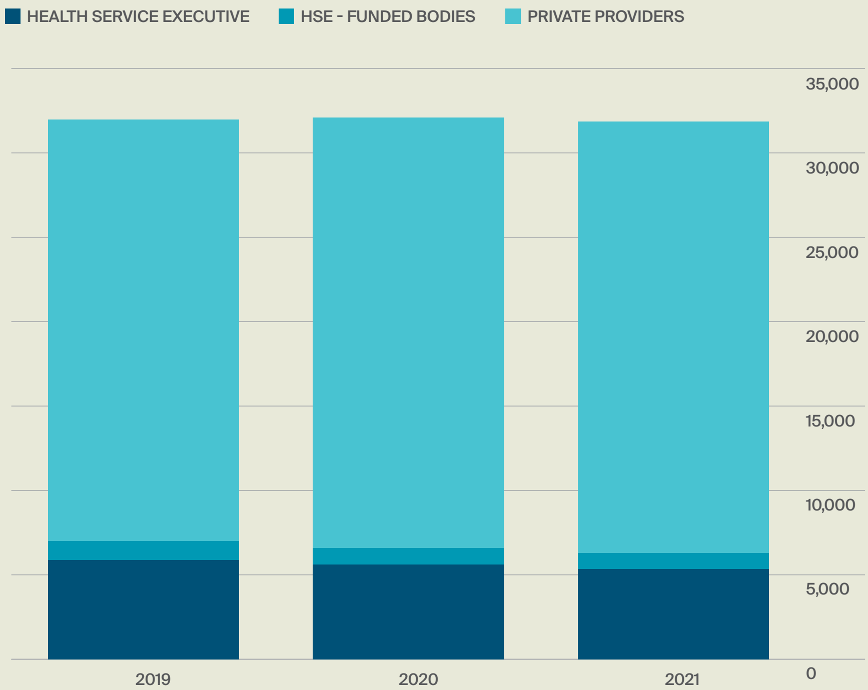
Fig 10: Total investment by Sub-Sector 2018 - Q1 2023



Healthcare	53%
Nursing Home	28%
Care Home	14%
IVF Treatment	2%
Medical Centre	3%

Source: Knight Frank Research

Fig 11: Elderly care bed supply



Source: Knight Frank Research

Spain

Spain's largest five elderly care operators, including the likes of Domus VI and Orpea, account for over 50,000 care beds between them. Mirroring the trend of concentration / 'top heaviness' seen across the key European markets. In terms of top or key buyers the Spanish market has been dominated by European-based capital, for example, Adriano Care. This is illustrated in the capital composition chart below which highlights cross-border capital as most active on the buy side, and this is across European borders; we then see a mix of domestic REIT, private and institutional capital. For the year 2022, Spain saw overall reported transaction volumes of £322m across the sector, while the year-to-date figure for 2023 sits at approximately £52m.

Table 7: Main healthcare operators in Spain

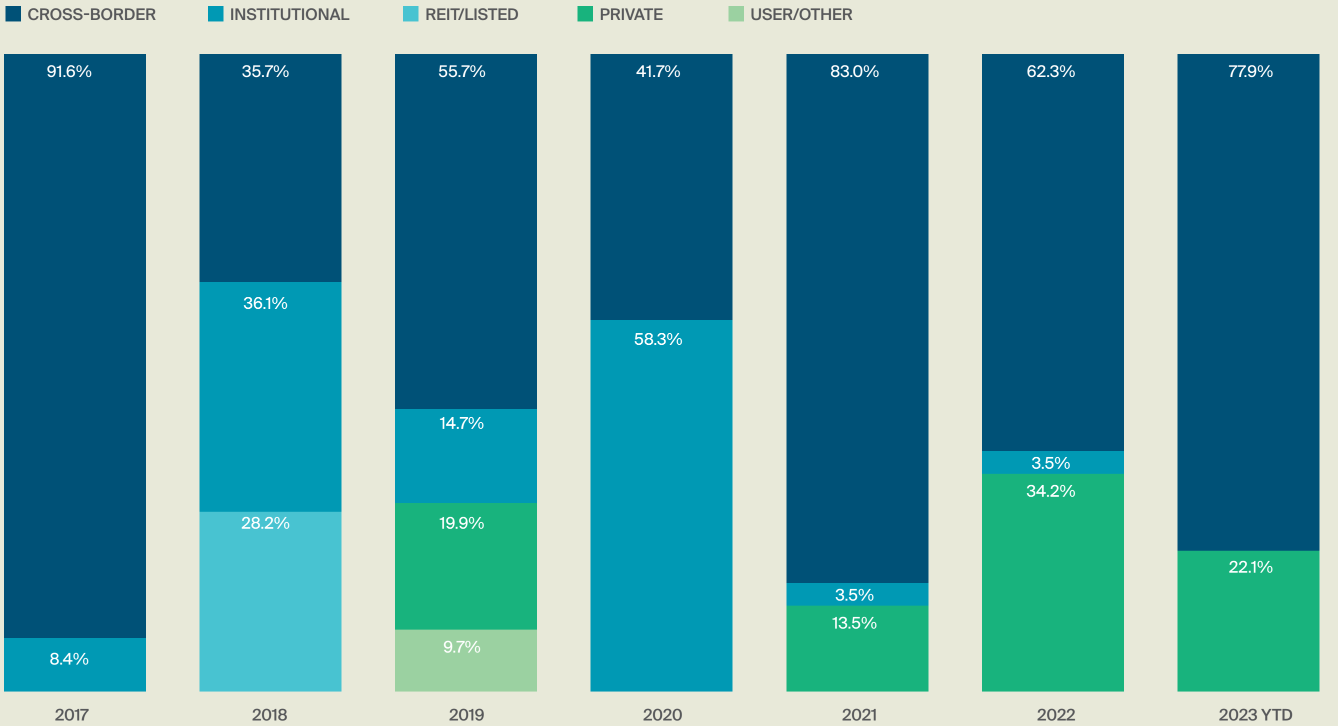
Top 5 operators	Beds (000s)
Domus Vi	20
Orpea	9
Vitalia	8
Ballelsol	7
Sanitas (BUPA)	7

Table 6: Key Investors in Spain

Rank	Buyer	Location
1	Adriano Care	Madrid, ESP
2	Primonial REIM	Paris, FRA
3	Caisse des Depots	Paris, FRA
4	Threestones Capital	Luxembourg, LUX
5	BAE Systems Pension	Farnborough, GBR
6	Cofinimmo	Brussels, BEL
7	Pierval Sante #SCPI	Paris, FRA
8	Aedifica	Brussels, BEL
9	MGS Seguros	Zaragoza, ESP
10	Care Property Invest	Schoten, BEL

> "Spain's largest five elderly care operators, including the likes of Domus VI and Orpea, account for over 50,000 care beds between them."

Fig 12: Buyer composition



Source: Real Capital Analytics

Netherlands

Institutional and private European capital make up the majority of capital composition for the sector in the Netherlands, with a significant Dutch representation amongst the top market participants on the buy side.

For the year 2022 the Netherlands saw an overall reported transaction volume of €688m across the sector, whilst year to date 2023 sits at approximately €186m.

Over 150 care settings are operated by the largest five providers in the Netherlands.

€688m

Transaction volumes across the sector in 2022

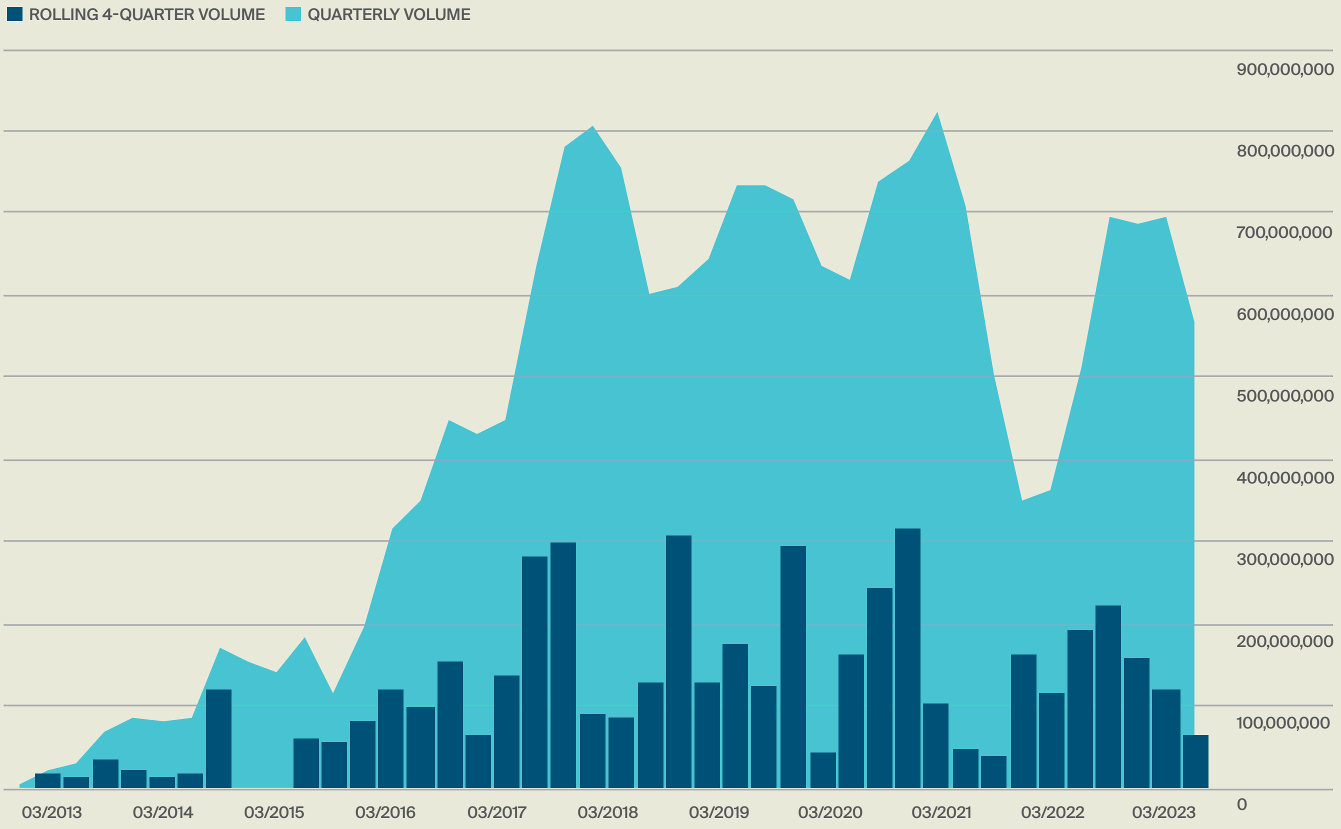
Table 8: Key Investors in the Netherlands

Rank	Buyer	Location
1	Bouwinvest	Amsterdam, NLD
2	Syntrus Achmea	Amsterdam, NLD
3	Amvest	Amsterdam, NLD
4	Pierval Sante #SCPI	Paris, FRA
5	Cofinimmo	Brussels, BEL
6	Berkley Investments (LUX)	Strassen, LUX
7	Cortese Capital	Utrecht, NLD
8	DWS Group	Frankfurt am Main, DEU
9	Fidelity International	Hildenborough, GBR
10	Lenferink Groep bv	Zwolle, NLD

Table 9: Main healthcare operators in the Netherlands

Top 5 operators	Beds (000s)
Orepa	82
Korian	37
Domus Magnus	17
Martha Flora	11
Ontzorgd Wonen	5

Fig 13: Sales volume (€)



Source: Real Capital Analytics

North America

Overview

EZEKIEL DUPREY
SENIOR RESEARCH ANALYST

U.S. health care consists of private hospitals (emergency visits, surgeries, etc.), doctors services provided in an outpatient hospital or medical office setting, mental health & counselling services, and specialty groups like dental, and vision. There are hospitals funded at the state & county level as well as the federal healthcare network for veterans of the military (U.S. Department of Veterans Affairs)

Elderly care encompasses any property that provides medical services at their facility, such as an Independent, Assisted Living, Memory Care, or a continuing care property. Generally, these have a full-time nurse or medical professional on site. Each state has minimum requirements in terms of staffing for such facilities.

U.S. healthcare is primarily provided by private sector companies funded by private payers (insurance and out-of-pocket) and public programs such as Medicaid and Medicare.

DEMOGRAPHICS

More than 60.7 million Americans are over the age of 65. During the next five years, that number is expected to increase to nearly 70 million, an annual growth rate of 3%.

California, Florida, and Texas are home to a quarter of America's seniors and a quarter of the U.S. population. However, California and Texas have two of the smallest percentages of senior residents.

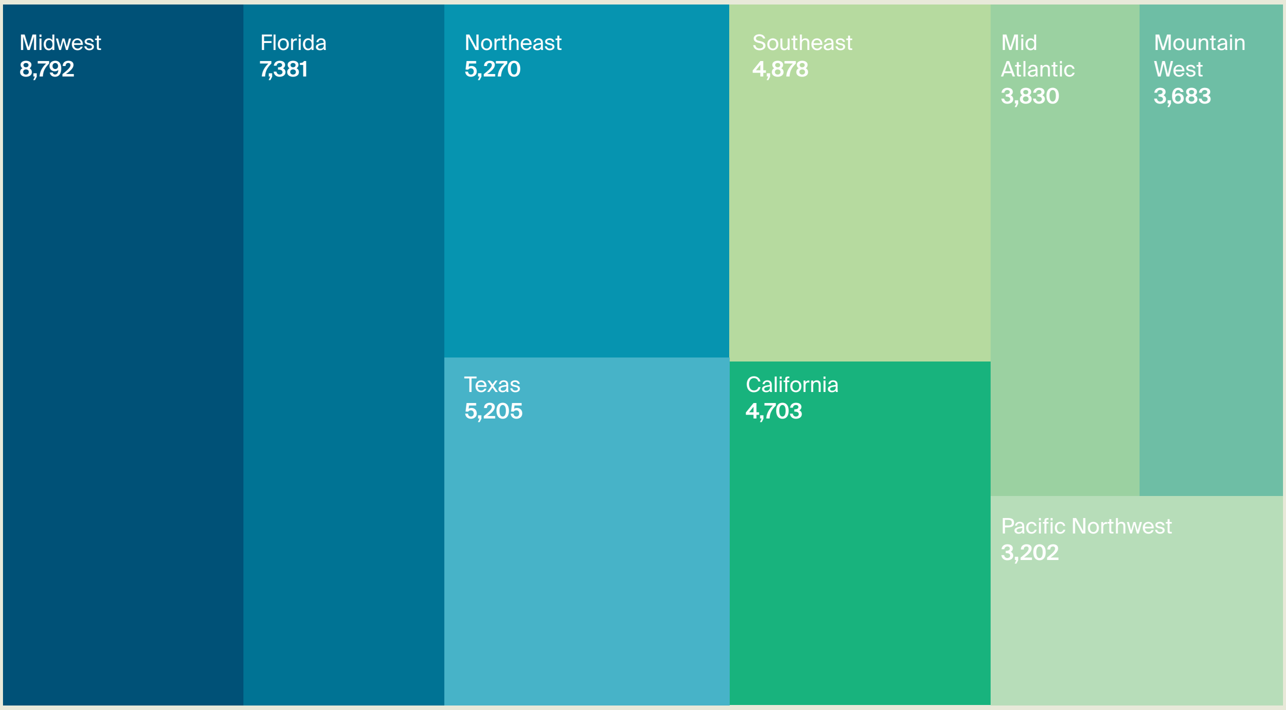
The Midwest and Northeast account for nearly two in five senior residents nationwide while accounting for roughly one out of every three total residents.

While the Southeast is viewed as a retirement magnet, its total percentage of senior residents remains below the national average.

Migration is expected to play a vital role in the distribution of older adults over the next five years. States attracting younger adults in the South and the West hope to see seniors follow children after retirement to be near families.

By 2030, half of the states in the country will have 65+ populations, measuring over 20% of their total populations.

Fig 14: Total units under construction by region



Source: Knight Frank Research/Berkadia

MARKET VIEW

Debt & Financing

AUSTIN SACCO, MANAGING DIRECTOR – MORTGAGE BANKING

ED WILLIAMS, MANAGING DIRECTOR – MORTGAGE BANKING

DEBT & FINANCING

Q: Who do you see as the leading sources for senior housing debt capital (institutional lenders, REITs, national banks, life insurance companies, Fannie/Freddie, HUD, etc.)? How do you expect underwriting standards to change this year (tighter, no change, loosen)? How do you expect interest rates, risk premiums, debt service coverage ratios, and loan-to-value ratios to change over the next nine months?

A: Currently, there isn't a true leading source for debt capital for the senior housing sector. The most desired debt execution in today's market is an agency loan via Fannie Mae and Freddie Mac, and there is available liquidity within both organizations (both expected to do ~$1 billion in seniors volume in 2023, respectively). The largest hurdle with respect to the agencies is that many properties do not currently qualify for permanent financing as many assets are dealing with depressed cash flow even if fundamentals across the sector continue to improve.

HUD is open for business and remains the best option in terms of long-term, fixed-rate debt. Additionally, HUD just announced their intent to rollback some of their COVID protocols, which should help properties that experienced very temporary dips in occupancy or halted admissions in 2022. From a HUD standpoint, these are good indications that the industry is recovering post pandemic.

There is a severe lack of capital from banks. National banks have largely been on the sideline since mid-2022. Regional banks also remain very selective, but some do continue to lend. The credit environment has certainly continued to tighten throughout 2023. For those regional banks who are still actively lending, most are requiring recourse, decreased LTVs, and a minimum 1.0x-1.25x coverage on in-place cash flow. We believe most lenders will stay in the current holding pattern through the end of 2023 and in to 2024.

MARKET VIEW

Market trends

MIKE GARBERS, MANAGING DIRECTOR – INVESTMENT SALES

Q: Rental rates grew for all care levels at a decent rate to begin 2023. What property type can sustain the momentum for the rest of the year, or will all three have equal rent growth?

A: Over the past year, the industry has experienced an average of 8% rate growth across all care types, with some markets reaching more than 10% growth. In addition to rate growth, operators have also been successful in increasing care fees for assisted living and memory care.

While these higher-than-historical rate increases are justifiable given the labour markets, increases in insurance costs, utilities, and pandemic-related expenses, this trend is not sustainable long-term, as affordability remains at the forefront of most operators' areas of focus, along with census improvement.

In terms of momentum, expect annual rate increases to start to decelerate in 2024 and return to historical levels in 2025 for all unit types, with assisted living and memory care taking longer to trend down due to its needs-based nature, compared to independent living and active adult, which is a lifestyle choice.

Buyers want to wait to watch the results of rent increases for a few months before giving credit to the seller.

MARKET VIEW

Sales trends

MIKE GARBERS, MANAGING DIRECTOR – INVESTMENT SALES

Q: Sales volume was historically low in 2022. What do you see as the biggest disconnect in pricing between what sellers are expecting and what buyers are willing to pay?

A: The disconnect ultimately comes down to the perceptions of cash flows at properties.

Buyers are still looking at historical financials for performance, while sellers want credit for future revenue growth through planned or recent rent increases that have not yet hit property financials.

We are starting to see improved NOI margins from January's rent increases, which is starting to narrow the gap in expected pricing.

Generally, communities did not pass along rent increases until January, but gave raises out to employees last year, even without revenues to offset the expense.

Buyers want to wait to watch the results of rent increases for a few months before giving credit to the seller.

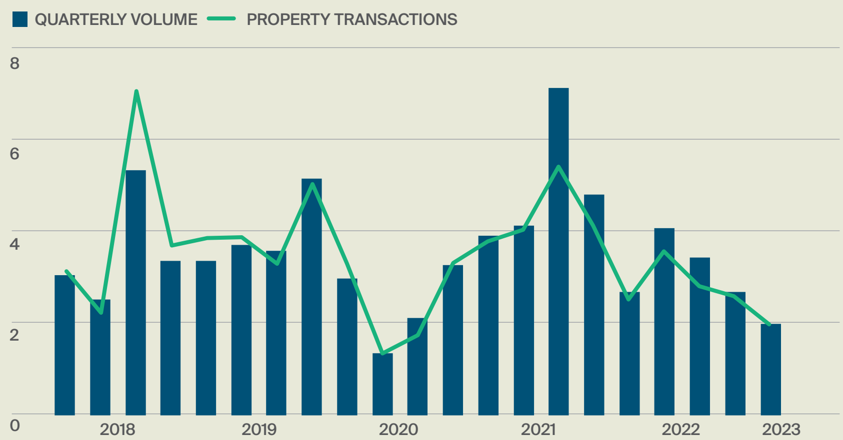
Owners without an urgent need to sell are holding onto their properties for now, while those with an urgent motivation to sell are having a more challenging time trading their assets at discounts.

There are still active buyer groups looking to transact; however, the bid-ask spread, which had widened during the second half of 2022, seems to have grown even larger.

Overall, deals are taking a bit longer to get done. Buyers are requesting longer due diligence periods, term sheets are harder to come by, and pricing deltas have grown, all factors that have created a general lack of urgency.

Fig 15: Seniors housing transaction trends

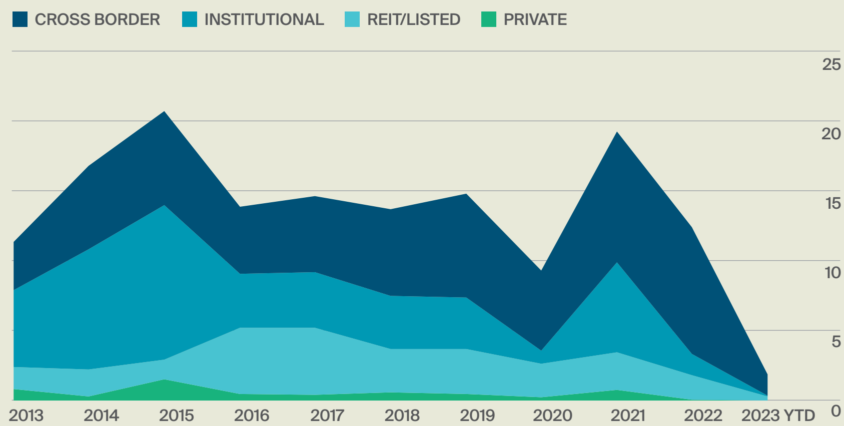
$ Billions



Source: Real Capital Analytics

Fig 16: Capital flows

$ Billions



Source: Real Capital Analytics

CODY TREMPER, MANAGING DIRECTOR – INVESTMENT SALES

Q: What is the outlook for trade volume and transaction closing times for the remainder of 2023?

A: Trade volume will certainly be lower in 2023 compared to the past few years, as we have already seen largely reduced M&A activity through Q1 2023; sales volume began to slip in the second half of 2022, in line with the rise in interest rates.

Hospitals & Medical Office Buildings

The medical and life sciences industry encompasses a broad range of sectors involved in research, development, manufacturing, and delivery of healthcare products, services, and technologies. General hospitals and medical office building (MOB) real estate falls within the industry.

Not facing a spike in COVID-19 cases to start 2023, compared to one year prior, hospital operations are stabilizing. Even so, hospitals on average faced negative operating margins with higher labour expenses and lower patient volumes. Hospital transactions moderated to $0.5 billion in the first quarter of 2023.

With more available inventory to trade than hospitals, MOB investment remained the bulk of transactions in the first three months of 2023. MOB sales totalled $1.6 billion in the first quarter of 2023. Real estate investment trusts REITs made up more than half of all MOB volume.

Developers have moderated construction activity recently, as general hospital and medical office building completions decreased over the last five years.

Construction completed on 16.5 million square feet for general hospitals and 17.0 million square feet of MOBs in the 12-month period through March 2023. Contributing to the slowdown was the rising cost of construction, with significant growth last year. After rising 13.9% during the previous year, MOB construction costs tempered to 5.8% since the first quarter of 2022. At the same time, hospital construction costs dropped 3.2% in the last four quarters after rising 6.4% during the year prior.

Builders remain active in the general hospital and medical office building sector. Approximately 90.8 million square feet of hospital and 50.1 million square feet of MOB were under construction at the end of the first quarter. More than half of the hospital construction was expansions, including the $74 million, 70,000-square-foot Fond du Lac expansion by Aurora Health Center in Wisconsin. One of the largest MOBs scheduled for completion over the next year is the 94,000-square-foot Anna-Maria and Stephen Kellen Tower on the campus of Hospital for Special Surgery in New York. The project is part of 21.8 million square feet of MOBs under construction on campuses nationwide.

Fig 17: Hospital pipeline (SF)

76.7m
expansion

42.2m
new

25.7m
replacement

Source: RevistaMed

Fig 18: MOB pipeline (SF)

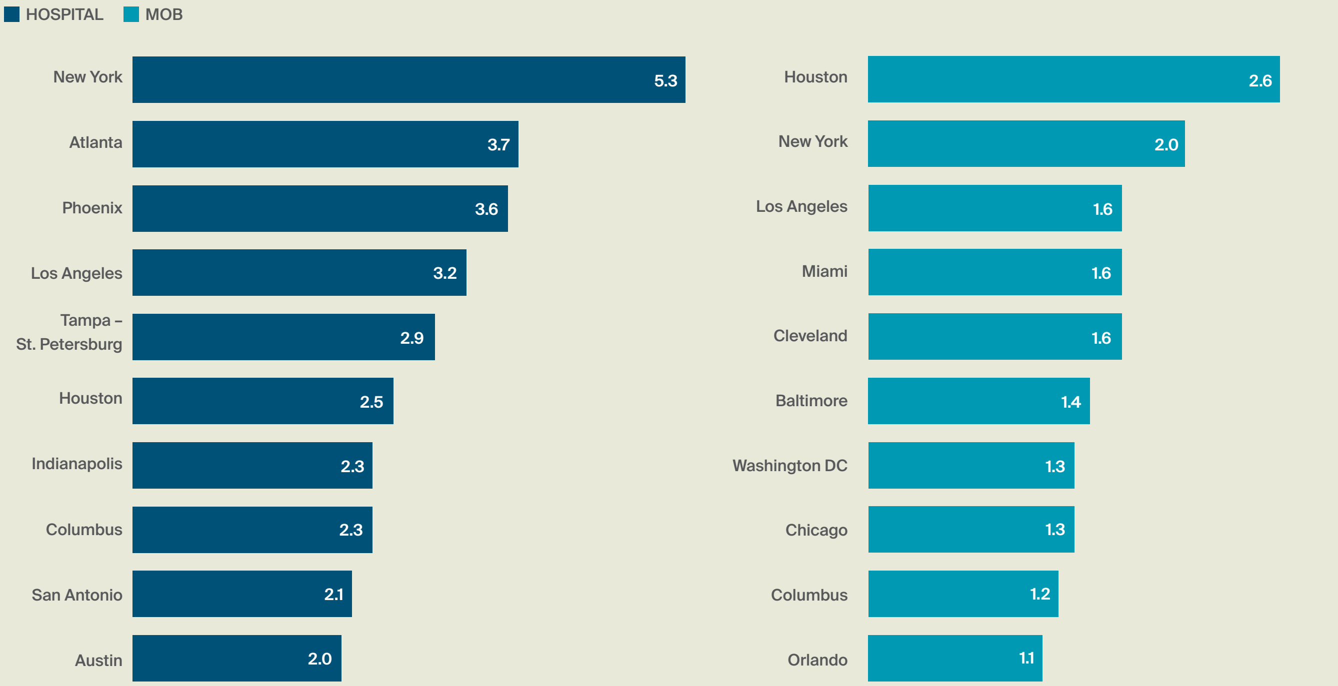
21.8m
on campus

28.3m
off campus

Source: RevistaMed

Fig 19: Top 10 pipelines (SF)

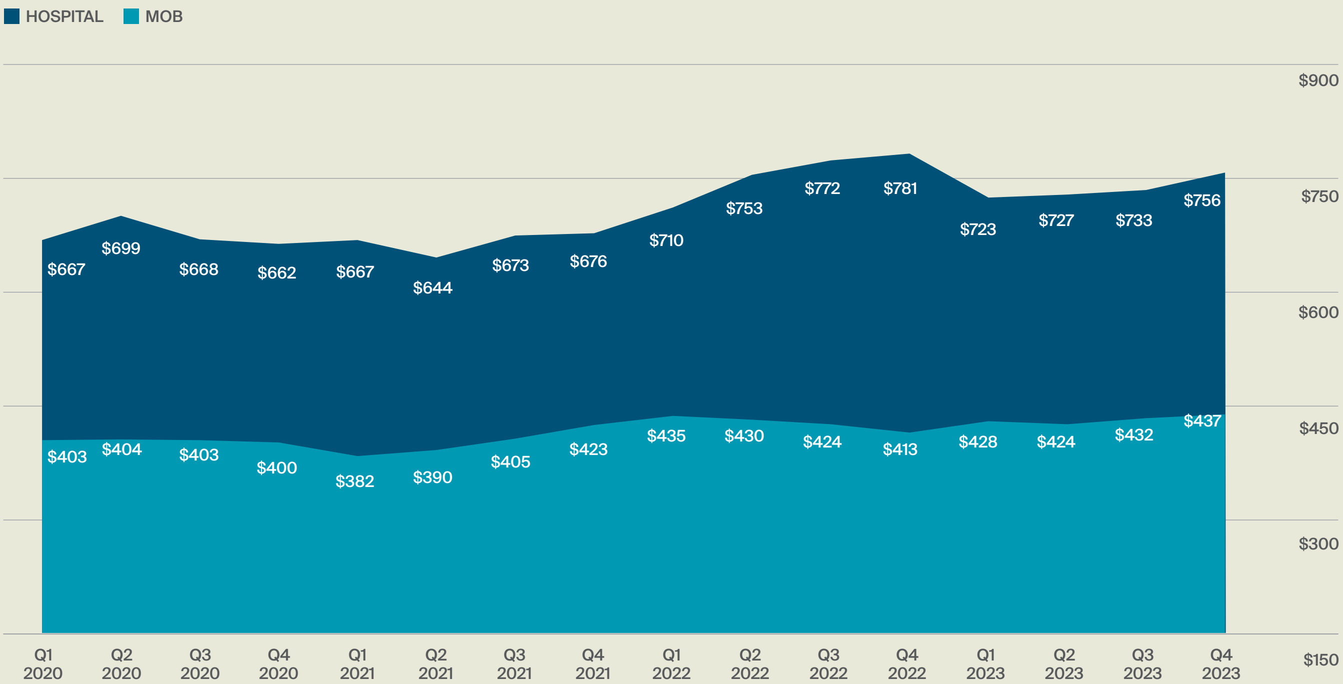
$ Millions



Source: RevistaMed

Fig 20: Average construction cost

per SF



Source: RevistaMed

Asia Pacific

Overview

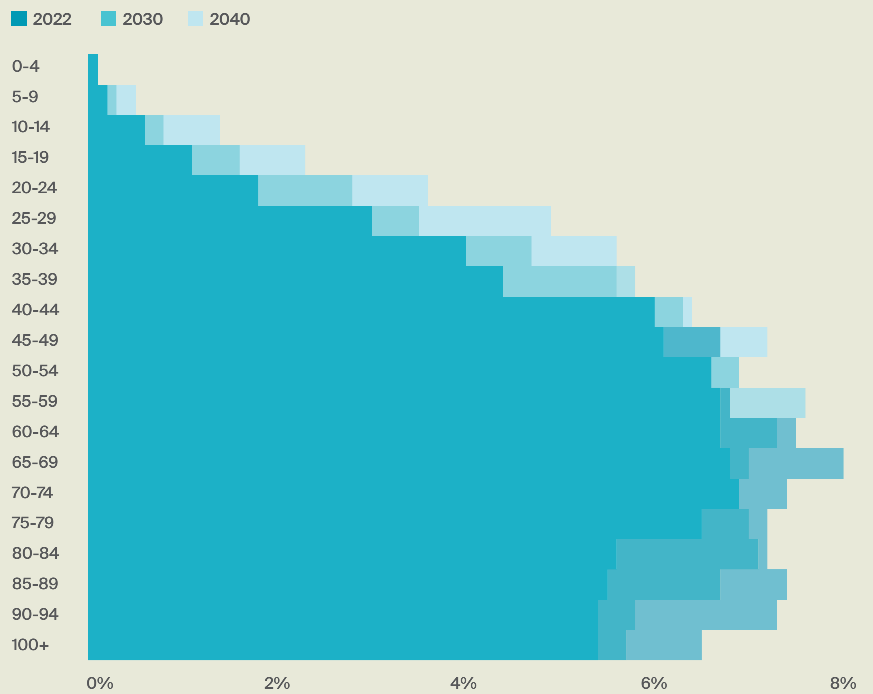
REAL ESTATE'S SILVER LINING
According to UN's projections, those aged 60 and above in the Asia Pacific will rise by over three-quarters to close to a billion by 2040, and account for close to a quarter of the region's population. This seismic demographic shift will be a powerful megatrend that will shape consumer markets, transform healthcare and real estate in the decades ahead.

PEAK WEALTH
While the billionaire under 30 is a growing phenomena, seniors, together with older professionals over 45, will remain the wealthiest cohort – a natural progression after years of employment, accumulation and investing.

According to Knight Frank's Wealth Sizing Model, the number of HNWIs in the region, or those with over US$1 million in net assets, will expand by close to 80% in the next five years, faster than the global average of 56.9%.

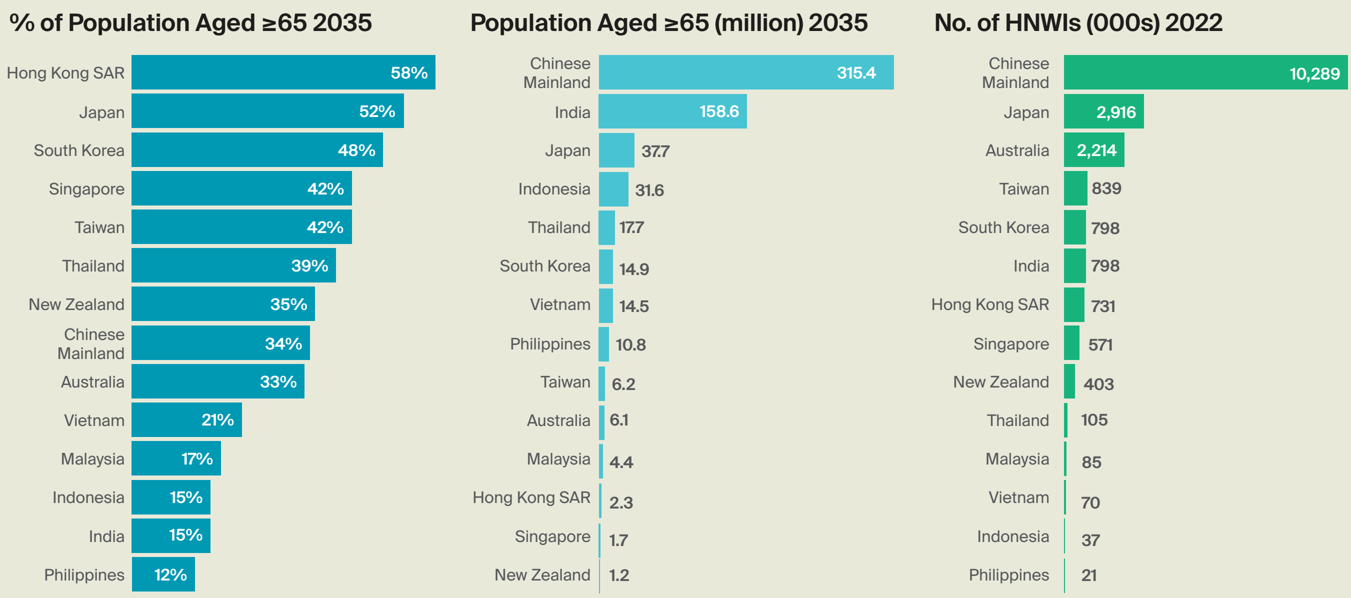
As a result of these self-reinforcing trends, the share of seniors in the

Fig 21: Shifting Demographics: Proportion of aged >65 years rises in Asia Pacific



Source: United Nations Population Division

Fig 22: Asia pacific population by country



Source: United Nations Population Division consumer class is expected to grow rapidly and their role in the economy will gain in significance. According to Ageing Asia, Asia Pacific's ageing market value is expected to hit US$4.6 trillion by the year 2025.

A SILVER LINING

Asia Pacific's rapidly ageing population and retirees' growing wealth will drive strong demand for senior housing in several of the region's developed markets, with the scope for more consumer-driven solutions. The implications of such high numbers of seniors means that there is a tremendous real estate opportunity to build homes that seniors can age successfully in. As a corollary, the opportunities for more upmarket retirement options will also increase.

GROWING ALLOCATIONS

The private sector is waking up to the opportunities thrown up by an ageing population. Despite the onset of the pandemic, acquisitions for operating assets in the region's care sectors reached a record US$2.8 billion in 2022.

With an uncertain global economy, the sector is expected to gain further traction, given its defensive characteristics. A renewed focus on health and wellness, brought on by the pandemic, has also lifted demand. As with most alternative sectors, the structural shortage in supply and higher yields will allow returns to outpace inflation.

In a transaction of note, Sweden-based EQT, in 2022, acquired Stockland's retirement living portfolio for US$987 million. Demand for retirement dwelling has risen in the past two years in Australia and is fuelling a development boom.

EXPANDING POTENTIAL

Currently, the retirement living market in the region is highly fragmented. The most prominent markets are Australia and Japan, which has the largest institutionalized portfolios. However, the ageing and wealth dynamics in the rest of the region remain conducive to the development of upmarket retirement solutions. Structural tailwinds arising from demographic changes point towards more favourable market dynamics for these markets, but there are other factors that affect the feasibility of such real estate products in the local markets. Cultural norm, cost of living, access to healthcare system and supply constraint are also in play especially when social economics are concerned. Retirement living in Asia varies depending on the country and individual circumstances. Some countries in APAC, such as Japan, Australia, Singapore, and South Korea, have well-developed pension systems and a high standard of living, making them attractive options for retirees. Countries in the region with less developed pension systems and lower standards of living will find developing retirement products more challenging.

> "The private sector is waking up to the opportunities thrown up by an ageing population. Despite the onset of the pandemic, acquisitions for operating assets in the region's care sectors reached a record US$2.8 billion in 2022."

TOP MARKETS FOR UPSCALE RETIREMENT LIVING

Australia

Chinese Mainland

Hong Kong (SAR)

Singapore

Japan

South Korea

Singapore

STRUCTURAL UNDERSUPPLY SITUATION CREATES OPPORTUNITIES

Since 2013, nursing home supply was driven mainly through the BOL model, where the dormitory-style structure is expected to be the prevalent model for these new nursing homes. This allows the government to control fees and maintain an affordable nursing home model for the mass market.

As of 2021, Singapore's nursing home capacity stands at just under 17,000 beds. Since 2013, capacity has been steadily increasing, and this expansion is projected to continue. It is anticipated that the number of beds will double to exceed 31,000 by the end of this decade.

Nonetheless, despite experiencing a doubling in growth since 2013, Singapore still had fewer nursing home beds per 1,000 elderly (aged 65 and above) in 2021 – 26.5 beds – than in 2006 when it was 32.1 beds. This is still significantly lower compared to countries such as the US, UK and Australia, where the number of nursing home beds per 1,000 elderly is around 38.2, 49.5 and 54.0 respectively, based on a study commissioned by the Lien Foundation and Khoo Chwee Neo Foundation.

CATALYSING PRIVATE SECTOR PARTICIPATION

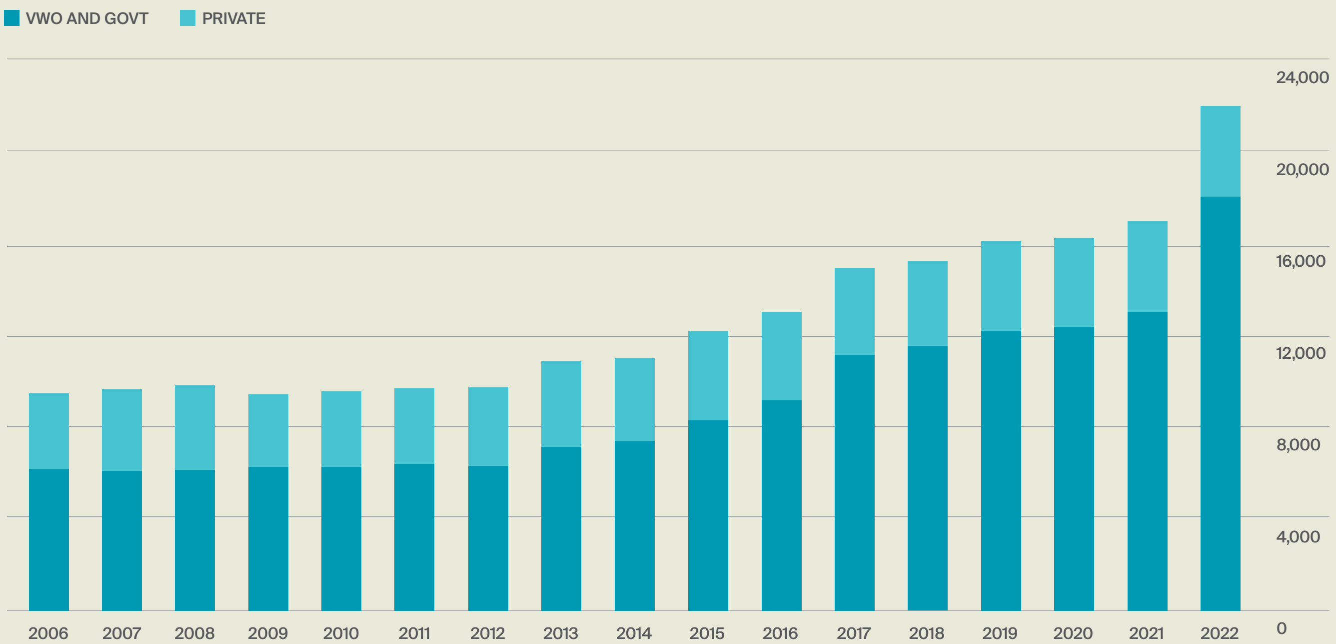
While private assisted living facilities emerged in Singapore in 2015, these have not expanded beyond a handful of providers. However, this is set to change. In late 2022, the authorities put up a land sale for a pilot private assisted-living development with senior-friendly features.

The tender, assessed via a concept and price bid, has since been awarded to a subsidiary of the developer Perennial Holdings. The pilot project will have the necessary guardrails to ensure the desired outcomes. However, eligibility of its occupants will be softer in terms of qualifying medical conditions to encourage take-up. The success of this project will no doubt set the tone for further private sector participation in the sector.

31,000

It is anticipated that the number of beds will double to exceed 31,000 by the end of this decade

Fig 23: Current and future supply of nursing home beds



Source: Department of Statistics

Australia

DEFENSIVE CHARACTERISTICS AND DEMOGRAPHIC TAILWIND CONTINUE TO ATTRACT NEW CAPITAL

Institutional investment in Australia's healthcare and life sciences sectors has gathered significant momentum in recent years, driven initially by domestic investors seeking defensive assets, and now sees strong market participation by regional and global sector specialists and their capital partners.

Healthcare and health-related expenditure account for over $241 billion annually in Australia, which represents approximately 10.5% of the country's GDP, with an estimated 73% of this provided by the Commonwealth and State Governments. Of the remaining $65.3 billion, an estimated $17.5 billion is spent by private health insurers.

The significance of this expenditure to healthcare real estate in Australia cannot be understated, and when considered in tandem with the fact that 23% of the population will be over 65 years old by 2062, provides strong support for investment across all subsets of the sector.

MAJOR PLAYERS

Australia's securitized healthcare real estate comprises approximately $22 billion of assets, with dominant players including:

- TSX-listed NorthWest Healthcare REIT, with an $6 billion portfolio representing approximately 50% of their global AUM;
- Australian Unity, widely considered the original institutional investor in the sector in Australia, managing a diversified $4 billion portfolio comprising senior living, primary care, hospitals and medical office buildings;
- Dexus, who manage approximately $1.8 billion in institutional-grade healthcare and life sciences assets;
- Healthco (ASX:HCW), a subsidiary entity of HMC Capital, which acquired Medical Property Trust's 11 asset portfolio in 2023 for $1.2 billion. Notably this portfolio is tenanted by Healthscope, an Australian operating hospital subsidiary of Brookfield.

Additionally, there are a number of asset managers such as Centuria, RAM, Elanor Investors and Barwon Investment Partners who are actively scaling their AUM in the sector. A number of these groups have progressed from single asset, syndicate-style vehicles targeted at HNW private investors and are now securing mandates from global institutional and sovereign wealth capital partners including MSREI, PNB and GIC. The portfolio composition of the smaller managers is maturing from smaller primary care and allied health assets to be more reflective of the portfolios of the larger institutional and global investors, with assets such as mental health, day, short-stay and tertiary hospitals. In 2023 we have begun to see capital recycling occur with a number of primary care assets being placed on market to fund development of larger precinct-style assets.

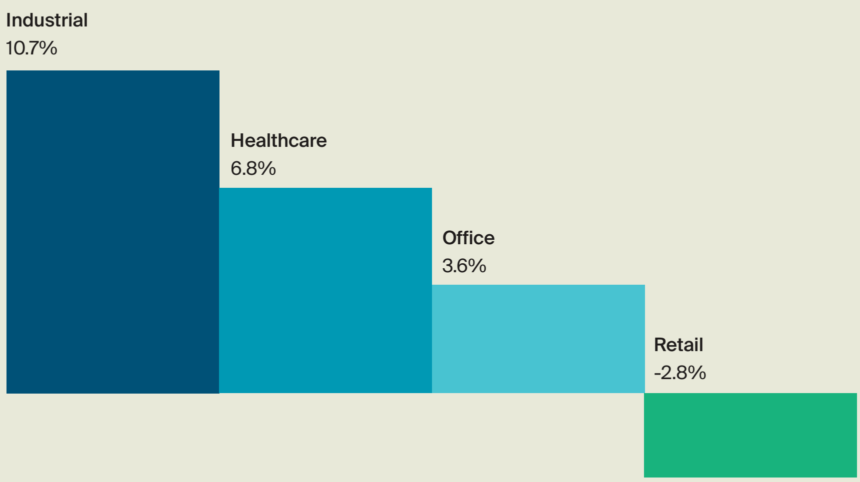
SENIOR LIVING IN DEMAND

Australia's senior living sector is experiencing strong demand, with the growth in the over-65 population cohort outpacing the supply of new accommodation across the land lease communities (LLC), retirement village (RV) and aged-care (RAC) sectors. Affordability is becoming critical and as such the market is attempting to respond, with LLCs in particular becoming more popular and significant M&A activity occurring across the sector. Notable recent transactions include Swedish-based EQT Partners acquiring Stockland's retirement portfolio of DMF (event) fee model villages for $987m in 2022. Prior to this divestment, Stockland changed its senior living focus from RVs to LLCs, having acquired 3,800 sites from Halcyon in July 2021 for $620m.

The aged care sector continues to face headwinds, particularly due to staffing availability and operating costs. Notable recent M&A activity includes Bain Capital's acquisition of the listed 6,500-bed Estia Health platform for $838 million in August 2023.

Fig 24: Healthcare performance second only to industrial

Average capital growth per year 2017-22

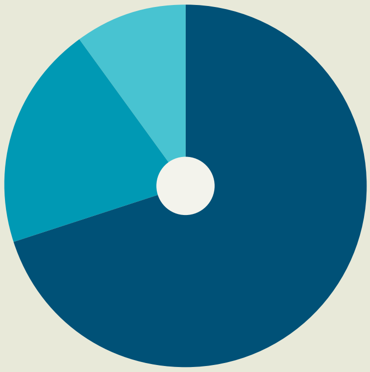


Source: : Knight Frank Research, MSCI

India

India's healthcare market was estimated to be worth USD $372bn in 2022, significant growth from USD $73bn a decade ago (in 2012). At this level and pace, India's healthcare industry has grown at an annual average rate of 18%. India's healthcare market primarily comprises hospitals, pharmaceuticals, health insurance and medical technologies. The hospital industry accounts for 80% of the healthcare market in India. To cater to the ever-expanding population and growing healthcare needs, the hospital industry in India has grown significantly in the last few years. Currently, India has an estimated 70,000 hospitals of which the private sector constitutes 63% of the total share. Unlike developed countries where public healthcare is dominant, the hospital industry in India is dominated by the private sector.

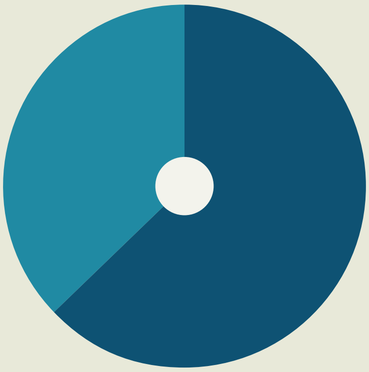
Fig 25: Share of market segment of healthcare in India



Hospitals	70%
Pharmaceuticals	20%
Medical technology / others	10%

Source: Statista, Knight Frank Research

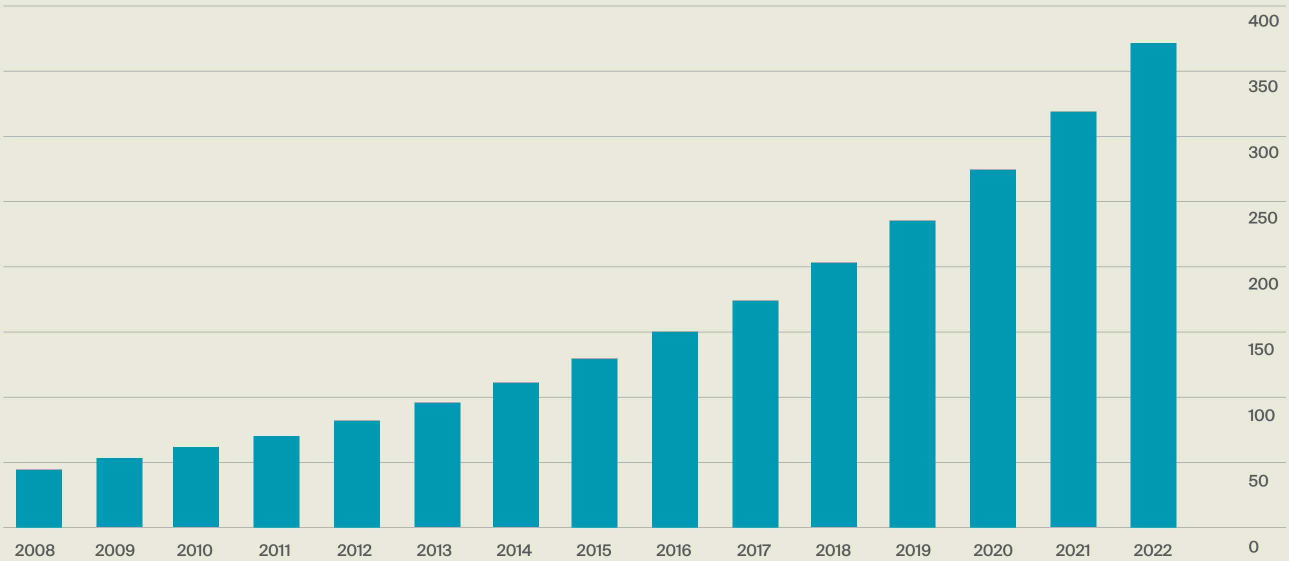
Fig 26: Hospitals in India
% Ownership



Private	63%
Public	37%

Source: Statista, Knight Frank Research

Fig 27: Linear growth of healthcare market in India
US$ billion

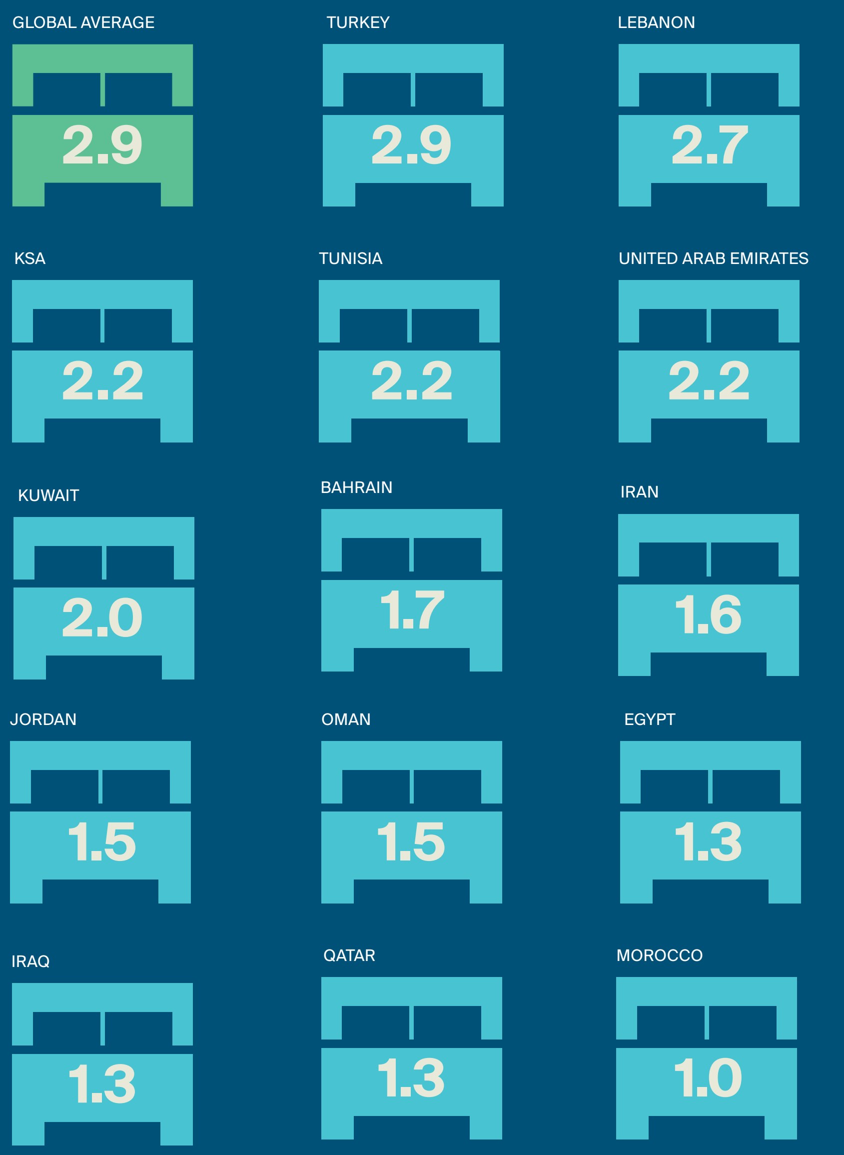


Source: IBEF, Knight Frank Research

Middle East

Overview

BED DENSITY: GCC



2.2

UAE and KSA have 2.2 beds per 1,000 population which is lower than the global average of 2.9 beds per 1,000 population."

Source: Knight Frank Research

The healthcare market in the Middle East (ME) is set to thrive in the next decade, primarily due to the rise in population, especially the ageing population and increasing incidence of chronic and non-communicable diseases. This will create demand for hospitals, specialty medical centres with a strong paradigm shift towards research, innovation and digital healthcare solutions.

In recent years, the region has experienced substantial sectoral growth. This growth can be attributed to increased government spending on healthcare infrastructure, particularly in countries like UAE and KSA. Additionally, the implementation of mandatory insurance and the expanded presence of private healthcare providers have played a crucial role in enhancing accessibility and delivering high-quality services.

The GCC healthcare expenditure is expected to reach USD $135.5 billion by 2027 increasing by 5.4% per year from 2022 with the UAE witnessing the highest growth at 7.4% per year (Source: Alpen Capital).

CAPITAL MARKETS

- Most real estate investment in the region has been allocated towards residential, industrial, education and offices.
- Healthcare deals are now very sought after as they provide:

Portfolio diversification

Are generally structured on long term triple net leases (where facilities are not owner occupied)

Population growth within the region and healthcare is generally seen as a more 'recession proof' sector

"In recent years, the region has experienced substantial sectoral growth. This growth can be attributed to increased government spending on healthcare infrastructure, particularly in countries like UAE and KSA. "

- Very limited pure real estate (propco) investment deals have occurred – less than 10 in the last decade, but five of these have taken place in the last two years showing market maturity.
- The last transaction (Burjeel sale) achieved a net yield of 7.75% and was let to a regional operator with 18 years unexpired triple net lease (GCC freehold). The asset was located in Sharjah.
- We expect yields to dip to the low 7's where criteria 4 and 5 are met and at least two of items 1-3 are met (see below).

1. asset located in Dubai
2. their operator/lessee is an international brand
3. the land tenure is international freehold
4. is structured with a long triple net lease in excess of 15 years
5. provision for bi-annual or three yearly rent review patterns

- Despite the shorter lease lengths, clinics (as opposed to hospitals) tend to trade at similar yield levels if not lower. This is generally because they are perceived to be less risky and are located in densely populated areas. The last transaction occurred at 7% which has 7 years unexpired to an international healthcare provider.
- It is not unusual to find land tenure in the UAE held under leasehold with an annual ground rent payable to the government. In such cases investment yields tend to be 100-150bps higher than freehold hospital/clinic deals.
- There has been a deal recorded where a freeholder sold their interest, which was subject to a 49 year ground lease to an international healthcare hospital operator. This achieved a yield of 5% but had provisions of bi-annual ground rent escalations and was highly reversionary (12%+).

Key demand drivers for healthcare sector in UAE:

Increasing purchasing power of individuals.

Fast growing ageing population will drive demand for specialized healthcare and wellness services especially since the people are moving towards proactive and preventive care to manage chronic conditions.

UAE's advanced infrastructure including focus on AI, automation and robotics and high adoption rates of technological innovation and digitization will play an important role in the country positioning itself at the top, offering quality care globally.

To address future needs of the emirates and to enhance the delivery system, the government is heavily focusing on a public-private partnership model as a long term sustainable strategy which will create a progressive impact.

Encouraging innovation in healthcare by supporting health startups.

Mandatory health insurance in Dubai and Abu Dhabi will continue encouraging spending and contribute to integrated healthcare services. There is an extension plan of mandatory insurance to some of the northern emirates as well. However, the timeline of implementation is yet to be confirmed.

Dubai's health strategy is based on attracting, retaining and developing a high callibre healthcare workforce by way of providing access to world class medical education opportunities.

Key demand drivers for healthcare sector in KSA:

The aim of the Saudi ministry is to raise the private sector's contribution from 40% to 65% towards GDP by 2030 targeting privatization of 290 hospitals and 2,000+ primary health centers.

Creating an environment and opportunities to attract medical talent from within the Kingdom.

Allocation of funds by the government to develop the healthcare sector including launch of health clusters to promote preventive and integrated care and focusing on medical education and research to improve outcomes.

Increase in ageing population creating demand for dedicated healthcare services.

The adoption of advanced technologies in healthcare has been a driving force. Saudi Arabia has been keen on implementing innovative solutions such as electronic medical records, telemedicine and digital health to improve healthcare delivery, patient outcomes and efficiency.

Collaboration with international healthcare providers, academic institutions, and research centers for knowledge sharing and to bring in expertise.

Africa

Overview

African healthcare presents extensive growth opportunities in medical devices, consumables, services and digital technologies. Healthcare is a vital sector for the well-being and prosperity of Africa. The African healthcare market is estimated to be worth USD $259 billion by 2030; Africa will present 14% of health and well-being business opportunities, only second to North America with 21% of the opportunities. The market is growing due to population growth, the changing nature of disease burden, and the need to decrease the gap between demand for and access to quality healthcare for all.

Although the continent accounts for approximately 17% of the world's population, it accounts for 25% of the world's disease burden. This will be further affected by Africa's population growth which is expected to nearly double to reach 2.5 billion people by 2050. Simultaneously, the number of people aged 60 and older is projected to reach 67 million by 2025 and 163 million by 2050. Thus, an increasing number of people living with chronic diseases and disabilities, increasing the demand for various health services.

Africa's disease burden has historically been related to communicable diseases, which account for two-thirds of the total disease burden. The most significant share of the disease burden comes from HIV/AIDS (approximately

> "The African healthcare market is estimated to be worth USD $259 billion by 2030; Africa will present 14% of health and well-being business opportunities, only second to North America with 21% of the opportunities."

Fig 28: Africa's population pyramid in 2023

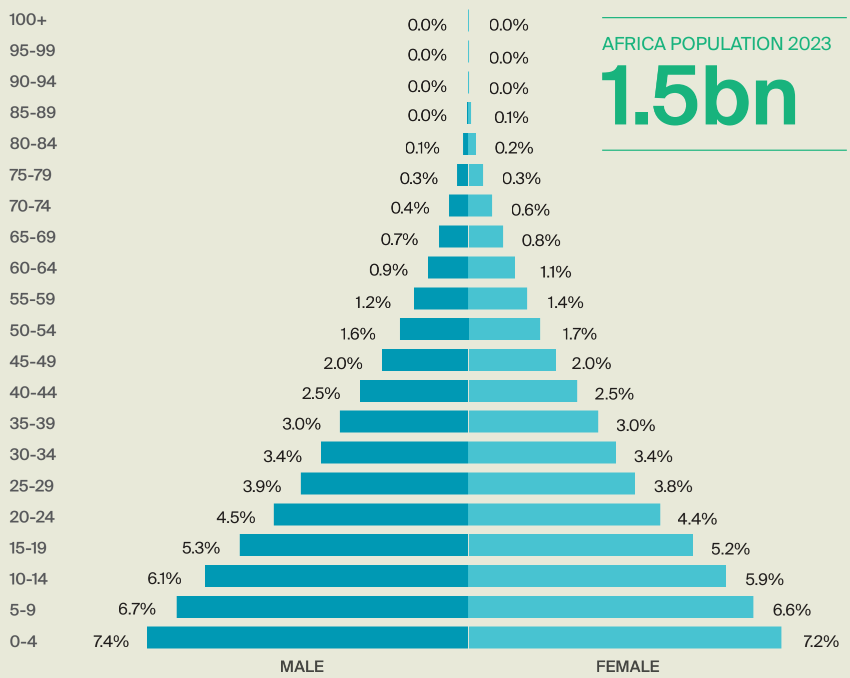
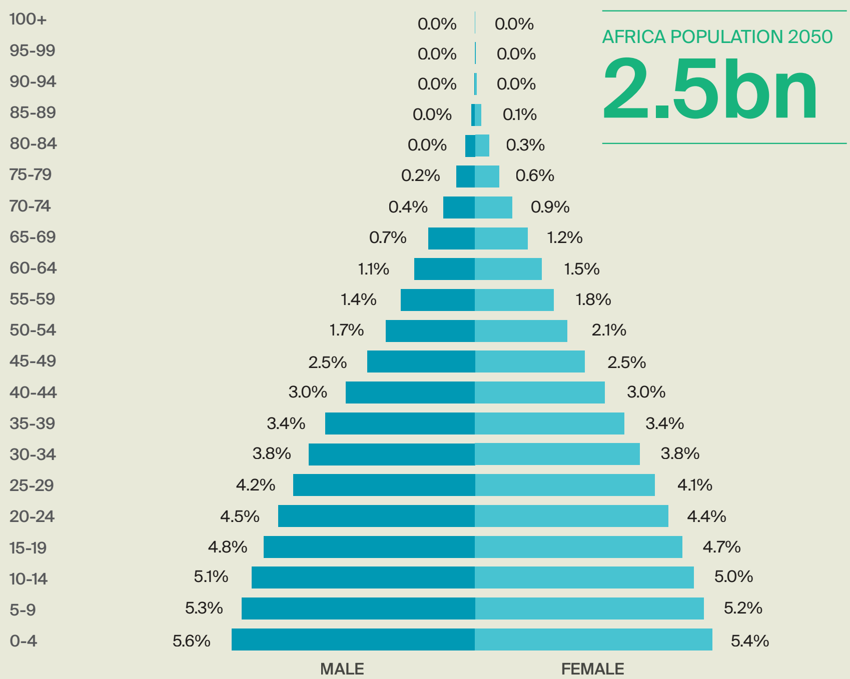


Fig 29: Africa's population pyramid in 2050



Source: Knight Frank Research

70% of people living with HIV are in Africa) and Southern Africa remains disproportionately affected.

However, in recent years non-communicable diseases are also on the rise around Africa. This is taking place in parallel to an increasing rate of urbanisation (from 27% in 1950 to 44% in 2021 and projected to reach 60% by 2050) and subsequent lifestyle changes. These changes are associated with rising risk factors such as hypertension, diabetes, and obesity, as well as mental and neurological disorders. A World Bank report estimates that by 2030 non-communicable diseases will cause more deaths in Africa than communicable diseases.

To facilitate greater access to healthcare, increased and innovative public and private sector involvement is needed to address these challenges. The role of the private sector should complement the public sector efforts in delivering quality healthcare to both existing and projected demand.

POPULATION

While Africa's population increased from 228.7 million in 1950 to 1.341 billion in 2020, Eastern, Western, and Middle Africa are the three regions growing more rapidly in recent decades. Overall, Africa's population has been steadily increasing by an average rate of 2.5% per annum and is expected to reach 2 billion people by 2050. This makes Africa the fastest-growing continent in the world. Additionally, Oxford Economics predicts a 43% increase in the population of individuals over 65 years in the next decade, which is attributable to an increase in life expectancy. Currently, individuals aged under 30 years make up 60% of the population. These demographic changes present various healthcare-related challenges but will also significantly increase the demand for healthcare services.

As illustrated in the Figs. 24 and 25, Africa’s population mainly consists of young people and is expected to remain so over the next 50 years. This has significant implications for the continent's healthcare system. While a young population typically means lower demand for healthcare services, it is also essential to recognise that younger individuals' health needs usually differ from those of older adults.

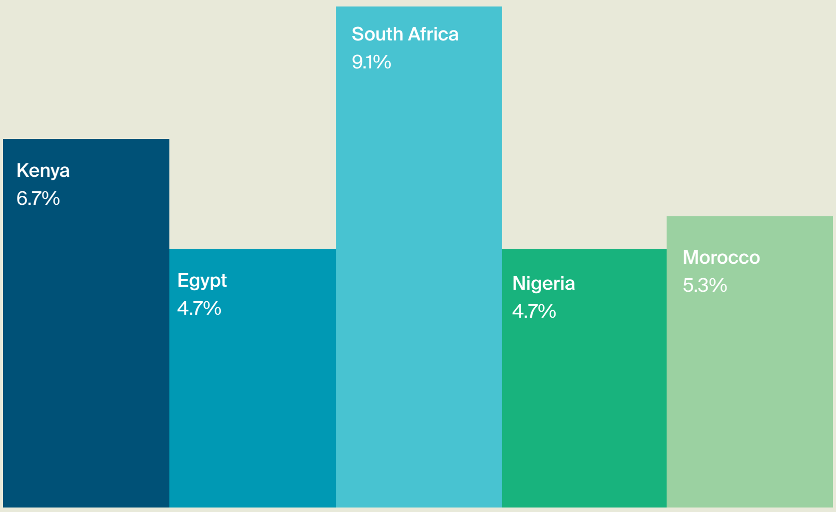
One of the critical implications is the need to focus on preventative healthcare measures, including education on healthy behaviours and access to vaccines and other preventative treatments. This can help ensure that young people remain healthy and prevent the development of chronic conditions that can become more prevalent as people age. Investments in healthcare infrastructure, including hospitals, clinics, and healthcare equipment, will be necessary. Additionally, there will be a need for a skilled workforce to provide healthcare services to the growing population.

At the same time, as the population ages, the demand for healthcare services and assistance is likely to increase. South Africa is already taking steps in this direction with various assistance healthcare services available.

HEALTHCARE INFRASTRUCTURE (HOSPITAL BED DENSITY)

Except for South Africa, healthcare systems in African countries currently fall short of the global average hospital bed-to-population ratio of 2.9 beds per 1000 people. Significant investment in healthcare infrastructure is needed across the continent to address this gap. For instance, on the global average, Nigeria requires an additional 386,000 beds, while Kenya needs an additional 70,000 beds. This highlights the urgent need for increased funding and resources to bolster healthcare infrastructure and improve access to quality healthcare services for all Africans.

Fig 30: Healthcare spending; percentage of GDP (2022)



Source: : Knight Frank Research

Medical tourism in Africa

Medical tourism uses comprehensive national strategies like public-private partnerships, tax incentives and marketing. A common medical tourism strategy is to provide packages that include assistance with medical visas, a meet and greet at the airport, private nurses, hospital accommodation before and after surgery and a luxury safari post-treatment.

Inbound

The global medical tourism industry is valued at $20 billion annually, with nearly 7 million patients seeking healthcare abroad. In Africa, South Africa has emerged as the clear leader as a medical tourist destination, with Morocco and Tunisia well positioned in North Africa to attract European patients.

SOUTH AFRICA

South Africa is ranked by the Southern African Development Community (SADC) as the leader in the African market for healthcare tourism. It offers a wide range of low-cost treatments, professionalism, and quality that sets its healthcare providers apart from the competition.

In addition to essential treatments, South Africa is well known for affordable cosmetic surgery procedures, fertility treatments, breast enlargements, cosmetic dentistry, and others, creating a thriving medical tourism industry. Many medical tourists come from other African countries, particularly for affordable infertility treatments.

South Africa is well positioned as an ideal medical tourism destination in that it boasts the following characteristics:

- Under-utilised private healthcare sector (catering to only 16% of SA's total population);
- World-renowned doctors who are international thought leaders;
- The South African medical industry has pioneered many ground-breaking surgeries and medical research, including the world's first heart transplant and, more recently, the world's first middle-ear bone transplant using 3D printed components;
- Shorter waiting times for surgeries (in the private sector);
- English-speaking country (therefore, communication is easier for the bulk of international visitors); and
- Favourable currency (vs. US Dollar and Euro), thus making it competitively priced compared to other regions.

MOROCCO

The Kingdom of Morocco's market for medical tourism has made major investments to become an attraction in Northern Africa. Medical tourism in Morocco is dominated by cosmetic surgery and dental treatment, with these procedures' costs running less than those offered in Western Europe. A pleasant climate, internationally trained medical staff, a Francophone population, and lower costs make Morocco an ideal medical tourist destination.

To enhance the competitiveness of Morocco's overall tourism industry, Morocco's Ministry of Tourism aimed to attract 1.5 billion tourists and accessible markets, focusing on the Western and Northern Europe region. The health and wellness tourism sectors are cited in the strategy as two major industries ripe for development and job creation.

Morocco's investments and policies have contributed greatly to the industry's growth. The country shares an "open skies" agreement with the European Union, which allows a variety of flight destinations for potential medical tourists. In addition, Morocco has eliminated value-added taxes on cosmetic surgeries, increasing the price competitiveness of its procedures.

> "South Africa is ranked by the Southern African Development Community (SADC) as the leader in the African market for healthcare tourism."

Outbound

KENYA

KENYANS SEEKING TREATMENT ABROAD KEY FACTS:

Sh160,000 - Sh1m (US $ 1,171.30 – US 7,320.64) is the average cost of treating cancer in Kenya, depending on the hospital

Over 10,000 Kenyans travel abroad each year seeking treatment for various ailments

Sh15bn (US$ 109M) – Travels abroad for treatment cost Kenya this much annually

The World Health Organization reckons that of the approximately 41,000 Kenyans diagnosed with cancer annually, about 28,000 die. However, the public hospitals that Kenyans majorly frequent are overstretched and poorly equipped. This is why thousands of Kenyans travel to India, South Africa, the UK, the US, and others to seek specialised treatment in oncology, cardiac surgery, advanced neuro-spine surgery, transplant surgery, and assisted reproductive technology, spending millions of shillings. Over 10,000 Kenyans travel abroad annually to treat various ailments, especially cancer. Government data shows that this costs Kenya about Sh15 billion annually.

NIGERIA

NIGERIANS SEEKING TREATMENT ABROAD KEY FACTS:

An average of 500 Nigerians travel abroad monthly to seek medical treatment while the country loses about $1.3 billion annually in foreign exchange.

Medical tourism also leads to the migration of medical and health professionals abroad, with at least 8,178 medical doctors of Nigerian origin working in the UK, according to the UK General Medical Council.

Key takeaways

1.

It is evident that healthcare takes many forms and there is a vast variation in terms of sub-sector focuses globally.

2.

Ageing demographics and the need for long term care presents itself as a key factor in the interest in healthcare globally.

3.

Supply and demand statistics create a further case for global healthcare.

4.

There is significant cross-border interest, and we expect this to continue in the near and distant future.

5.

Inflation sits as point of concern globally for the sector. The ability of care providers to absorb rising operational costs, without impacting delivery of care, will continue to be assessed by industry professionals.

6.

We anticipate continued interest in tech that supports the efficiency of the sector, whilst there is a substantial need to improve and increase supply especially on the elderly care side. We also believe market participants will continue to tap into healthcare's ESG credentials with particular attention paid to social impact.

Summary

Despite healthcare's breadth and various forms across geographies, similarities in structural drivers, such as the ageing population, has resulted in significant demand for the sector globally.

JULIAN EVANS, FRICS,
HEAD OF HEALTHCARE

Despite the breadth of healthcare and the vast variation of sub-sector terms and geographic trends (e.g. the focus in the Middle East on private clinic versus a European focus more heavily skewed towards elderly care) one thing is abundantly clear - there is substantial demand for the sector in all its various forms. The level of cross-border interest for various geographies and sub-sectors suggest that many are aware of the sector's underlying and indirect diversification capabilities, which aren't always highlighted alongside the more conventional cases for healthcare.

Ageing demographics and the need for long term care present themselves as key factors in the interest in healthcare globally. In addition to this, supply and demand statistics create a further case for global healthcare, in connection with the rapidly ageing population we need to see an increase in what is deemed fit-for-purpose or future-proofed bed space.

Inflation sits as a point of concern globally for the sector. The ability of care providers to absorb rising operational costs, without impacting delivery of care, will continue to be assessed by industry professionals. Investors especially will continue to watch this during their underwriting of deals both on the real estate and operational side and it will certainly contribute to sector sentiment.

Rising rates and thus a higher cost of debt could lead to a shift in the composition of capital. With private equity capital beginning to feature more due to firstly, the need to deploy committed capital and secondly, investors that have historically utilised gearing may become more cautious in their pricing of deals.

We anticipate continued interest in tech that supports the efficiency of the sector, whilst there is a substantial need to improve and increase supply especially on the elderly care side. We also believe market participants will continue to tap in to healthcare's ESG credentials with particular attention paid to social impact.

"Inflation sits as a point of concern globally for the sector. The ability of care providers to absorb rising operational costs, without impacting delivery of care, will continue to be assessed by industry professionals."

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