

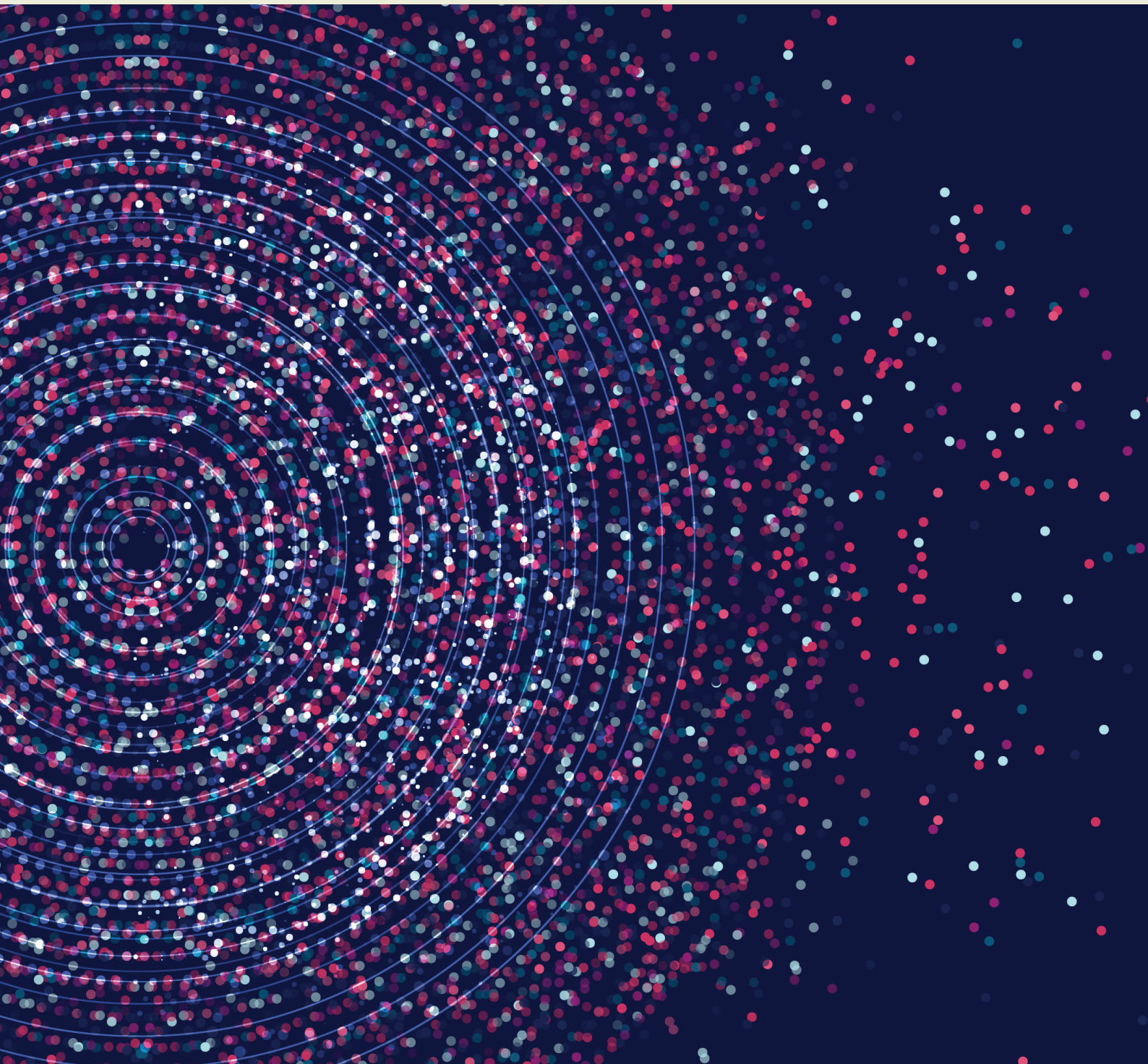
Insight Paper 2:

# The HealthTech Remedy

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Tackling global healthcare challenges through innovation and smarter systems

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# The HealthTech Remedy

Tackling global healthcare challenges through innovation and smarter systems



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Wherever you are in the world, healthcare systems are under strain. Technology is not a cure-all, but it can help ease the pressure.

In the UK, the National Health Service (NHS) is grappling with record wait times. In the US, spiralling costs and

widespread staff burnout are pushing systems to the brink. Across Europe and Australia, ageing demographics are stretching underfunded services. And in parts of Asia and the Middle East, care delivery is still constrained by patchy infrastructure and uneven investment.

The scale may differ, but the pattern is the same: rising demand, limited resources and a growing urgency to adapt. Healthcare technology, often called HealthTech, is pivotal in this context.

HealthTech refers to digital tools such as software, devices, apps, wearables and platforms that improve

healthcare delivery, accessibility, efficiency and personalisation. It spans everything from telemedicine to mental health apps and automation tools.

It also encompasses MedTech - a key subset focused on the medical devices and technologies used by healthcare professionals to diagnose, monitor and treat patients. Examples range from surgical robots and imaging equipment, to pacemakers and everyday instruments used in clinical care. MedTech plays a critical role in enhancing precision, safety and efficiency across a wide range of healthcare settings.

## HealthTech at a glance



### Care delivery & access

**Telehealth** - Umbrella term for remote healthcare services via phone, video or digital platforms.

**Remote monitoring** - Use of wearable devices and home sensors to track patient vitals (e.g. heart rate, blood pressure) outside clinical settings.

**Virtual wards** - Home-based care models that replicate hospital-level care using digital monitoring tools.

**Teleradiology** - Remote interpretation of medical images (e.g. X-rays, CT scans) by off-site radiologists.

**Point-of-care diagnostics** - Portable testing devices that provide immediate results near the patient, aiding rapid diagnosis and treatment.

**Mental health apps** - Digital platforms offering therapy, behavioural coaching or guided support to improve mental wellbeing.

**SMS-based tools** - Text-based communication systems used for medication reminders, appointment alerts and basic care outreach.



### Robotics and automation

**Surgical robotics** - Robotic systems that assist surgeons in performing minimally invasive, highly precise procedures.

**Rehabilitation robots** - Devices that guide patient movement and support physical therapy for recovery and mobility training.

**Mobile and disinfection robots** - Autonomous systems used for cleaning, delivery and logistics within healthcare facilities.



### Artificial Intelligence (AI)

**Clinical note automation** - AI tools that transcribe, summarise and structure clinician-patient conversations.

**Medical imaging AI** - Algorithms that assist in detecting abnormalities in scans, improving speed and diagnostic accuracy.

**AI training platforms** - Adaptive learning tools that personalise clinician education based on knowledge gaps.

**AI scheduling tools** - Systems that optimise shift patterns and staffing based on patient demand and operational needs.

**Predictive analytics** - AI-powered forecasting that anticipates admissions, discharges or staffing needs based on historical and real-time data.



### Digital infrastructure

**Electronic health records (EHRs)** - Digital systems that store, manage and share patient health information across providers.

**Smart building systems** - Internet-connected lighting, HVAC and occupancy tools that boost energy efficiency and facility responsiveness.

**RFID tracking** - Real-time location technology used to monitor the movement of medical equipment, supplies and even patients.



### Advanced modelling

**Digital twins** - Virtual models of healthcare environments, equipment or patients, used to simulate scenarios, predict outcomes or optimise care delivery.



But what challenges is healthcare facing, and where is technology making a difference? While every system is different, four challenges consistently rise to the top: workforce strain, access gaps, cost pressures and the need to raise care quality.

## Challenge 1:

### THE WORKFORCE STRAIN

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The global shortage of health workers is becoming critical. The World Health Organization (WHO) forecasts a shortfall of 11 million health workers by 2030, with the most significant gaps in lower-income countries. But even high-income nations are feeling the squeeze as they contend with burned-out staff.

Some of this pressure stems from shifting demographics. According to the UN, the number of people aged 60 and over will nearly double from 1.2 billion in 2024 to 2.1 billion by 2050 – rising from 12% to 26% of the global population. Chronic illnesses such as cancer, diabetes and cardiovascular disease are also on the rise, now accounting for three in four deaths globally. As care becomes more complex, the available workforce is not keeping pace with an ageing population and growing demand.

Technology will not replace clinicians; instead, it will assist in streamlining tasks, expanding reach and enabling more responsive care models.

Telehealth is one of the most visible shifts. It is an umbrella term for delivering care remotely, from virtual GP consultations and diagnostics (telemedicine) to mental health support (telepsychiatry). By eliminating the need for in-person appointments, telehealth reduces travel time, shortens waitlists and allows clinicians to see more patients in less time. This helps overstretched teams manage growing caseloads more efficiently, reserving face-to-face care for the most complex or urgent cases.

Teleradiology is a prime example of how telehealth expands clinical capacity. With scan volumes rising and radiologist shortages growing, remote image review lets hospitals scale diagnostics without adding on-site

staff. In Singapore, it is embedded into smart hospital infrastructure. Shared digital platforms and AI-enabled workflows developed by Singapore's national HealthTech agency, IHiS, help radiologists prioritise urgent cases and balance workloads across sites.

Norway leads in scaling telehealth. With over 30 years in teleradiology, it has expanded into telemedicine and telepsychiatry, supported by national digital health infrastructure and regulatory reform. Its system enables less reliance on traditional outpatient services.

In Sweden and Georgia, telehealth also supports more agile workforce models. Remote doctors supervise rural nurses or advise GPs in real time, leveraging telehealth technology. This helps fill local gaps without requiring full-time staff in every location. These flexible teams extend clinical oversight beyond physical borders and shift patterns.

Remote monitoring offers another form of relief. It supports 'virtual wards', which are hospital-level care delivered at home. Clinicians can monitor recovery remotely using wearables and home sensors to track health indicators such as blood pressure or glucose levels. The NHS has used virtual wards in the UK since 2004. A 2024 evaluation in Southeast England found they helped avoid 9,000 hospital admissions in a year. With fewer patients needing admission, staff can focus on those requiring in-person care. Today, some devices work without internet access, improving inclusivity.

Staff training is evolving, too. The Swedish company Sana Labs uses AI to deliver adaptive learning tailored to individual knowledge gaps. In the US, Osso VR uses virtual reality (VR) for immersive simulation, and studies have shown that it improves surgical training performance by 230% compared to traditional teaching methods. These tools accelerate upskilling without needing more educators.

Together, these technologies support teams to work more efficiently, serve more patients and train faster, helping systems meet growing demand with constrained resources.

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## Challenge 2:

### THE ACCESS GAP

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Even when services exist, they are not always within reach. Geography, waitlists, language barriers or cost may limit access. In rural areas, patients may travel hours to see a clinician. In cities, overcrowding and long queues can delay care.

Telehealth is reshaping how patients access services. Moving consultations online expands reach to underserved populations and reduces pressure on physical infrastructure. India's free-to-use eSanjeevani platform has enabled over 270 million remote consultations, many in rural areas. The UAE's "Doctor for Every Citizen" programme follows a similar model. The service is accessible through an app and 24/7 for initial consultations, prescription requests and radiology tests.

However, digital care is only as inclusive as its infrastructure. Many patients lack internet, smartphones or digital skills. In response, SMS-based systems such as those used in India and Bangladesh continue to deliver care via basic mobile phones. These systems can help close the digital divide that often limits access in low-resource settings.

Mental health platforms such as Woebot, SilverCloud and Talkiatry also help lower access barriers by offering private, low-cost and flexible support options. By enabling patients to connect with professionals virtually, they reach individuals who might otherwise delay or avoid care due to stigma, cost or geography.

Diagnostics are decentralising through point-of-care (POC) technologies – portable tools that deliver test results near the patient. These include rapid blood and urine tests, and AI-guided ultrasound devices such as those from GE Healthcare, which non-specialists can use to help expand access to places with few radiologists.

These tools bring care closer to those who need it most by removing travel barriers, accelerating diagnosis and enabling early intervention.

### Challenge 3:

#### COST PRESSURES AND THE PUSH FOR EFFICIENCY

Healthcare systems are under growing financial strain. With rising demand, flat budgets and stretched staff, the pressure to deliver care more efficiently has never been greater.

Admin tasks are one of the biggest drains on clinician time. According to a Google Cloud and The Harris Poll report, US physicians spend nearly 28 hours weekly on paperwork – that is, 60% of their time is spent on admin rather than patient care. AI is central to tackling this burden. For example, Danish company Corti uses AI to transcribe consultations and generate clinical notes, cutting documentation time by up to 50% and freeing clinicians to focus on patient care.

Care.ai tackles the efficiency challenge on multiple fronts. Its smart care platform combines documentation support with ambient sensors that continuously monitor patients, detecting early signs of deterioration, infection or falls. Alerting staff before problems escalate helps reduce harm and lessen reliance on in-person checks.

AI is also driving smarter hospital operations. Platforms such as Qventus use AI to analyse real-time and historical data to forecast admissions, prioritise discharges and optimise resource use. Housed in digital command centres, they give hospitals a live view of capacity and risk, enabling proactive decisions that ease bottlenecks and smooth patient flow.



Yet the impact of these tools depends on strong digital foundations. Integrated electronic health records (EHRs), secure data infrastructure and interoperable systems are essential to connect the entire care environment. Without them, even the most advanced tools remain siloed. In the UK, fragmented EHR systems across NHS Trusts still hinder data flow and continuity of care. By contrast, Denmark has developed one of the world's most advanced digital health systems. Its national EHR platform enables clinicians across hospitals, general practice and community care to access and share patient data securely in real-time. Citizens also have complete visibility and control over their records through the Sundhed.dk portal. This high level of integration, transparency and interoperability has made Denmark a benchmark for connected, patient-centred care.

Improving efficiency means rethinking the physical and digital systems underpinning care delivery. On the ground, sensors track room usage, RFID tags monitor equipment in real-time, and AI-powered scheduling tools help deploy staff more effectively. At the same time,

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digital platforms like e-prescribing streamline workflows by sending prescriptions directly to pharmacies, reducing administrative burdens and speeding up access to medication.

South Korea's Samsung Medical Center brings this vision to life. As one of the country's flagship smart hospitals, it has built a strong reputation for innovation and high-quality care. The facility uses automated guided vehicles (AGVs) to deliver medical supplies to wards. RFID systems track inventory levels, staff and patients in real time. In parallel, voice recognition technology lets clinicians input scan results directly into the system. In 2024, it became the first hospital in South Korea to receive HIMSS Stage 7 validation and the prestigious Davies Award – recognising its advanced use of digital technologies



to improve outcomes and reduce clinician workload.

These technologies shift from reactive care to more proactive, data-driven delivery where resources are better allocated, risks are flagged earlier, and clinicians can focus on what matters most.

## Challenge 4:

### RAISING THE STANDARD OF CARE

Improving access and efficiency means little if the quality is left behind. The WHO estimates over 3 million deaths annually from unsafe care, many due to preventable errors. These failures often reflect overstretched systems rather than individual mistakes.

Technology is helping close those gaps by assisting clinicians in detecting conditions earlier, acting faster and tailoring care to the individual.

One area already seeing impact is diagnostics. ProFound AI, developed by iCAD, uses deep learning to analyse 3D mammograms and detect patterns the human eye might miss. Clinical trials of the tool show reductions in false positives and missed cases. Now, through a partnership with Microsoft, the tool is being integrated into cloud-based imaging platforms, bringing advanced diagnostics to radiologists worldwide.

Surgical robotics is also extending what's possible. These systems offer greater precision, smaller incisions and faster recovery times. Cleveland Clinic Abu Dhabi and Cleveland Clinic US surgeons recently collaborated in real time to perform the world's first remote robotic-assisted focal therapy for prostate cancer. It demonstrates how a combination of robotics, AI and robust connectivity can extend the reach of specialist care across borders, raising standards in locations that previously lacked such capabilities.

Robotics also raise care standards by making clinical environments safer and more efficient. Autonomous systems disinfect rooms, deliver supplies and assist with navigation – reducing infection risk and allowing staff to focus on higher-value tasks. At Charité Hospital in Berlin, UV-C disinfection robots provide consistent sterilisation, a practice accelerated during COVID-19 that remains a key infection control measure. In rehabilitation, robotic exoskeletons and modular devices are improving patient outcomes by guiding recovery exercises with precision and tracking progress in real-time. At Fujita Health University Hospital in Japan, these

technologies support stroke recovery and elderly mobility, enhancing therapeutic impact through data-informed care.

The next leap in quality care may come from prediction. Digital twins – virtual replicas of patients, systems or facilities – allow clinicians and researchers to simulate real-world scenarios and plan more responsive care. Pharmaceutical firms like AstraZeneca and Bayer use them to forecast drug responses. The EU's DIGIPREDICT project recently developed the first live digital twin of a patient, combining AI with biomarker data to anticipate serious health events before symptoms arise. While clinical validation is ongoing, these tools show how precision modelling could transform reactive care into preventive, personalised treatment.

Innovative tools are helping clinicians act earlier with greater accuracy, raising the bar for patient care.

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# The Real Estate Perspective

For health systems under pressure, HealthTech offers a practical path to resilience. From virtual wards to robotic surgery, digital tools are helping care teams respond more flexibly, prioritise more intelligently and deliver services in new ways. But technology alone will not solve healthcare's problems.

Implementation is complex. A 2023 OECD review found many health IT projects face delays and cost overruns due to workforce resistance and operational challenges. Yet, when deployed well, these tools can reduce readmissions, improve system responsiveness and cut long-term costs. The question is not whether tech saves money, but whether it can help health systems use resources more wisely.

That potential depends on solid foundations: secure infrastructure, good governance and interoperable systems. Fragmented platforms and patchy adoption risk widening inequalities rather than closing them.

This is where real estate becomes critical. As technology transforms how care is delivered, it also reshapes what healthcare buildings need to do, and what occupiers expect from them. For

landlords, investors and developers, this shift brings both a challenge and an opportunity:

## 1. TECH CHANGES WHAT HEALTHCARE BUILDINGS NEED TO DO

If care is going virtual, mobile or remote, then the role of the physical building shifts. Facilities must now support digital consultations, remote monitoring infrastructure and interoperable systems. Buildings that don't evolve risk becoming obsolete.

## 2. IT AFFECTS WHAT TENANTS NEED AND WHAT THEY ARE WILLING TO PAY FOR

Healthcare occupiers increasingly want spaces that are tech-ready: with reliable connectivity, flexible layouts, room for smart systems and strong cybersecurity. Properties that offer this will attract stronger demand, longer leases and, potentially, premium rents.

## 3. IT INFLUENCES LONG-TERM ASSET VALUE

Tech-enabled buildings are more resilient to change. As care models continue to shift, assets that can adapt – supporting virtual wards, digital diagnostics or

automation – will hold their relevance and value longer than rigid, static spaces.

## 4. IT IMPACTS ESG AND EFFICIENCY GOALS

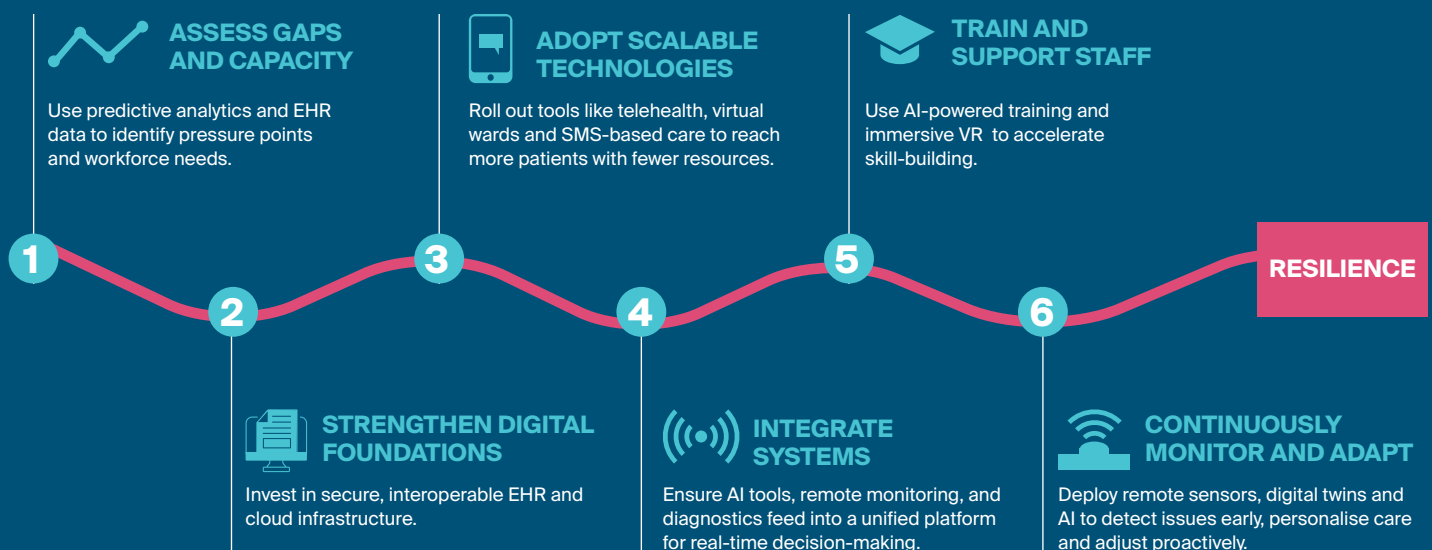
Smart systems don't just support care, they also improve building performance. Think Internet of Things (IoT) sensors for energy use, AI for room scheduling or robotics for internal logistics. These technologies contribute to lower operational costs and stronger ESG credentials.

## 5. IT OPENS NEW MARKETS AND ASSET TYPES

The move to decentralised, tech-enabled care is driving demand for new types of space: outpatient hubs, home health logistics centres, hybrid clinical environments and diagnostic nodes. Investors who understand these trends can spot emerging markets earlier.

In this context, real estate is a platform for delivery. Digitally enabled care environments will be better positioned to support clinical outcomes, attract tenants and deliver long-term value. For real estate stakeholders, enabling care is the next frontier.

## A practical pathway to resilience



## Recent research



Healthcare Capital Markets 2025



Quantifying Technology In Real Estate Spring 2025



Healthcare Development Opportunities Report 2025

We like questions. If you've got one about our research, or would like some property advice, we would love to hear from you.



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