Valley Regional Hospital

Service Available

At Capacit

The smart hospital of the future is a hospital without walls

Co Les

Position paper



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Executive summary

As healthcare becomes increasingly digitalized, much of the care that is delivered in hospitals today will move into the home and the community. At the same time, hospitals will continue to play a key role in the distributed healthcare system of the future, serving both as a central physical hub and as an orchestrator of a wider ecosystem of care.

With the rising cost of care, growing staff shortages, evolving patient expectations, and persistent inequities in access to quality care, the current hospital-centric model of care delivery is under growing pressure. Thanks to remote patient monitoring, virtual collaboration, and other emerging digital technologies, much of the care that has traditionally been delivered in hospitals can move into lower-cost settings that are more easily accessible and convenient for the patient – such as ambulatory centers, retail clinics, and the home.

Over time, we envision that this will result in the emergence of smart ecosystems of care, in which secure digital infrastructures and technologies seamlessly connect the hospital to the home and the community. Rather than being tied to one location, healthcare will become a distributed network. New delivery models – including virtual care, mobile care, and walk-in care will bring healthcare closer to the patient.

As a result, the current episodic model of care will evolve into more continuous health management, to support the growing number of patients living with multiple chronic conditions. Wellness and prevention will take center stage, with smart and connected technologies empowering people to live healthier lives. Meanwhile, artificial intelligence (AI) will be able to predict when patients need care to prevent avoidable hospital (re) admissions.

As this new reality takes hold, hospitals will continue to play a critical – albeit different – role. Instead of providing all services under a single roof as they have traditionally done, the hospital of the future will focus on delivering a narrower set of specialized services and acute care, while simultaneously taking a more proactive and preventative role in managing population health outside the hospital. What emerges: a new healthcare ecosystem, featuring hospitals without walls.

With this broader distribution of healthcare, system-wide orchestration will take on increased importance. Connecting data across settings will be required to ensure that every patient gets the right care in the right place at the right time. In addition, hospitals will be forced to make more efficient use of increasingly scarce resources by optimizing their workflows and driving out waste from their processes.

A smart hospital, as we envision it, connects people, data, and technology

in intelligent ways for better end-to-end care experiences and seamless transitions across care settings. It is highly flexible and adaptive to evolving needs and circumstances, combining high tech with high touch to deliver superior care when and where it is needed – always with the patient at the center.





More specifically, this paper outlines four areas that can help hospital leaders chart a path towards becoming a smart hospital as part of a wider ecosystem of care:

1. Operational efficiency

Hospital care today is labor-intensive, putting an increasing strain on staff as hospitals grapple with growing workforce shortages and alarming rates of burnout. Smart hospitals rely on workflow automation to liberate healthcare professionals from repetitive tasks that get in the way of providing patient care. At the same time, they use centralized operational insights to forecast and manage patient flow across settings, and to manage the allocation of staff, beds, and medical equipment for optimal resource utilization.

2. Clinical excellence

In their bid to provide superior specialist and (post-)acute care, smart hospitals connect patient data across different modalities and systems, turning it into insights that support clinical decisionmaking at the point of care. As an integrated part of a wider network of care, they embrace virtual collaboration and remote patient monitoring to extend the line of sight for healthcare professionals beyond hospital walls.

3. Experience-centricity

Recognizing that consumers want to take a more proactive role in their own care, smart hospitals empower patients and their families with digital engagement tools throughout their care journey – even before they enter the hospital. They also create humancentric care environments that support patient and staff well-being, even under the most stressful conditions.

4. Innovation capability

Becoming a smart hospital is as much about organizational and cultural transformation as it is about technology. Smart hospitals develop and embed new organizational capabilities to sustain digital innovation and create a culture of continuous improvement.

Hospitals that invest in all four areas will be best positioned to address the challenges facing today's healthcare industry and lead the way into the future.



Why health systems need to reinvent themselves

Healthcare as we know it is on an unsustainable trajectory. Hospitals are already facing acute staff shortages today, while the prevalence of chronic disease will only continue to increase in the next few decades - creating a growing human and financial burden that forces us to urgently reconsider how and where care is delivered.

The numbers paint a clear and sobering picture. Chronic diseases such as diabetes, cancer, and heart disease affect one in three adults worldwide today – a number that is only set to rise due to rapid urbanization, globalization of unhealthy lifestyles, and aging populations.¹

As a result, healthcare systems are coming under increased financial pressure, with healthcare expenditures taking an everbigger chunk out of countries' gross

domestic products.² In many countries, hospital care accounts for the largest share of those expenditures, amounting to more than \$1 trillion in costs in the US alone.³

There's a growing awareness that in order for healthcare to remain affordable and sustainable, it needs to move into lowercost settings whenever possible to address people's health issues at a much earlier stage and ideally prevent them.

Increasing staff shortages

Adding to the challenge is that hospitals are not staffed to keep pace with the rising demand for care.

Globally, a shortage of 6 million nurses pre-COVID plus 4.7 million set to retire in the next few years has been exacerbated by an exodus from pandemic-related burnout, leading to an estimated shortfall of 13 million nurses by 2030.⁴ The outlook for physician shortages is equally concerning, prompting healthcare leaders to ask how they can divert care away from laborintensive hospitals to more labor-efficient home and community settings.

Evolving patient expectations

Meanwhile, patients expect more digitalized healthcare experiences that don't require them to spend precious time and money on travelling when – in some



Demand for care outstrips supply



1 in 3 adults worldwide have one or more multiple chronic conditions

Preventive medicine reports 2018



the expected global deficit of qualified healthcare professionals by 2030

World Health Organization 2019

cases – they could just as well connect with their doctors remotely. Having become familiar with the benefits of telehealth during the pandemic, 60% of patients say they find virtual care more convenient than in-person care.⁵

Younger, digital-native generations in particular are becoming increasingly critical and informed consumers of healthcare. In fact, 95% of patients aged 18-34 say they will switch providers if the digital experience doesn't live up to their expectations.⁶

Taken together, this means healthcare providers find themselves in a perfect storm of having to meet new and growing demands with a limited and increasingly exhausted workforce.

The pandemic has also shined a harsh light on long-standing health disparities in many parts of the world, kindling an increased sense of social responsibility among healthcare leaders to improve access to quality care at affordable costs for all patients, irrespective of location or background.⁷ This is still a far cry from today's reality in which half the world's population lacks access to the health services they need.⁸ We can and must do better. Patients expect more seamless digital experiences



95%

of patients aged 18-34 say they will switch providers if the digital care experience doesn't meet their expectations

Econsultancy 2021



60%

of patients believe virtual care is more convenient than in-person care

McKinsey 2021



Moving toward smart ecosystems of care

To meet the growing demand for affordable and accessible care, building more hospitals cannot be the only answer. Through smart and connected technology, healthcare providers can extend care delivery beyond hospital walls and bring it closer to the patient, whether that is virtually or physically, at home or nearby in the community.

The trend towards out-of-hospital care was already well underway before the COVID-19 pandemic accelerated the adoption of digital triaging, telehealth, and remote patient monitoring. As the 2022 Philips Future Health Index report reveals, healthcare leaders now view extending care delivery beyond the hospital as their highest priority after staff satisfaction and retention. Increasingly, we will see healthcare being delivered through a distributed network of ambulatory clinics, retail settings, mobile care solutions, and home-based monitoring. What will make these ecosystems of care truly 'smart' is the ability to connect and integrate patient data across care settings – using AI, the Internet of Things (IoT), and cloudbased digital platforms to turn data into actionable insights at scale, when and where they are needed.

Smart hospitals will be an essential part of the healthcare ecosystem of the future, but they will no longer provide all services under a single roof. Instead, they will focus on delivering a narrower set of highly specialized services, including diagnosis and treatment of acute, severe, and complicated conditions. At the same time, hospitals will take a more prominent role in managing population health in the community and at home. The smart hospital of the future will not be bound by walls – it will offer seamless experiences that follow the patient wherever they go.

Connecting the hospital to the home

The use of virtual care in particular has soared since the start of the pandemic, with adoption rates increasing 38-fold between 2020 and 2021.⁹ Although this massive increase in uptake was

Four emerging care models in a distributed healthcare system



A potential care scenario across emerging care delivery models along the care continuum.

largely born out of necessity, healthcare providers have come to recognize the lasting potential of virtual care to keep a caring eye on patients at home and alleviate overstretched hospital resources. By 2025, Gartner predicts that 40% of care providers will have shifted 20% of their hospital beds to the home, driven by remote patient monitoring and Alenabled services that can help prevent avoidable hospital (re)admissions by picking up early signs of patient deterioration.¹⁰

A case in point is Australian healthcare provider West Moreton Health, which already pioneered the use of remote patient monitoring well before the pandemic. Faced with disproportionately high numbers of emergency department visits and potentially avoidable hospitalizations, they sought new ways of making quality care accessible for highneed, chronically ill patients.

In partnership with Philips, West Moreton Health developed a virtual patient engagement program called MeCare, which uses home-based medical devices to collect patient-reported outcome data and biometric indicators including blood pressure and oxygen levels. Outcomes are reviewed in real time to proactively engage participants with personalized health coaching. Early results were significant, showing a 28% reduction of potentially preventable hospitalizations in chronically ill patients.¹¹ West Moreton has since expanded the MeCare program to include more patients and more use cases, including most recently COVID-19 monitoring, medication management, and mental health.

It's a great example of how virtual care can offer healthcare professionals a window in patient's day-to-day health. No longer do they have to rely on episodic measurements. They can now follow the patient's health over time and provide ongoing care management, wherever that patient is located. In this case, that means patients in small rural communities in the West Moreton area also get to benefit, making the local healthcare system more equitable and inclusive.

As another example, home-based patient monitoring can support the early detection of heart rhythm irregularities to prevent (repeat) strokes, using wearable patches. Such patches are becoming more and more unobtrusive, allowing patients to keep an active lifestyle while extending the line of sight of physicians from the hospital into the home. Cloud-based AI can spot early signs of heart rhythm disturbances based on more than 20 million ECG recordings, giving care teams the insights they need to give patients the care they need sooner and potentially prevent more severe outcomes.¹²



Bringing care closer to the patient

In lockstep with the rise of virtual care, we expect to see a further increase in healthcare services being delivered in walk-in settings such as department stores or community clinics.

During the pandemic, pop-up clinics have played a pivotal role in relieving the strain on overwhelmed healthcare systems by providing testing and vaccinations on a large scale. There are many other routine exams and medical procedures that could also be delivered in community-based settings to relieve hospital resources, improve access to care, and support early detection and diagnosis of disease.

For example, the NHS in England is planning to build one community diagnostic center for every 300,000 people – amounting to up to 150 diagnostic hubs. These "one-stop shops", which are located away from hospital sites closer to patients' homes and often on the high street or in retail locations, will provide specialist services for cardiovascular patients, people with cancer, and those with respiratory illnesses – supported by expert teleconsultations where needed.¹³

Similarly, in the US, where people in rural or remote areas make up one fifth of the population, we have designed virtual care stations that allow patients and providers



to connect remotely through a secure, clinical-grade environment. In addition, we are bringing innovations in imageguided therapy closer to patients through out-of-hospital settings such as officebased labs or ambulatory surgery centers, which can perform routine procedures at lower cost while offering patients greater convenience. Through mobile health technology solutions such as mobile ICUs

Regional hospital

- Remote patient monitoring
- Early warning scoring software
- Affiliated telehealth network coverage

Clinic

- Integrated COPD care
- Care management
- Patient portals

Specialty hospital Patient management

- solution
- Tele-acquisition
- Tele-ultrasound
- Teleradiology
- Telepathology
- Interoperability solutions

health trucks, we can make care even more accessible to patients while connecting healthcare professionals with more experienced peers in a specialty hospital for remote support and guidance.¹⁴

The role of smart hospitals: four guiding principles

Smart hospitals play a pivotal role in the smart and connected healthcare ecosystem of the future. By embedding digital technologies into every aspect of care delivery, hospitals can improve operational efficiencies, deliver clinical excellence, and provide seamless end-to-end patient experiences both within and beyond hospital walls.

No patient wants to end up in hospital. But when they do, they want their experience to be as frictionless, comfortable, and reassuring as possible, with minimal waits and delays. Physicians and hospital staff, for their part, want to focus on delivering the best possible patient care, without getting bogged down in administrative duties or having to manually gather different types of patient data.

The reality is that, despite impressive advances in medical innovation, hospital

care today is all too often plaqued by disconnects and inefficiencies that get in the way of optimal experiences and outcomes. Information overload is a growing issue, with 55% of healthcare leaders in the 2022 Philips Future Health Index report expressing concerns that their staff is overwhelmed by the volume of data that is available to them.¹⁵ That data is often locked away in silos, hindering the ability to use it effectively. Inefficiencies exact a financial cost, too, in times when hospitals are operating on razor-thin margins. In the US, for example, it is estimated that 25% of healthcare spending is wasted through issues such as delayed discharge, poor transitions of care, and suboptimal asset management.¹⁶

As healthcare becomes increasingly distributed, connecting data across settings and data sources – and turning it into meaningful insights – will become even more important to orchestrate patient care effectively and efficiently.

A smart hospital, as we envision it, connects people, data, and technology in intelligent ways to 1) improve operational efficiencies, 2) advance clinical excellence, and 3) create seamless patient experiences before, during, and after hospital visits – all of which need to be supported by 4) new capabilities to create a culture of continuous innovation and improvement.



Operational efficiency

Optimizing workflows and resource utilization to free up focus for patient care



Experience-centricity

Creating frictionless experiences for patients within and beyond hospital walls





Clinical excellence

Using data-driven insights for enhanced clinical quality and efficiency



Innovation capability

Creating a culture of continuous innovation and improvement

Increasing operational efficiencies to free up focus for patient care

Smart hospitals rely on workflow automation and data-driven optimization to remove waste and inefficiencies from their processes, thereby enabling healthcare professionals to focus on what drew them to medicine in the first place: taking care of patients.

Operational efficiency



- **Smart connected imaging** Automating routine tasks to optimize workflows
- **Real-time location tracking** Reducing equipment search times and maximizing asset utilization
- **Patient flow management** Streamlining transitions of care across settings

Smart connected imaging

One of the biggest opportunities afforded by smart technologies such as AI is to automate much of the cumbersome manual work that is wearing down physicians and staff. By adding intelligence to medical systems and devices, they also become easier to use for lesser-gualified staff, making hospitals less dependent on scarce specialists without compromising on quality and patient safety.

For example, in MR imaging, smart and touchless patient sensing technology can automatically monitor a patient's breathing – allowing the setup of routine MR exams to occur in less than a minute, even for less experienced operators, while helping them keep a caring eye on the patient. In addition, smart AI-enabled systems can suggest the most appropriate protocol for each MR exam, speed up image acquisition, as well as automate exam planning, scanning, and processing.¹⁷

The point of such innovations is not to remove clinical and technical staff from the loop. It's to equip them with actionable intelligence at their fingertips, with solutions that are deeply embedded into their workflows and designed to augment their capabilities. That means less time figuring out equipment settings, and more time interacting with the patient.

In more complex cases that require **Real-time location tracking** additional guidance, experienced Another frequent source of frustration technologists in a central hub can provide and inefficiency that automation can virtual over-the-shoulder support to help to address is lack of real-time insight their less experienced or nonspecialist into asset location and utilization. For colleagues at remote sites, while the example, more than a third of nurses patient is on the scanner table. Such hubwaste up to two hours a shift searching and-spoke models can be easily scaled for missing medical equipment such as across several or even hundreds of sites. mobile infusion pumps.¹⁹ In the absence Not only does this help to standardize of reliable utilization data, hospitals image quality and reduce the need for may unknowingly be procuring more unnecessary recalls and repeats, it can equipment than is needed for one also make advanced imaging such as MR department, while there are structural accessible at more sites, closer to where shortages in other departments. patients live, at more flexible hours.¹⁸



Track-and-trace-like solutions – using tracking based on radiofrequency identification (RFID) or infrared (IR) – can help staff find the nearest equipment more quickly. At the same time, real-time location data can be integrated with other information such as data from Electronic Medical Records to provide hospital administrators with actionable insights that help them optimize workflows and equipment utilization. Using such a real-time location system, one Dutch hospital managed to identify the potential to save 20% on asset search times and € 1 million on equipment investments based on more accurate utilization rates.²⁰

A similar tagging mechanism can be used to follow patients throughout their care journey, for example as they move through the emergency department (ED). This can help answer questions like: How much time do patients spend in the triage room? How long do they have to wait for their radiology exam? Early pilots have shown how such realtime operational insights can help administrators manage patient flow in the ED as well as optimize equipment and bed utilization.²¹

Managing patient flow

Over time, these department-level solutions will evolve into enterprise-

wide IoT platforms, capturing accurate and real-time information about patients, beds, and equipment across care settings through smart sensors and ubiquitous interconnectivity. This information will then feed into central command centers that manage transitions of care from one setting to the next, much like an air traffic control tower coordinates hundreds of flight paths simultaneously. Coupled with predictive analytics, this can help hospitals forecast and prevent bottlenecks in patient flow before they occur, thereby reducing waits and delays across the hospital and ensuring timely discharge for home-based monitoring.²²

Ultimately, we envision the smart hospital as a fully interconnected and intelligent system that can dynamically adapt in the moment, making staff and equipment available where they are needed most – for example when a disaster or local incident occurs. With the logistical challenges of the COVID-19 pandemic fresh in mind, this will help hospitals become more resilient in the face of future crises.²³

Based on a digital twin of a department or even a full hospital, administrators can also run virtual simulations that help them test and evaluate the impact of changes in capacity and staffing before implementing them – enabling continuous operational optimization.²⁴ As healthcare becomes more distributed,
centralized care coordination will be
further extended into the home, using
remote diagnostics and monitoring to
keep a caring eye on patients as they
resume their daily lives.gets the right care in the right place at
the right moment. Whether that's in
a hospital, the home, or a community
setting.Based on a deeper understanding of

resume their daily lives. Based on a deeper understanding of patterns in patient demand and patient flow, healthcare leaders can also start creating long-term strategies for hospital capacity planning, making better informed decisions to ensure that the right patient Based on a deeper understanding of patterns in patient demand and patient flow, healthcare leaders can also start creating long-term strategies for hospital capacity planning, making better informed decisions about the types of care settings and resources that are needed.



Driving clinical excellence based on data-driven insights

Just like smart technologies can bring more insight, predictability, and efficiency to hospital operations, they can also help clinicians deal with a growing deluge of often disconnected patient data to support more integrated and efficient precision care.

Clinical excellence



- Integrated diagnostics
 Supporting multi-disciplinary collaboration
- -• Smart patient monitoring

Enabling timely care interventions based on predictive insights

Remote clinical oversight
 Empowering clinical staff at the bedside

Integrated diagnostics

Take cancer care, for example. As we advance our understanding of cancer, more and more patient information is becoming available to clinicians – including various medical images, pathology reports, genomics, and molecular test results. Pulling all that information together manually can be time-consuming and is also prone to error.

In collaboration with our clinical innovation partners, including Karolinska University Hospital in Sweden, we have developed digital dashboards that automatically integrate patient information from different sources for collaborative decision-making. As a result, we have been able to improve the efficiency of multidisciplinary tumor board meetings at Karolinska University Hospital through a 24% reduction in time spent per patient case, without compromising on patient outcomes.²⁵

Smart patient monitoring

Similarly, in acute and post-acute care, smart patient care management solutions can integrate data from a plethora of monitoring devices and then filter that data intelligently for clinical use.

With an ever-growing list of tasks constantly competing for attention,



nurses and physicians don't have time to go through through large amounts of disparate data. They need timely and contextually relevant insights that they can act on immediately in the critical moments that matter. For example, by pioneering the use of automated early warning scores that pick up on signs of patient deterioration in the general ward, one hospital was able to reduce the number of serious adverse events in patients by 35% and the number of cardiac arrests by 86%.²⁶ In the smart hospital of the future, we will see more and more smart wireless patches – or even contactless, light-based sensing – enabling ubiquitous patient monitoring throughout the hospital. Mobile connected devices will reduce dependency on bedside equipment, making care teams more flexible to move around as needed. Avatar-based monitoring can further reduce cognitive load by integrating patient data in a highly visual way, providing an at-aglance overview of their health status.

Remote clinical oversight

To mitigate growing shortages of qualified nurses and intensivists, highly trained specialists in centralized hubs will oversee patients and support their bedside colleagues remotely.

Remote care for patients in intensive care units, known as tele-ICUs, can extend critical care resources to the bedside independent of a health facility's location. This provides the ability to standardize care across sites while maximizing bed utilization. In previously published studies, tele-ICU programs have been shown to reduce ICU mortality by 20%²⁷, generate care savings of nearly \$1,500 per patient across a 60-day post-ICU episode²⁸, and reduce ICU length of stay by 30%²⁹.

During the pandemic, tele-ICUs have played a pivotal role in providing critical care support as ICUs were flooded with patients. With COVID-19 primed to leave a lasting mark on healthcare delivery, the next few years will likely see a further expansion of tele-ICU programs around the world. Remote clinical oversight also has the potential to alleviate staff in lower-acuity areas such as the general ward, ensuring that patients get the best possible care as they transition from one setting to the next.



Creating seamless experiences within and beyond hospital walls

With smart technologies offering so many possibilities to optimize hospital care, it's the ability to create seamless patient experiences across their care journey that ultimately glues everything together. And in the smart healthcare system of the future, that journey starts well before the patient enters the hospital.

Experience-centricity



Digital patient engagement Involving patients in their own

care at every step of the way

Ambient experience

Reducing patient stress and anxiety before and during procedures

Healing environments

Supporting patient well-being and post-treatment recovery

Digital patient engagement

Digital self-triaging can help patients assess their symptoms and determine the next best step, including the most appropriate care setting. Online selfscheduling allows them to book an appointment just as easily as they would book a taxi or a flight. And when patients receive educational content in advance, going into the hospital no longer needs to be a step into the unknown. Patients will know what to expect and feel more at ease as a result. Personalized reminders can help ensure they arrive in time, reducing no-shows by up to 42%.³⁰

Once patients arrive at the hospital, a virtual waiting room allows them to check in using their mobile phones. Staff receive an automatic notification via the EHR system and can send a text message back once they are ready to see the patient. Digital wayfinding can then guide patients through the hospital, helping them get to their appointment without stress.

Ambient experience

For patients who need to undergo an exam or procedure, ambient experience solutions can provide further information and guidance during scanning or prior to the procedure, while offering a personalized audiovisual experience that puts patients at ease. In MR imaging, this has shown to reduce re-scans by as much as 70%, improving clinical efficiency as well as patient experience Similarly, in minimally invasive imageguided therapy, ambient experience can help reduce patient anxiety before and during interventional procedures, allowing interventionists to operate mo productively and efficiently.

Adaptive healing environments

In the future, combining ambient experience with smart contactless sensing will allow hospitals to create increasingly adaptive healing rooms and environments, for example by adjusting



<u>2</u> . ³¹	the lighting or temperature based on patient's stress levels. As a result, hospital rooms will offer patients a greater sense of comfort and well-being, promoting speedy recovery and patient satisfaction.
nd	Following hospital discharge, remote patient monitoring will allow patients to resume living the lives they love more quickly, in the comfort of their homes. Clinical oversight from virtual care teams will help spot early signs of health deterioration to enable timely and targeted intervention.
a	

Developing and embedding digital innovation capabilities

Becoming a smart hospital is as much about organizational and cultural transformation as it is about technology, calling for new organizational capabilities that help sustain digital innovation and establish a culture of continuous improvement.

Innovation capability



Purpose-driven

A unified digital strategy aligned with organizational objectives and key results

Empowered teams

Supported by new funding and governance models

Agile approach

Continuous improvement based on data-driven insights

With new technologies come new opportunities. But as healthcare leaders move towards digital care delivery models and new ways of working, they simultaneously have to manage their dayto-day operations with increasingly limited resources. It's a delicate balancing act of performing and transforming, of "being" and "becoming" at the same time. Without meaningful organizational transformation and buy-in from all relevant stakeholders, digital transformation initiatives in healthcare often fail to deliver on expectations.

Clarity of purpose

Sustained transformation starts with clarity of purpose. For digital initiatives to succeed, they must be aligned to organizational strategy and objectives, whether that is to improve operational efficiencies. achieve clinical excellence, or improve the experience for patients and staff – or typically a combination of those goals.

Once a direction has been set, a next step is to agree on a set of specific and manageable problems that are most important for digital technologies to address. Co-creation sessions with healthcare leaders and professionals at all levels of the organizations can help to bring those problems to the surface. Digital maturity assessments, benchmark analyses, and data visualization tools

can all provide additional insights to help develop a shared digital roadmap and measure progress on clearly defined objectives and key results.

Empowered, agile teams

To successfully deliver on those objectives, hospitals need to bring together clinical experts, data scientists and technology developers in dedicated, cross-functional innovation teams. Rather than focusing on one-off deliverables, those teams should be empowered to take ownership of solving problems and improving specific aspects of patient care over time. This process is never done; it's a continuous loop of identifying unmet needs, experimenting, iterating, and optimizing for agreed-upon outcomes.

That also requires rethinking traditional annual budgeting and multi-year planning cycles, which tend to slow down innovation. With rapidly evolving patient needs and accelerating technological advances, hospitals need to be able to experiment faster – and then double down on what works, while discarding what doesn't. To accelerate digital innovation, hospital leaders can take inspiration from other industries, where lean funding and governance models enable innovation teams to operate with a high degree of autonomy and accountability.

Coupled with the flexibility and scalability of cloud-based platforms as a technological foundation, this allows innovation teams to develop and put new digital applications into the hands of physicians or patients more quickly, and then add new or improved features and functionalities as they gather additional user feedback. That means hospitals get to innovate faster, and in smaller, more digestible increments – all while focusing on what ultimately matters most: delivering better patient care.



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