

Future of healthcare

A modern era of care that is agile, digital and consumer-centric.



KPMG International

kpmg.com

Foreword

The pressure on healthcare systems to deliver more services with fewer resources is highly significant. These pressures are now manifesting in emerging signals of change that are shaping how healthcare will be delivered and consumed in the future.

- a changed reality of customer-centric care
- a workforce in crisis
- harsh economic realities
- fast-changing markets in the digital economy
- altered states for supply chains
- turning data into value.

These signals of change are also influencing the establishment of new healthcare standard to meet the changing needs of health consumers. **High street healthcare** embodies consumercentric digital health and care resources that go beyond basic telemedicine and virtual care. **Meta care** leverages artificial intelligence (AI) and other advanced capabilities like machine learning to support brand new technology-enabled models of care. **Hyper-local healthcare** seeks to address inequities in access to care built around a foundation of social determinants of health.

Moving past the current pressures and transforming into a more modern healthcare archetype is easier said than done for most health systems today. In our view, it can take a clear view of the path to achieve the requisite value within each paradigm, new enterprise capabilities, courage to adopt new ways of working and embracing digital solutions, and architectures that will underpin tomorrow's health workforce and health consumer. By enabling the **Connected Enterprise for Health**, healthcare systems can respond effectively to the significant disruptions they face to simultaneously help deliver meaningful improvements to experience, health outcomes, access, quality and cost.



Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise

Future of healthcare | 2

Contents

Signals of

change







Looking ahead to a new connected ecosystem	16
KPMG Connected Enterprise for health	17
How connected is your organization?	19
Forging digital connections for a changing era	20

Transforming healthcare for the changing era High street healthcare — Putting consumers

at the center of care and case study	09
Meta care — Care in the metaverse is poised for bold a new reality and case study	10
Hyper-local care — Supporting inclusivity and accessibility of care and case study	12



Transforming
healthcare
for the
changing era

KPMG Connected Enterprise

Signals of

change

Signals of change

The critical need for transformation in today's reality.



Transforming healthcare for the changing era

> KPMG Connected Enterprise

Future of healthcare 14 © 2023 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved. $\widehat{\mathbb{W}}$

Amid soaring demand for health services and rising costs, the future is likely to demand an unprecedented focus on strategies, technologies and health-human workforces that can improve consumer experiences and reduce financial pressures, while meeting public expectations for care quality and access. Emerging from the pandemic, six signals can help shape the future of healthcare.

1 A new reality of customer-centric care

Public expectations are changing, shaped by digital disruptors, sector reforms and the pandemic experience. Meanwhile, healthcare needs are expected to continue to go unmet. The pandemic has exacerbated what appeared as cracks in many health systems in respect of safe, trusted, high-quality care. Health systems will need to rebuild customer trust after recent failings and issues. Health organizations that provide personalized care, digital services and products that meet evolving consumer needs (for example, in relation to mental health) can be better placed to deliver equitable healthcare access and seamless modern experiences.

2 A workforce in crisis

A workforce crisis is undermining today's healthcare delivery. The high rate of burnout and illness during the pandemic has led to increased attrition among healthcare workers. This complex challenge requires new workforce strategies involving regulatory, academic, community and health-system players to address current and long-term workforce needs. Modernizing healthcare by reducing labor-intensive and inefficient processes through the broader use of digital solutions can help accelerate progress.

3 Harsh economic realities

The cost curve for healthcare providers has spiked, patterns of demand have shifted, and the need to manage expenditures for a new era of service delivery has been posing profound challenges for health-system leaders. A focus on modern strategies that can improve operational efficiencies, create new revenue models and takeouts, and deliver value-based care can be essential in driving financial recovery from the pandemic.

Fast-changing markets in the digital economy

The healthcare sector is being disrupted by non-traditional entrants such as startups and enterprises — including global players from other industries — diversifying into health. KPMG commissioned Forrester Consulting to conduct a study to better understand the changing global healthcare industry. Their research shows that on the question of marketplace disruptors with the greatest potential to change today's healthcare landscape, organizations surveyed cited *businessto-consumer* organizations (26 percent) for their ability to engage with consumers and meet their expectations. Other disruptors cited include global supply chain consolidation (22 percent), data aggregators (19 percent), subscription healthcare models (17 percent) and big-tech vendors entering healthcare (15 percent).

For disruptors, which factor has the greatest potential to change the landscape of healthcare?

Business-to-consumer (e.g. consumer expectations and engagement)

26%

Global supply chain consolidation

22%

Data aggregators

19%

Subscription healthcare models

17%

Big-tech vendors entering healthcare



Base: 473 Director+ customer-centric strategy decision-makers at healthcare organizations Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, October 2021 Signals of change

Transforming healthcare for the changing era

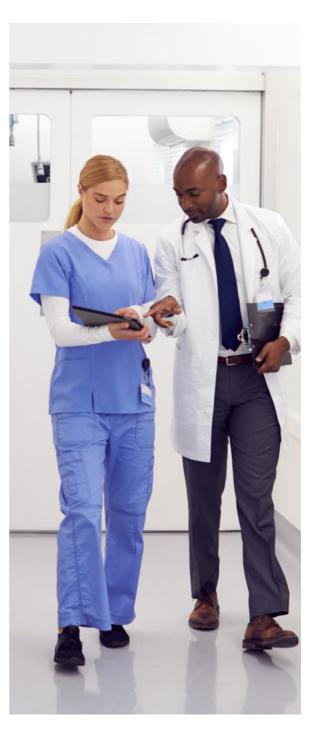
Health providers and payors should be increasingly ready to partner, govern and operate with new entrants to meet consumer-driven demand for modern health and wellness services. At the same time, continued emphasis is needed on robust privacy and security regimes, and consumer-centric system redesign, to maintain the confidence and trust of health consumers, especially as new operating models emerge.

5 Altered states for supply chains

Geopolitical and post-pandemic impacts have significantly disrupted global healthcare supply chains, including pharmaceuticals, medical supplies, and equipment. Some jurisdictions have built local manufacturing capacity to mitigate dependence on external sources or have substituted local resources to offset external shortages. Altered supply chains have been susceptible to fraud and exploitation by increasingly inventive and agile actors. These supply chain changes are likely to require health systems to creatively assess clinical and operating models while competing more intensely for scarce resources.

6 Turning data into trusted insights and value

We believe health systems will need to invest in the advanced capabilities, infrastructure, processes, and data that are essential to new models of virtual and in-person care. Capitalizing on the value of modern technology requires health enterprises to establish new operating models that unlock value from legacy ways of working. Building a successful and trustworthy reputation and brand can stem from a health system's governance structure, risk appetite and tolerance, accountability, values and culture. Health systems remain at a very early stage in leveraging data to achieve these lofty goals; robust data-governance and datamanagement capabilities will likely be required to convert proliferating data into insights that enable forecasting, planning, and bolder decision-making informed by risk and guided by core values.



Signals of change

Transforming healthcare for the changing era

Transforming healthcare for the changing era

The changing face of healthcare paradigms.

Future of healthcare 1 7 d by one or more of the KPMG International entities. KPMG International entities provide no servi<u>ces to clients. All rights reserved</u> Signals of change

Transforming healthcare for the changing era

Against the backdrop of these signals of change — as the focus for traditional healthcare shifts to public health in a changing era of outcomes — now is a critical time to transform the models that underpin healthcare systems around the world. We've identified three healthcare paradigms that have the potential to unlock new value for consumers and healthcare actors alike:



High street healthcare - Putting consumers at the center of care



Meta care - Care in the metaverse is poised for bold a new reality



Hyper-local care - Supporting inclusivity and accessibility of care



Signals of change

Transforming healthcare for the changing era

1. High street healthcare — Putting consumers at the center of care

Consumer expectations of care have been rising for some time, driven by their modern digital experiences when interacting with most other industries: banking, retail, and transport, to name a few. The COVID-19 pandemic provided a catalyst for change in the settings through which care can be delivered. Testing clinics sprang up in carparks and airports, vaccination centers in shopping malls, while access to more complex treatments shifted into low-cost settings like outpatient clinics. In addition, periodic consumer-administered screening for disease proliferated in homes around the world.

These examples, and others such as online mental health platforms and at-home fertility treatments, help demonstrate public readiness for consumercentric digital healthcare to be integrated into dayto-day experiences. These personalized, 'demanddriven' models can empower the consumer to determine when and how they seek and receive care. Reliance on modern digital services can also serve to ease staffing pressures amid the ongoing workforce crisis and its negative impact on healthcare innovation and service adoption.

Digital services also open the door for more diverse revenue streams, with consumers electing to pay for services (either in whole or part) if they are ineligible for coverage or choosing to pay for the value they receive. While there may be variations in access to services via these models, appropriate regulation and management have the potential to redefine the consumer experience, improve access and reduce the cost of care.

With trust being a critical concern for the consumer, commercial models will likely build stronger long-term customer relationships due to direct engagement between the provider and the customer. Many providers may think differently about how they work within and beyond the healthcare ecosystem, such as with partners enhancing consumer experiences while providers focus on core competencies.

For example, providers may employ logistics partners, such as large online retailers possessing expansive distribution networks for last-mile delivery. Care providers could also look to programs that provide on-demand food services and meal plans in institutions or for individuals recovering at home. Partners may also provide consumers with seamless access to funding sources, including traditional insurance, out-of-pocket payments from savings, and potentially debt-funded schemes such as buy now, pay later services. Signals of change

Transforming healthcare for the changing era

Case study: 'Delivering' care in convenient changing ways

Uber Health, the non-emergency medical transport offshoot of the popular ridesharing service, has partnered with NimbleRx, an on-demand platform linking patients with local pharmacies to fill scripts online, thereby offering the convenience of a combined prescription delivery service in the US.¹ A pilot running in the Seattle and Dallas metropolitan areas has seen more than 15,000 deliveries made.² The service assists consumers who are unable or unwilling to attend a pharmacy in person — a market segment which has grown amid the global pandemic — to access the pharmaceuticals they need, while also addressing some of the barriers faced by older or socially isolated consumers. Uber Health's core offering has seen the company partner with a range of healthcare providers to offer patient transport, with a focus on reducing missed medical appointments while improving real-time tracking.

¹ Uber Enters Home Drug Delivery Business With Pharmacy Partner NimbleRX. Forbes.com. Bruce Japsen. August, 2020.

Future of healthcare | 9

© 2023 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

² NimbleRx and Uber Health Partner to Expand Accessibility to Prescription Delivery. Nimble. August 2020.

2. Meta care — Care in the metaverse is poised for bold a new reality

Various forms of revolutionary virtual-care platforms — featuring advanced digital capabilities such as cloud and AI — exist today, ranging from basic service delivery to complex care. For example, Ginger is an on-demand mental health support program providing app-based content and textbased coaching to address mild depression or anxiety. It utilizes AI to triage and escalate patients to a therapist or physicians when required.³

For more complex care, continued investment and research into the development of robotically assisted surgery, plus significant advances in translational AI^{4,5}— including the use of machine learning and deep learning — have set the stage for remarkable shifts in the way that pathology, radiology, and intensive care are delivered. These innovations can help:

- improve productivity of highly specialized health professionals
- improve quality, safety and clinical decision making
- enhance service flexibility and access to healthcare specialists.

As the world's largest technology firms shift their focus to investment in Web 3.0, the principles and technologies that underpin it are expected to revolutionize healthcare. Web 3.0 is viewed as an upgrade to — or the next generation of — the internet, in which today's 'read and write' model is replaced by a 'read, write and own' model that makes it more democratic and decentralized. A key part of Web 3.0 is the metaverse, where physical and digital realities collide in a borderless realm, offering the potential to enhance people's lives with new opportunities to work, learn and play using virtual and augmented reality.⁶

Forrester research shows that on the question of which technology-related factors have the greatest potential to change the healthcare landscape, most organizations surveyed cited *AI and machine learning* (27 percent), followed by *intelligent automation and robotics* (22 percent), *5G and the Internet of Things* (19 percent), *cloud and edge computing* (15 percent) and *cybersecurity* (15 percent).

For technology, which factor has the greatest potential to change the landscape of healthcare?

Al and machine learning

27%

Intelligent automation and robotics

22%

5G and Internet of Things (IoT)

19%

Cloud and edge computing

15%

Cybersecurity



Base: 473 Director+ customer-centric strategy decision-makers at healthcare organizations Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, October 2021

New care models are already gathering momentum. In the last 2 years, the number of facilities in the US providing care by telepresence has more than doubled from 43 percent to 95 percent.⁷ The metaverse healthcare market size is also expected to increase to US\$72.10 billion by 2030 from the current US\$6.85 billion.⁸

In addition, new infrastructure for secure digital exchanges has been rapidly deployed to enable more seamless virtual experiences: for example, the national roll-out of electronic prescribing infrastructure in Australia, enabling consumers to smoothly transition from physical care to virtual care.⁹Telepresence also empowers patients to seek out clinicians without regard to their physical location, enabling greater choice and access to world-leading expertise for those who can navigate and afford this new paradigm.

³ Digital Tools are Revolutionizing Mental Healthcare in the US. Harvard Business Review. Steve Blumenfield and Jeff Levin-Scherz. December, 2020.

Transforming healthcare for the changing era

KPMG Connected Enterprise

Signals of

change

⁴ Translational AI & Deep Learning in Diagnostic Pathology. Frontiers in Medicine. Ahmed Serag et al. Oct. 2019.

⁵ Digital Pathology & Al in translational medicine and clinical practice. Modern Pathology. Vipul Baxi et al. Oct. 2022.

⁶ Blockchain, health disparities and global health. BMJ Journals. Dominique Vervoort et al. April, 2021.

⁷ The Amazing Possibilities Of Healthcare In The Metaverse - Forbes.com. Bernard Marr. February, 2022.

⁸ Metaverse in Healthcare Market. Precedence Research. 2022.

⁹ Electronic prescribing | Australian Government Department of Health.

Case study: The virtual hospital is emerging

Latus Health Ltd, a UK-based firm specializing in occupational health, has flagged the potential development of a virtual hospital in the metaverse. Initially, the company intends to offer remote physiotherapy and counseling services via a virtual reality (VR) headset. Physiotherapy will feature computer vision (a field of computer science that enables processing and analysis of visual data in a human-like manner), providing a more accurate measurement of progress and recovery versus a conventional setting. Capturing and using visual data, for example to measure improvement in the range of movement in a joint, provides feedback on the efficacy of an intervention and could drive both better adherence to a therapeutic regimen and enhanced motivation for patients.¹⁰

New generations of consumers — particularly millennials and Gen Zs¹¹ — are already comfortable accessing services through these channels and will be likely to increasingly prefer them to traditional alternatives. The virtual nature of the environment has the potential to confer significant benefits associated with the destigmatization of health conditions, particularly in mental health and sexual health.¹²

As technologies mature and the volume and quality of data increases, digital twins offer potential for providers and patients alike to better consider and predict likely outcomes. This change is likely to be accelerated by the increasing prevalence of genetic screening and targeted therapies for both healthcare and naturopathic uses.¹³

Moreover, the borderless nature of the metaverse, combined with the ability to use new payment methods like cryptocurrencies, and the portability of personally controlled health information, may create opportunities for global service markets to emerge. The BlueButton Program in the US is giving patients control over — and value from — digital portability of health-claims data.¹⁴ Platforms such as Itheum are transforming personal data into a tradeable asset: consumers can make their information accessible to healthcare organizations via a non-fungible token (NFT).¹⁵

Traditional barriers to virtual consultations requiring physical contact have the potential to be disrupted by accelerating adoption of haptic and mixed-reality technologies such as Microsoft Mesh.¹⁶

As with the High street healthcare paradigm, we believe consumers will have significant sovereignty in this environment. It's expected that new payment models that enable micro-insurance — for example, subscription models — may become more prevalent for a defined set of common and low-acuity conditions.

The cumulative effect of these changes is likely to be the emergence of a new range of digital healthcare providers that are no longer bound by the constraints of physical infrastructure or geography. The virtualization of specialized human capital, along with the use of AI, has potential to confer significant economies of scale that can improve as the volumes of data available for machine learning grow.

Signals of change

Transforming healthcare for the changing era

- ¹¹ How Gen Z is Affecting Healthcare. Abbott.com. November, 2019.
- ¹² Could Telehealth Be the Answer to Stigma Removal for Behavioral Health. University Hospitals Report. 2020.
- ¹³ Innovating for Cancer Treatment and Prevention. LifeLabs.com Community Report. 2020.
- ¹⁴ Share Your Medicare Claims. Medicare.gov. 2022.

¹⁰ The Amazing Possibilities Of Healthcare In The Metaverse. Forbes.com. Bernard Marr. February, 2022.

¹⁵ Itheum Whitepaper. DEV Community. December, 2022.

¹⁶ Mesh for Microsoft Teams. Microsoft.com. 2023.

3. Hyper-local care — Supporting inclusivity and accessibility of care

The COVID-19 pandemic brought attention to disparities in health outcomes and highlighted gaps in service delivery for underserved populations. Hyperlocal healthcare emphasizes community-controlled models to improve health equity in underserved and culturally or linguistically diverse groups. Some models, such as Indigenous health authorities in Canada, and community-controlled health organizations in Australia, are owned, governed and managed by a specific community group.

In the US, the Equity-First Vaccine Initiative is an example of how community-based organizations can be leveraged to address a targeted public health priority (increasing COVID-19 vaccination) and build upon existing trusted community partners that are already addressing root causes of inequity, such as housing and transportation.¹⁷ These models are positioned to respond to the healthcare context of a community, deliver care in a culturally safe and appropriate manner, and focus on targeted approaches to the social determinants of health.

Hyper-local healthcare models can draw on multiple datasets to gain timely and detailed population-level insights. For example, in the United States, the CDC's Places program provides health data for small areas, which helps local health departments "to better understand the burden and geographic distribution of health measures in their areas" and also assists with public health intervention planning.¹⁸

When it comes to care delivery, hyper-local models are typically best suited to primary care, prevention, and well-being. One such example is Community Cavell Centers in the UK — they intend to integrate primary care, diagnostics, community health services and social care for populations of up to 150,000.¹⁹ These enterprises then play a critical role as brokers to draw on partnerships for certain services such as tertiary care, leveraging accountability and funding agreements to ensure that the health and cultural needs of community members are met outside the walls of their community.



¹⁷ Faherty L.J. et al. (2022). The U.S. Equity-First Vaccination Initiative: Impacts and Lessons Learned. Rand Corporation. ¹⁸ PLACES: Local Data for Better Health. Centers for Disease Control (CDC). December, 2022.

¹⁹ Shrewsbury Health and Wellbeing Hub: Case for Change. Shropshire, Telford & Wrekin Integrated Care System (NHS). 2022.

Transforming healthcare for the changing era

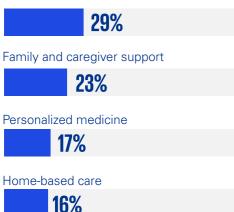
KPMG Connected Enterprise

Future of healthcare | 12

Forrester research shows that among care services with 'the greatest potential to change the landscape of healthcare,' 29 percent of organizations surveyed cited *telehealth and remote care*, while nearly one in four (23 percent) cited *family* and *caregiver support* for its potential to enhance healthcare. Other factors cited include *personalized medicine* (17 percent), *home-based care* (16 percent) and *patient self-care* (15 percent).

For care, which factor has the greatest potential to change the landscape of healthcare? (Select one.)

Telehealth and remote care



Patient self-care



Base: 473 Director+ customer-centric strategy decision-makers at healthcare organizations Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, October 2021

Case study: Serving every member of the community

CommunityHealth, a free US health clinic in Chicago, provides a variety of communitybased health services to uninsured adults, many of whom are undocumented and non-English speaking. CommunityHealth recognized that although the proliferation of virtual care increased healthcare access for many, underserved individuals lack access to the required technology. Clients of CommunityHealth needing to attend in-person appointments therefore faced financial and social hardships amid time off from work, long public-transport commutes, and a lack of childcare. To address these challenges, CommunityHealth launched a telehealth microsite. Individuals accessed 'assisted virtual visits,' attending telehealth visits in a state-of-the-art room to access lab services, get vital signs taken and fill prescriptions. Individuals also have access to social care such as a food bank and childcare services. Success is demonstrated by the microsite having a no-show rate of 3 percent, compared to the national average of 18 percent. Patients report that the microsite made it easy to access care and attend future appointments.²⁰



²⁰ Community Health at Onward House: 7 month check-in! Community Heath. November 2021, Improving Health Care Access by Meeting Patients Where They Are. Harvard Medical School. March 2022. Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise

KPMG Connected Enterprise

Transformation in healthcare requires adapting to a connected operating model.

Future of healthcare | 14 vices to clients. All rights reserved. Signals of change

Transforming healthcare for the changing era

The KPMG Connected Enterprise approach is designed to help organizations assess their existing capabilities, identify capability gaps, and manage the transformation hurdles across the enterprise to design and embrace their future business models.

The eight capabilities of KPMG Connected Enterprise:

Insight-driven strategies and actions	Innovative products and services	Experience- centricity by design	Sign char
Seamless interactions and commerce	2x Impact*	Responsive operations and supply chain	Tran heal for ti chan
Aligned and empowered workforce	Digitally- enabled technology architecture	Integrated partner and alliance ecosystem	

*Base: 1,299 professionals involved with customer strategy decisions.

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, 2018. The research was conducted on a sector-specific basis.

With the need for more connected and seamless digital offerings, what can good look like?

- Investing in the right capabilities to help drive effective digital-first ways of working and operating models.
- Connecting and applying these capabilities across the functional value chain.
- Making the most of technology with a platform mindset.

Future of healthcare | 15

© 2023 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

Signals of change

Transforming healthcare for the changing era

Looking ahead to a new connected ecosystem

When successfully scaling a healthcare transformation, you can face several challenges in healthcare systems, including:

Misalignment of actors

Healthcare services are delivered through complex ecosystems of providers — such as hospital networks, primary- and secondary-care practices — plus public and private payors, producers across the life sciences sector and, most importantly, consumers and citizens. The interests of these actors are not always aligned and, particularly for consumers, they are often making decisions without complete information and the advice of healthcare providers.

Weak markets

Markets for health services function differently from those in other sectors. Consumers are protected from market limitations through a complex array of regulation and price signals via payor mechanisms. For their part, payors manage health-expenditure growth through other mechanisms such as access and eligibility policies and how services are reimbursed. These regulatory and contractual responses to weak markets can limit the speed, spread and sustainability of innovation and transformation efforts in healthcare systems.

Paying for activity, not outcome

Funding and reimbursement systems use access and eligibility criteria to determine which services are reimbursed or prospectively commissioned. Certainty and stability in these mechanisms are important for markets to function effectively and efficiently. It also has the adverse effect of creating rigidity in the range of services that providers offer and can constrain their agility and responsiveness. As a result, changes in how services are funded can be a powerful driver for healthcare transformation.

Trust and accountability

Despite a common commitment to placing consumers at the center of care, meaningful accountability for medium- and long-term care outcomes remains elusive for healthcare providers, not least because payment models incentivize treatment rather than prevention or more-efficient, lower-cost models of care. Healthcare systems remain fragmented despite the pressing need for better integration of care, improvements in care quality, safety and outcomes, and enhanced productivity for workforces and providers. The accelerated adoption of digital tools and channels over recent years suggests that consumer-centric healthcare transformation has significant potential to improve productivity, make care safer, improve outcomes and save consumers time and money.

As noted earlier in this report, these signals of change are influencing health systems around the world:

- A changed reality of customer-centric care Consumer demand for convenient personalized services.
- A workforce in crisis The need for new workforce strategies to combat burnout.
- Harsh economic realities Scarce financial resources amid a growing demand for services.
- **Fast-changing markets** The disruptive impact of non-traditional entrants.
- Altered states for supply chains Solving persistent constraints in supply chains.
- Turning data into value Digital capabilities to support modern care models.

These signals of change are catalysts for digitally enabled transformation that can help shape and define the future of how healthcare is both delivered and consumed. With increasingly scarce resources, it's expected that healthcare providers will need to focus their investments on transformation, integrating programs and services programs to include capabilities that can unlock value across the entire organization. Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise for health

Our blueprint for a consumer-centric approach to a digitally enabled transformation

A digitally enabled transformation in healthcare requires several orchestrated elements to help achieve new levels of value and ongoing innovation. The **eight capabilities** of the KPMG Connected Enterprise approach can deliver the tools, methods and frameworks to help transform healthcare outcomes and return on investment. We believe the following are the eight capabilities of a digitally enabled transformation in healthcare.



The future will be data-driven and unified: The ability to turn timely data into valuable insights is critical to informing modern strategies, service design and decision-making, as well as monitoring progress on key transformation objectives.



There will be solutions to supply chain barriers: Responsively managing demand and capacity constraints and adopting innovative approaches to sourcing and support-services delivery to sustain operational excellence as a foundation for clinical excellence.



Service innovation needs will evolve: The ability to design new approaches to service delivery that respond efficiently and effectively to public needs, improve health equity, and balance inherent tensions between system objectives.

|--|

A modern mindset among leaders and workforces will emerge: Providing leadership and workplace cultures that are positioned to tackle transformational change. This includes attracting and retaining a skilled and digitally enabled workforce that is actively engaged in strategy delivery and positioned to deliver value to modern healthcare services.



The consumer will be at the center of services: Ensuring that digital service design places the consumer experience at its heart, so that consumers are engaged and have agency in both the design process and throughout every care journey.



There will be seamless interactions across evolving ecosystems: Delivering interactions with consumers that are seamless, irrespective of their entry point or preferred channel (virtual or in-person), plus integration with other care providers beyond the organization.



An evolution of game-changing technologies will emerge: A digitally enabled technology architecture guided by a clear commitment to a 'digital-first' approach, robust IT service management, and an unstinting focus on information security and active management of soaring cyber threats.



Innovative partnerships will add real value: The ability to work collaboratively and effectively within an ecosystem of alliances and partnerships that leverage third-party value for the benefit of consumers.

Commissioned studies conducted by Forrester Consulting on behalf of KPMG International reveal that the eight capabilities of the connected enterprise are significant differentiators in organizational transformation. The research shows that firms that make a moderate or significant investment in all eight capabilities of the connected enterprise are two times more likely to deliver a customer experience that exceeds expectations, successfully execute on one or more customer-centric objectives, and increase ROI across one or more metrics.*

*Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, 2018. The research was conducted on a sectorspecific basis.

Future of healthcare | 17

© 2023 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

Transforming healthcare for the changing era

In addition to the eight capabilities, we believe a strategic execution plan is essential and three key elements serve as pillars that underpin the journey to transformational change and a truly connected healthcare enterprise:



A clear business blueprint that identifies functions and processes impacted by transformation.



A technology architecture that integrates data and digital solutions underpinning transformation.



Target operating models for impacted functions and processes to sustain change over time.

For leaders and organizations contemplating transformation to enhance the delivery of healthcare services in an increasingly volatile and resource-scarce environment, these key questions can help identify where health systems are on their connected enterprise for health journey:

- How resilient are we to the pressures we will face over the next 10 years?
- Have we worked with our consumers, communities, and workforce to chart an informed course for the future that meets today's — and tomorrow's — expectations and needs?
- What capabilities will we need to effectively deliver on this strategy in a rapidly changing environment?
- How advanced are the capabilities we have today and where should we target new investment?
- Which healthcare system functions have the greatest potential to unlock latent value for consumers, staff and the system through transformation?

The KPMG Connected Enterprise for Health approach provides a comprehensive, research-based framework to help healthcare leaders answer these questions and design, prioritize and deliver complex, consumer-centered transformation programs. To get started, assess your organization's readiness for transformation against global health-industry benchmarks by completing our free digital-maturity assessment diagnostic here.



Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise

Future of healthcare | 18

How connected is your organization?

Are you connecting your customers with compelling value propositions, opportunities, and interactions?

Are you connecting and empowering your employees to deliver on the customer promise?

- **3** Are you connecting your front, middle and back offices to execute the customer-growth agenda?
- 4 Are you connecting your governance, risk and oversight structures to anticipate the impacts of emerging risks, taking risk-based decisions for continuous quality improvement, and safe, quality customer outcomes?
- **5** Are you connecting your partner ecosystem in order to jointly deliver on customer commitments?
- **h** Are you connecting to market dynamics and digital signals?



Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise

Future of healthcare | 19

Forging digital connections for a changing era

The following considerations can help healthcare organizations accelerate progress on the connected journey:



Keep close to what your consumers want. The ability to think 'outside-in' is key in building a customer-centric business. Ensure you know and act on what your consumers want, need and value; keep continually looking up and outside of the organization and industry to help ensure alignment with some of the best consumer experiences in day-to-day life.



Do things in an agile way. Break changes down into specific steps, sequence them and then implement them. Stand back to assess whether the change has been successful in a 'test-and-learn' approach. Pursue a series of small changes that together can add up to a significant and impactful transformation.

3	
U	

Build in resilience. Take on today's challenges with resilience and determination, and be prepared to expect the unexpected, fail fast and learn along the way. By developing a connected enterprise architecture, you will find that your ability to change course at speed is significantly enhanced.



Keep it human. While embedding new technologies, such as AI and automation, is likely to be critical in developing seamless customer interactions, remember that you need to keep the experience 'real.' Many great organizations remain defined by the quality and passion of their people and their sense of purpose.

h
U

Make use of new technologies. Continually look at what new technologies are becoming available that could help you serve consumers better or connect your business more seamlessly. Experiment with the opportunities available through cloud platforms, machine learning and advances in data science.

KPMG professionals are helping healthcare organizations to evaluate and improve all eight connected capabilities across their enterprises. These capabilities align with the target operating models and can allow organizations to prioritize, shape and execute their digital transformation.

Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise

Future of healthcare | 20



Transformation never stops. Neither do we.

At KPMG we believe that business transformation is too good an opportunity to miss. Combining the right tech and the best processes with people whose insight is as broad as it is deep, are essential ingredients to successfully transform. KPMG has worked at the heart of global businesses for many decades, helping our clients realize the full potential of their people and technology and working together to achieve real-world outcomes. Because when people and technology are in harmony great things happen.

Making a world of difference:

KPMG people can make all the difference on your transformation journey. Together we can help you to orient your business around the customer, optimize functions for a new era, manage enterprise risk and regulation for a safer future, rise to a new level of value creation, and create an environment for managing ongoing change. Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise

Future of healthcare | 21

Contacts

Authors



Lydia Lee

Global Co-Lead, KPMG Connected Enterprise for Health, KPMG International; Partner and National Leader, Digital Health Transformation KPMG in Canada E: lydialee1@kpmg.ca

Healthcare network contacts

Axel Bindewalt

Public Sector Consulting Partner and Head of Healthcare KPMG in Germany **E:** abindewalt@kpmg.com

Beccy Fenton

Global Co-Lead, Care System Redesign, KPMG International; Partner, Head of Healthcare and Human Services KPMG in the UK **E:** beccy.fenton@kpmg.co.uk

Dr. Anna van Poucke

Global Head of Healthcare, KPMG International; Healthcare Senior Partner KPMG in the Netherlands **E:** vanpoucke.anna@kpmg.nl

Burhaan Khan Partner and Head of Healthcare KPMG in Saudi Arabia **E:** burhaankhan@kpmg.com

KPMG in the Netherlands E: ogink.arjan@kpmg.nl Ashraf Shehata

Evan Rawstron

KPMG Australia

Services

Global Co-Lead, Operational Excellence in

Health and Life Sciences Industry Leader

Healthcare, KPMG International; Partner, National

Enterprise for Health.

Global Co-Lead, KPMG Connected

KPMG International; National Sector

Leader, Health Ageing and Human

E: erawstron@kpmg.com.au

National Sector Leader, Healthcare and Life Sciences KPMG in the US **E:** ashehata@kpmg.com

Jenny Yao

Gordon Burrill

KPMG in Canada

Arjan Ogink

E: gburrill@kpmg.ca

Head of Healthcare

Head of Healthcare KPMG China **E:** jenny.yao@kpmg.com

A special thanks to the following who helped with the development of this report:

Neil Thomas

Global Co-Lead, Assurance and Integrity in Healthcare, KPMG International; Partner, Infrastructure, Government and Healthcare KPMG in the UK **E:** neil.thomas@kpmg.co.uk

About our team

The global healthcare team is a network of 5,000 KPMG professionals based in more than 70 countries and territories who provide Audit, Tax and Advisory services to healthcare organizations. Our multidisciplinary teams combine deep industry experience and strategic, clinical and technical capabilities with leading partnerships, technologies and approaches to help manage the pace of change and turn challenges into opportunities with the goal of transforming healthcare organizations so they can serve societies and meet the needs of patients — now and in the future. Visit <u>kpmg.com/healthcare</u>

Future of healthcare | 21

© 2023 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

Signals of change

Transforming healthcare for the changing era

KPMG Connected Enterprise

 $\widehat{\mathbb{W}}$

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

kpmg.com/socialmedia



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 Copyright owned by one or more of the KPMG International entities. KPMG International entities provide no services to clients. All rights reserved.

KPMG refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity. KPMG International Limited is a private English company limited by guarantee and does not provide services to clients. For more detail about our structure please visit <u>kpmg.com/governance</u>.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

Throughout this document, "we", "KPMG", "us" and "our" refers to the global organization or to one or more of the member firms of KPMG International Limited ("KPMG International"), each of which is a separate legal entity.

Designed by Evalueserve.

Publication name: Future of Healthcare | Publication number: 138534-G | Publication date: March 2023