Transforming Healthcare

The future of healthcare in your hands

Harness the power of digital technology to improve quality of care and reduce costs

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Today's changes and tomorrow's uncertainties are redefining your healthcare organization.

We have seen significant changes across the healthcare continuum, including exponential growth in telehealth and virtual care, the shift to hybrid work, a growing cyber threat landscape and the disruption of traditional primary care models.

When healthcare organizations harness the power of technology, they can expand access to and deliver data-driven care, achieve operational transformation, address security, privacy and compliance requirements, and create better patient and provider experiences. And all along the way, new solutions help save time and money.

Our commitment to state-of-the-art healthcare lays the foundation for tomorrow. For over 20 years, Cisco's comprehensive approach to healthcare has been empowering organizations to take on new challenges and adapt to the ever-shifting care landscape. Cisco technology solutions have placed over 17,000 healthcare organizations on the cutting edge of holistic, technology-enabled care. Every day, Cisco pushes the boundaries of what's possible in healthcare.

Not sure where to start? We can help.

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See healthcare solutions

Healthcare of the future, today

Chapter 1

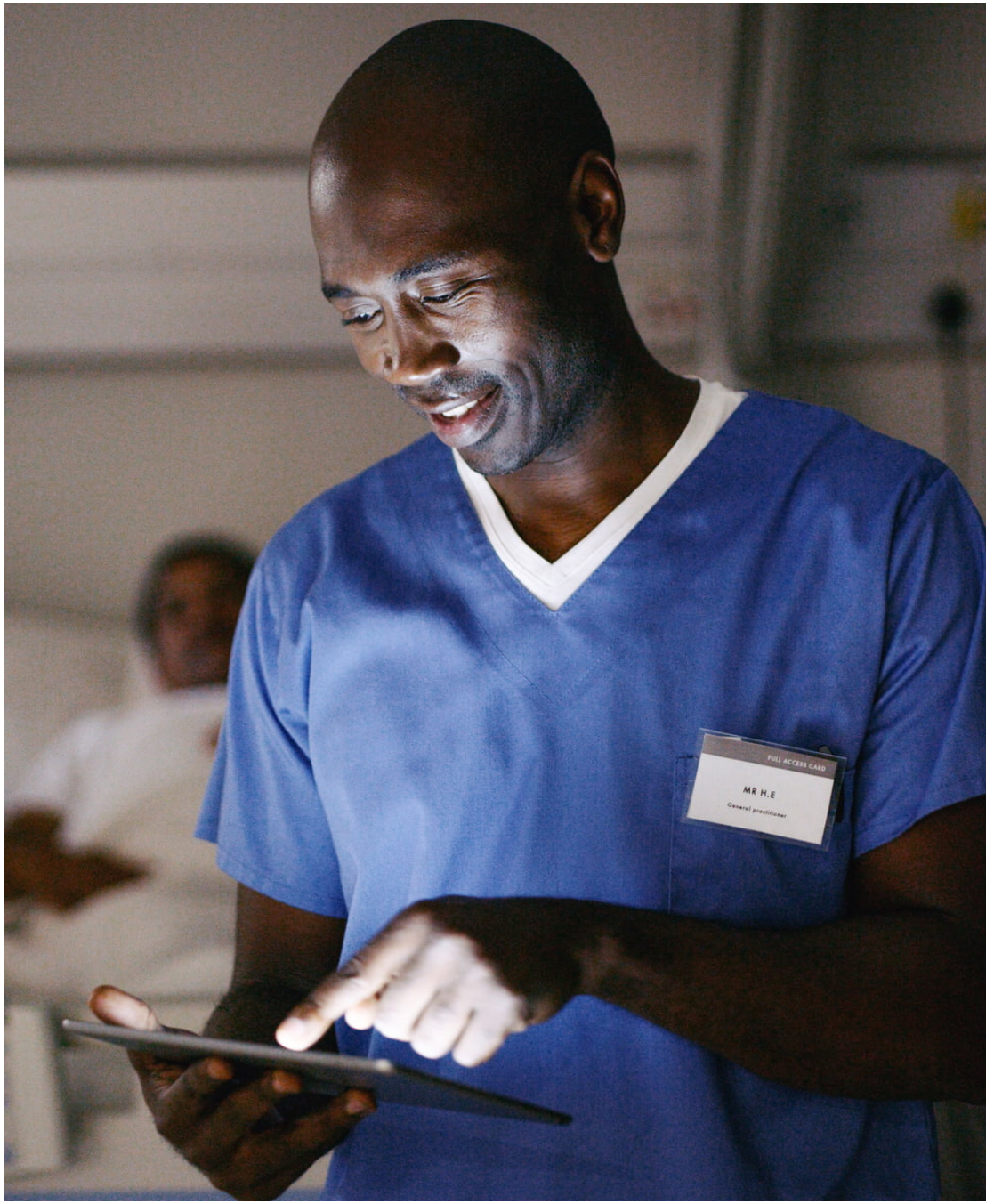
Chapter 1:

Healthcare of the future, today

Imagine a hospital or clinic. Clinicians seamlessly engage with patients and care teams on mobile devices in a highly secure environment, expanding their reach within a facility and around the world. Wi-Fi and sensors securely connect the hospital to a cohesive data infrastructure that dramatically improves operational efficiency, workflows and helps the healthcare organization achieve environmental and sustainability targets.

Outside of the facility, patients can access the care they need with omnichannel digital front door communications for scheduling and care coordination. And when an in-person appointment isn't possible – patients can easily consult with their care teams through telehealth, from any place at any time, securely.

Is this your reality? It could be.



Today's patients expect the same access to technology in healthcare that they get from other consumer services. That means experiences like virtual care, self-service digital front door, seamless connectivity inside a care facility, and location-aware mobile services are quickly becoming the new norm. And above all, these experiences must be secure, as protecting patient data and privacy are non-negotiables.

Today's care teams require a secure digital environment that makes more efficient workflows possible, with access to the systems they need from any device or location, at any time. With global staffing shortages, clinician burnout, and an alarming number of healthcare workers leaving the profession, it's time to rethink the work experience.

To survive in this changing world, it's clear that healthcare delivery must evolve. That's where Cisco comes in.

Cisco is your trusted technology partner, delivering a portfolio of solutions that enable you to build a secure, intelligent platform for digital healthcare.

Dive into Cisco's solutions for healthcare

To support these trends, the strategic plan of today's healthcare organizations must include:

Telehealth usage is up 38x pre-pandemic baseline[1]

Secure applications, devices and connectivity to support virtual care and hybrid work

60% of patients expressed interest in digital front door[1]

A secure platform for seamless, self-directed care, which leads to better patient and clinician experiences

Healthcare accounts for 4.4-4.6% of worldwide greenhouse gas emissions[2]

Connected facilities to drive clinical, operational, business and sustainability goals

85% of physicians believe that data-sharing will become standard practice[3]

Secure data availability to optimize clinician workflows and support data-driven care decisions

$7M the average total cost of a data breach in healthcare[4]

An integrated and holistic cybersecurity strategy to mitigate risk and keep data secure

Breaking down the barriers to care

Chapter 2

Chapter 2:

Breaking down the barriers to care

The goal of any modern healthcare facility includes personalizing patient experiences and increasing care access while protecting patients and their data. On top of that, keeping costs down is a major concern.

Healthcare organizations today face an even wider variety of challenges. From securely enabling virtual care to reimagining and redesigning the care delivery model to transforming facilities and ensuring the safety of clinicians and staff – there's a lot to plan for and consider.

To transform care delivery, adapt to evolving technology, strategize for short and long-term clinical and business resiliency and change patient expectations–all in an uncertain environment–start by asking these questions:

How can we deliver the best patient experience?

On-demand care and the new digital front door

Today, the way patients seek care has changed to a click, call and chat priority. Omnichannel virtual care contact centers have become a critical tool in the patient intake process. 77 percent of patients believe the ability to book, cancel or change an appointment online is important.[5] Patients demand seamless access to care through mobile-first scheduling, communication and virtual consultations. Do you have the technology needed to support these digital experiences?

Telehealth and virtual visits

83% of patients had a virtual care visit for the first time in 2020, yet only 20% downloaded a virtual care app in advance of needing it.[6] Consumers have never been more aware or actively engaged in the management of their health. They are driving and accelerating the pace of change in healthcare. While adoption of telehealth expanded exponentially in 2020, some patients still had difficulty managing applications and joining their telehealth visit in an effective and timely manner. That's why it's more important than ever before to select telehealth technology that is easy to use for patients and integrated into existing clinical workflows.

How can we use data to provide better patient care?

Clinical communications

In a hospital, a patient will interact with many members of their care team. If care teams cannot share information effectively, patient satisfaction and safety are impacted. You need to strengthen your clinicians' ability to communicate and collaborate with everyone on the care team, at all times, wherever they are.

Medical device integration

Today, less than five percent of patient data is processed for clinical care and less than one percent goes into the EMR.[7] You must enable quality of care at scale and ensure the secure availability of data to drive care delivery. With a secure network architecture and switches, you can aggregate and remotely view contextual patient data from bedside medical monitoring devices.

How can we protect our patients and their data?

Cybersecurity

Healthcare is extremely vulnerable when it comes to cyber threats. The average cost of a data breach in healthcare is up more than 10% from 2019.[4] And financial concerns are only one negative result of a cyberattack. Patient safety has shown to be at risk when hospital systems and medical devices are compromised by cybersecurity breaches. Block threats, contain intruders, and improve visibility to protect your systems and patient data from cyberattacks with an integrated, end-to-end security portfolio.

Medical device security

63% of healthcare organizations experienced a security incident related to unmanaged and IoT devices over the past two years.[8] When a medical device is compromised, it can disrupt care delivery, and in some cases, can evolve to a life-or-death situation. You need to protect and prevent IoT device breaches across a broad spectrum of mobile, medical, and infrastructure endpoints.

How can we save time and money?

Asset tracking

Studies have shown that an average of 6000 hours per month is wasted by nurses searching for medical equipment within a care facility to deliver patient care.[9] This is valuable time spent away from patients and can impact job performance. Leverage location data to enable clinical operational efficiency, improve patient throughput capabilities, and monitor asset utilization.

Mobile experiences

The estimated cost in the United States due to missed appointments is $150 billion each year.[10] You can't afford for patients to have missed or delayed appointments due to inefficiencies. To help patients navigate your care facility and streamline check in processes, enable wayfinding and digital intake on their personal devices.

Smart hospitals

As an industry, healthcare accounts for 4.4–4.6% of worldwide greenhouse gas emissions.[2] The U.S. healthcare system accounts for almost one quarter of these emissions, a figure which grew by 6% between 2010 and 2018.[11] These emissions contribute to climate change and indirectly lead to reduced health outcomes. A smart hospital can harness the fourth utility to deliver reduced power consumption and sustainability, improved security, and data-driven clinical workflows.

Exceptional experiences: Improving personalized health

Chapter 3

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Exceptional experiences: Improving personalized health

Think about the last time you, a loved one, or a friend needed medical care. It can be an overwhelming, confusing, and often daunting experience.

There isn't a lot of transparency around what is happening, where you need to go, what you need to do–all of which compounds the stress of dealing with a routine visit or an ailment.

In healthcare, everyone has different priorities.

1. Making the appointment

Nearly 60% of appointments are booked outside of office hours and 80% of patients prefer a physician who offers online scheduling.[12]

The first step in a patient's care experience is making the appointment. Being able to chat with a chatbot for frequently asked questions, be escalated to a video call if needed, seamlessly schedule appointments across a healthcare organization, access language interpretation services, and receive follow-up information makes a difference. Today's patients expect omnichannel, self-service and on-demand access to their care teams to easily communicate, schedule appointments and manage their treatment plan.

Learn more about Cisco's platform for digital front door

2. Staying connected before, during and after the appointment

Waiting for an appointment, doctor, test, results, or diagnosis—the time adds up. When a patient is dealing with the uncertainty of an illness, it is important for them to be able to browse the Internet easily and reliably and to stay connected with friends and family. It can help speed up the intake process, help patients be more comfortable, entertained, and less anxious, leading to patients who are in a better mood and easier to work with.

Learn more about Cisco's secure, agile network for healthcare

3. Supporting data-driven care delivery

Global adoption and expansion of Electronic Medical Record and Electronic Health Record systems are driving the need for data connectivity at every point of care. Especially with the shift to hybrid work, clinicians need to access on-premises patient data and medical systems anywhere, anytime, and from any device. And care team members need the ability to securely communicate, regardless of location. Equipping care teams with the right technology and tools not only improves clinician workflow and reduces burnout, but also results in better and more-informed patient care.

Learn more about Cisco's solutions for data-driven clinical workflows

4. Following up with doctors from home

93% of physicians who have used telehealth say it improves patients' access to care.[13]

The pandemic has served as a catalyst for change in the healthcare industry. Patients now demand the ability to receive care, regardless of their physical location, and telehealth is quickly becoming widely adopted and accepted. Telehealth can save patients travel time and expense, while reducing physical contact and meeting sustainability goals. For clinicians, telehealth enables them to extend their reach beyond the hospital, see more patients and blend in-person and virtual appointments for schedule density.

Experience the difference telehealth can make in the lives of patients and clinicians

Safety first: Protecting patients and data

Chapter 4

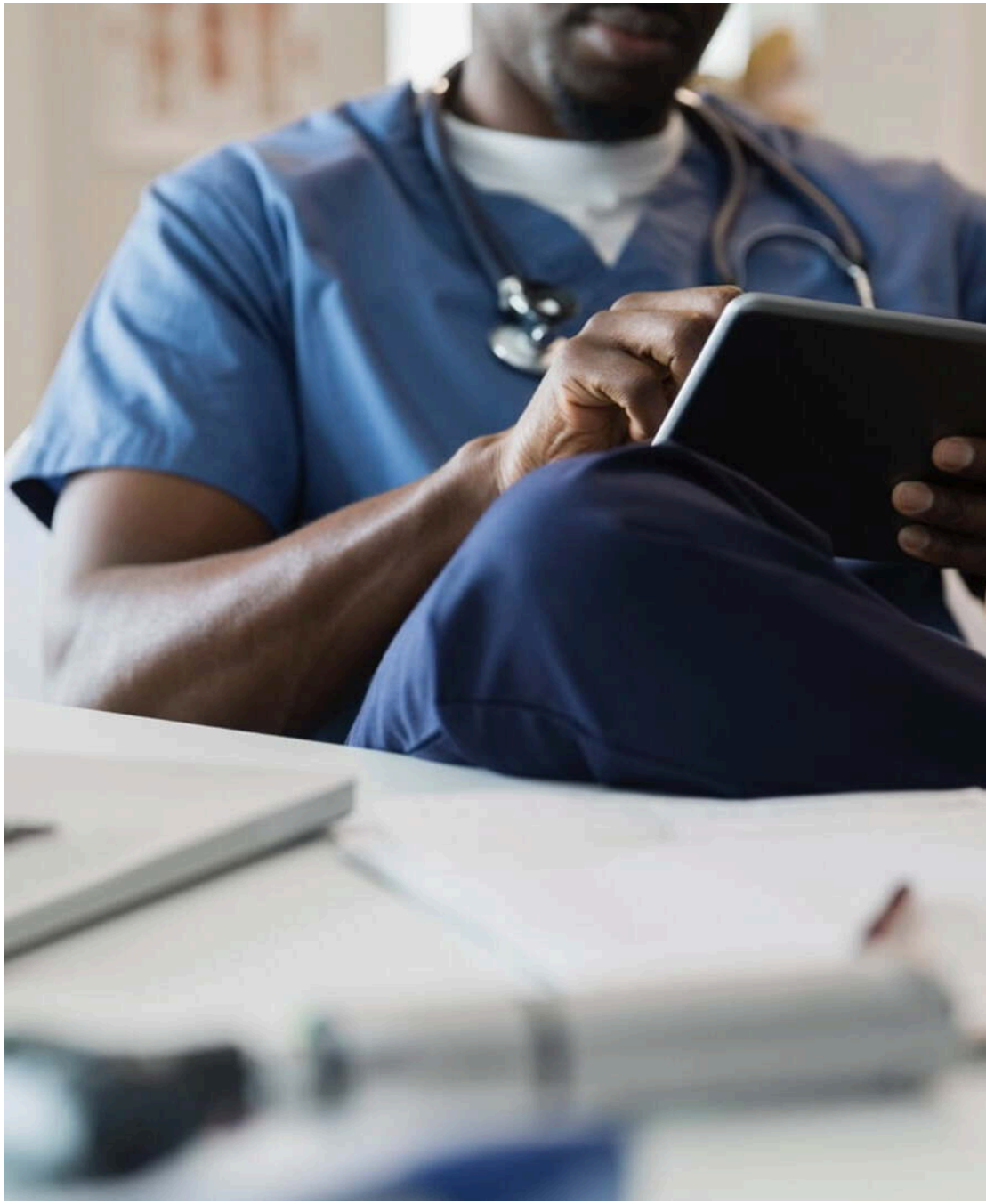
Chapter 4:

Safety first: Protecting patients and data

Every day, thousands of new medical devices are connecting to the network. Take a minute to picture the amount of data these devices are generating, transferring, and storing in addition to data from Electronic Health Records (EHR), clinical workstations, and smart hospital applications. All of that data needs protecting.

What used to be the realm of science fiction is now real. Hackers might use an unprotected infusion pump on the network as a gateway to your hospital's data. A staff member might unknowingly download a malicious PDF attachment from an email. Or perhaps a virus has been lurking undetected in your network for some time.

Securing an ever-changing and complex IT infrastructure can be overwhelming. With the expanding attack surface in healthcare, threats are getting more serious–and healthcare organizations must find ways to address them.



Protect the patients and data that matter most.

How can we prepare before an attack?

Identify:
It's hard to protect something if you don't know what or where it is.
To understand the risks to systems, assets, data, and capabilities, you need visibility into what is on your network, who is using network-connected devices, when network access is requested, and where the request is coming from.

Protect:
Deploying safeguards against inevitable cyberattacks is crucial.
Protection can include everything from enforcing access control to managing data confidentiality. Firewalls are foundational to having the industry's most complete and open security platform. With world-class security controls, consistent policy and visibility, and the ability to integrate network and security, your healthcare organization can reduce costs and complexity.

Protect the patients and data that matter most.

How do we react during an attack?

Detect:
Many cybersecurity incidents go unnoticed for months, giving hackers ample time to explore your networks, locate sensitive information, and slowly and carefully extract it.
Get global threat intelligence, advanced sandboxing, and real-time malware blocking to help prevent breaches in your healthcare organization. But because you can't rely on prevention alone, you need the tools to continuously analyze file activity across your extended network, so you can quickly detect, contain, and remove advanced malware.

Know who and what is on the network and exactly what is happening in real-time using telemetry from your network infrastructure. Detect advanced threats and respond to them quickly. Protect critical data with smarter network segmentation. And do it all with an agent-less solution that grows with your healthcare organization.

Respond:
The ability to respond to an attack is a bit like an insurance policy:
No one ever wants to use it, but you have to have it when disaster strikes. You may have suffered a breach already but simply haven't discovered it yet.

Analyze the effects and spread of advanced malware for fast response. See which systems have been affected, how deep the malware has gone, and what steps you can take to recover quickly. Quarantine malicious code to protect other systems from infection.

Did you know?

Cisco delivers a comprehensive security portfolio for healthcare organizations. World-class threat intelligence, a leading services organization, and an architectural approach lead to a more effective, simpler security solution. Now you can confidently address critical challenges, including patient-data privacy, medical device security, ransomware and other malware.

Learn more about Cisco Secure and Cisco SecureX.

What’s next?

Chapter 5

Chapter 5:
What's next

Change. It's constantly redefining our healthcare landscape, whether triggered by technology innovations, cultural shifts, or world events. Healthcare organizations understand this and plan for it, putting continuity and recovery plans in place to help them maintain normal operations as much as possible. But, never before has your healthcare organization faced such rapid change.

This is where Cisco makes a difference. Cisco is and will continue to be your trusted technology partner in healthcare, delivering a portfolio of solutions that enable you to build a secure, intelligent platform for digital healthcare. From foundational connectivity and operational transformation, to industry-leading security embedded into everything we do, to the innovative tools critical to driving patient engagement and data-driven clinical workflows, we have the products and services you need to realize successful outcomes, faster. Together with our ecosystem of solution partners and the leading expertise of our Customer Experience organization, we help you transform care for the future.

Ready to get started? Explore Cisco's solutions for healthcare

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Thank you for reading

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