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Better Healthcare Needs Better IT

The latest tech trends driving improved patient, provider, and staff experiences

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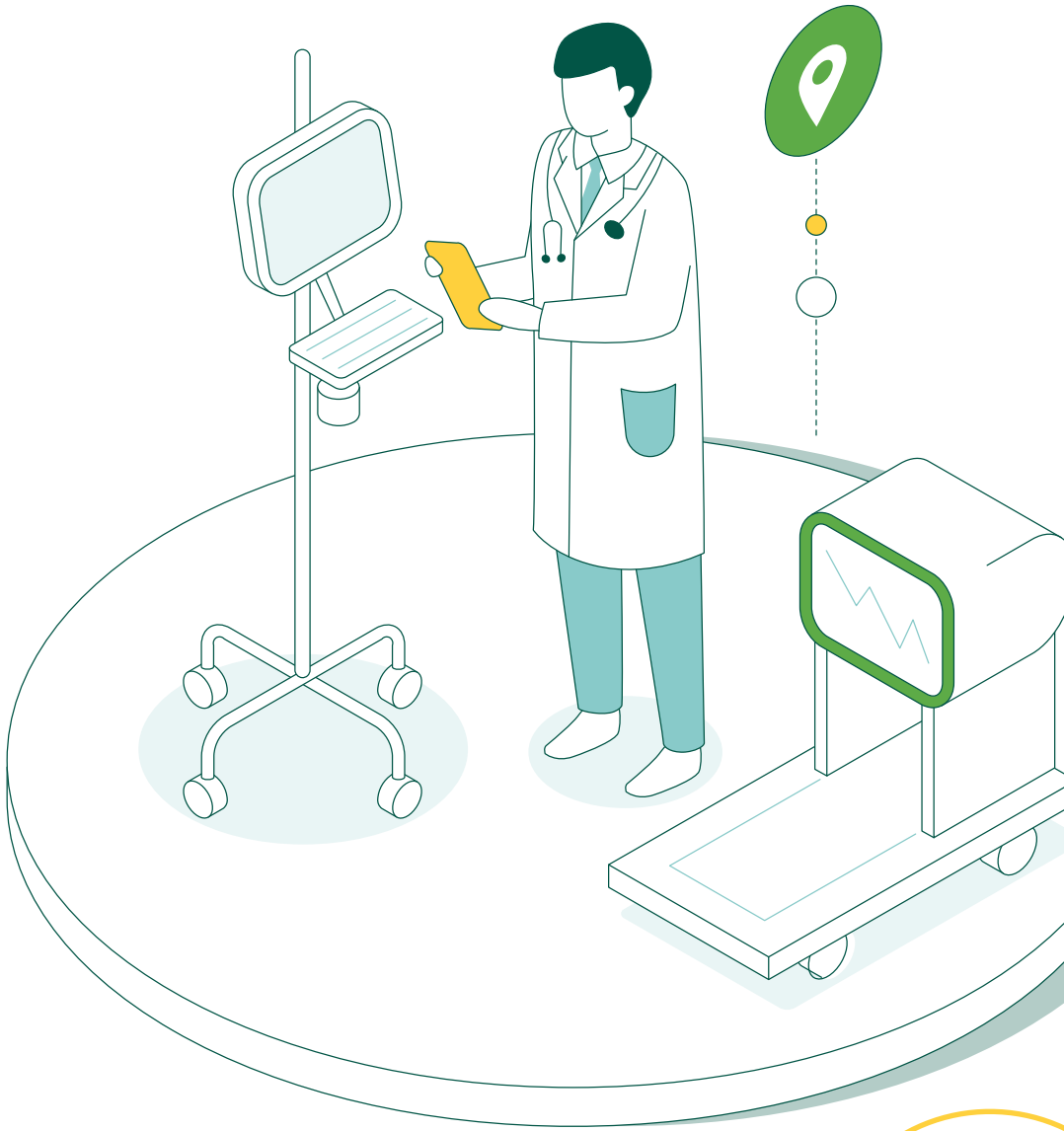
Technology can play an important role in improving healthcare experiences for everyone. Demand for care is outpacing workforce challenges and at the same time, patients expect more with digital services. These are driving a need for a modern infrastructure that can deliver better care, at scale, safely and securely.

By 2025, 80% of U.S. health systems plan to invest in digital health technologies. (Source: HIMSS' Future of Healthcare Report).

Digital health innovations are increasingly complex and connected. As services grow, healthcare systems are developing and hosting a greater number of applications across hybrid environments. There is an increased need for reliable, secure connectivity to ensure these applications and data can support client-dense, low-latency medical devices and workflows.



Modernizing IT infrastructure can transform operations, drive health equity, and provide the foundation for future-proofing medical facilities.

Discover some of the latest healthcare IT trends that are helping medical providers deliver on a modern, secure, and simplified technology experience.

Even highly regulated industries get the best of both worlds with a hybrid cloud

While adoption of cloud networking continues to grow in healthcare, that's only half the story. The majority of healthcare providers opt for a hybrid cloud model, keeping network activity and data both on premises and in the cloud.

Because there is no single hybrid cloud configuration, organizations can adopt a model that works for them. From efficiently transferring electronic health records (EHRs) to offering telehealth; managing complex claims and billing workflows; and securing, protecting, and backing up medical imaging files or patient health

information (PHI), hybrid cloud models provide flexibility to run apps and store data on premises, at the edge, or in the cloud. And when workflows are manageable and efficient, department collaboration can improve, which ultimately results in better patient care.

Modernizing IT infrastructure does not happen overnight. Given the complexity of healthcare IT systems, the hybrid model allows organizations to manage their transformation at their own pace, within their budget and customized to their needs.

73%

of surveyed healthcare organizations report using multiple public cloud vendors. (Source: TechTarget)

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NetBrain

NetBrain Next-Gen is designed to automate any network management task for any hybrid network, regardless of technology complexity.

Treating the symptoms of workforce pressures with automation

Healthcare organizations are struggling with increasing stress, absences, lack of time to train new staff, and reduced morale, leaving patients with a diminished quality of care. In 2022, the **healthcare vacancy rate** hit more than 8.0%, second only to hospitality services.

And it's not just healthcare staff. IT staff are also difficult to hire and retain, especially top talent with the expertise to deploy and maintain advanced network infrastructures.

While hospital administrators are navigating labor shortages, IT can help alleviate the pain for current healthcare providers and staff.

Examples include:

- Leveraging data analytics to inform staff schedule planning and optimize staff resources on a day-to-day basis
- Automating repetitive or manual processes, such as identifying rooms ready for cleaning, delivering food with robotics, or monitoring hallways for wandering patients
- Protecting assets and staff with real-time location services (RTLS) to optimize asset tracking and improve worker safety
- The ability for IT staff to leverage artificial intelligence/machine learning (AI/ML) and automation to build intelligent networks that can provide insights and alerts to speed up troubleshooting and save time on routine updates

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AiRISTA Flow

AiRISTA Flow's Unified Vision platform uses wireless tags for patients, staff, and equipment that help with patient flow, asset tracking, wander management, and staff safety.

Caring for patients where they are with telehealth and virtual care

Virtual visits provide care at a distance through secure voice and video technology, improving patient access to care and clinician productivity.

From in-patient acute, primary, and chronic care and follow-ups to outpatient behavioral health, wellness, and support groups, the availability of video visits has come to be expected by patients. And given the physician and clinician shortage and the need for specialists, particularly in rural areas, telehealth can reduce geographic

barriers and improve access to care, regardless of location, and demonstrate a provider's commitment to patient well-being.

Telehealth can also enable virtual consultations for multi-party specialist care teams and family members, and workflows for scheduling, billing, identity management, and EHRs can be integrated with telehealth platforms and managed via the network.

Virtual care that is secure, simple to use, and feels like a face-to-face interaction can help lay a foundation for inclusive care for all.

"Telehealth will continue to be the leading technology investment for healthcare organizations well into 2023 and beyond." (Source: HIMSS)

Modernize and simplify the security tech stack with more than just a data breach bandage

The digitalization of care is creating a more complex and rapidly evolving threat landscape. The healthcare industry remains one of the most highly targeted industries for cyber attacks. The high value of PHI and EHRs are sensitive and more comprehensive than any other type of record, making health information a valuable target for cyber criminals.

As a result, the need to modernize and simplify the tech stack is critical. Adopting a secure, hybrid cloud platform

can help hospitals maintain HIPAA compliance, proactively identify problems, back-up on-premises data, defend against emerging threats, and protect patient data before users are impacted.

Security breaches can destroy trust and endanger health as well as lives, and data is the backbone of modern cloud healthcare. Hospitals that modernize and secure existing networks not only help boost operational efficiency and prioritize cybersecurity, but also ensure a superior and trusted patient and clinician experience.

Healthcare data breaches doubled between 2019 and 2022 (Source: Health Sector Cybersecurity Coordination Center)

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BOUNDLESS DIGITAL

With Boundless Access Control, mitigate data breaches and network breakage by choosing the exact menu a user is authorized to view and modify and restrict access everywhere else.

Deliver secure access—anywhere, anytime, on any device—with IoMT

The Internet of Medical Things (IoMT) is the network of internet-connected wireless sensors, medical devices, equipment, and wearables. IoMT enables these devices to rapidly communicate and store data in the cloud that can be shared with authorized staff and patients to provide insights that can drive improved care.

The benefits to healthcare providers, patients, and hospital administrators are many, including:

- Providing doctors with information to make faster, more accurate diagnoses

- Supporting telehealth patients with opportunities to resolve minor issues remotely
- Offering tools to better manage people, places, and things, including patients and staff, waiting times, drug inventory, and critical equipment availability

IoMT creates troves of personal data, requiring the need to protect and prevent device breaches across mobile, medical, and infrastructure endpoints. Secure and reliable access to public and private cloud, on-premises patient data, and medical systems anywhere, anytime, and from any device is critical.

The global Internet of Things (IoT) in healthcare market size is projected to reach USD $446.52 billion in 2028. (Source: Fortune Business Insights)

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Ordr offers the only purpose-built platform to discover and secure every connected device, from traditional servers, workstations, and mobile devices to Internet of Medical Things (IoMT).

Improve patient care with better network connection and speed

A single hospital or medical facility network can serve thousands of connected devices every day. Healthcare professionals, staff, patients, and visitors connect to the network with medical devices, telehealth equipment, or personal phones and tablets. In high-density spaces, this can be challenging for network coverage and impede the delivery of critical operations, data, and applications.

Wi-Fi 6 provides sufficient capacity and efficiency for healthcare settings, accommodates many more devices in dense locations, adds better coverage, and improves resource management to deliver a quality user experience.

Next-generation Wi-Fi 6E offers even faster wireless speeds and lower latency. This can advance patient care and experiences given the expected increases in telehealth and video chat phone systems. It also provides better performance for large medical equipment, such as X-ray and MRI machines, that connect to the Wi-Fi network and consistently push several gigabytes of data at a time.

With the proliferation of new devices and sensors being added regularly, Wi-Fi 6E can help healthcare organizations achieve goals and provide a higher level of patient care.

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V-App analyzes Wi-Fi network data to generate insights such as visitor connection times, device types and dwell times, access points that are not performing as desired, and historical data reporting.

Healthcare systems want to accelerate the journey to sustainability

Smart, connected, and sustainable spaces are the future of healthcare. Digital technologies are increasingly being used to deliver care and informed patients expect improved and personalized experiences. While healthcare systems are responding to demand, they are also now investing in solutions to address environmental, social, and governance goals (ESG) to reduce energy consumption, water usage, and waste.

A converged technology infrastructure can address energy efficiency, decarbonization, and overall operating cost reductions, helping move the organization forward on their sustainability journey. On-site, it offers greater control and visibility of site-wide lighting, blinds, doors, HVAC systems,

building management, and physical security systems. Off-site, patients leveraging telehealth services can connect with their provider from anywhere, thus reducing the need for travel and helping to decrease greenhouse gas emissions while eliminating the waste of protective gear.

Delivering care from anywhere, streamlining workflows, and transforming operations can help support sustainable business initiatives for both near- and long-term ESG goals.

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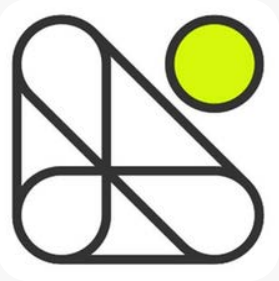

Take control of your hospital facilities, avoid costly disruptions, and digitally transform your organization with V-App IoT Builder and Cisco Meraki sensors.

Meraki

Technology is today's driving force for better patient and provider experiences.

There are many challenges for healthcare organizations when it comes to modernizing IT. With the right technology in place, employees and staff can enjoy modern, secure, and simplified experiences that improve care for everyone.

Read our healthcare solution guide to learn more.

GET THE GUIDE