

4 ways to make networks easier to manage

The right IT strategies help healthcare practices do more with less



Digital communication has become essential to the continuum of care and the patient experience. Telehealth services and electronic health records (EHRs) demand a growing share of technical resources, regardless of how stretched these resources are already.

The market for connected healthcare technologies is expected to grow by 19.9 percent annually over the next five years.³

Maintaining the network day to day becomes even more of a challenge as practices rapidly adopt new technologies to remain competitive. For example, according to HIMSS, healthcare providers have seen the average number of telehealth interactions increase by 145 percent since February 2020.¹ Plus, the market for connected patient technologies and other components of the internet of medical things (IoMT) is expected to grow 19.9 percent annually over the next five years.² On top of that, HD-video, high-resolution imaging and data from EHRs will continue to put more demands on bandwidth and performance from providers' networks. As their systems grow more complex, healthcare organizations must discover new approaches to keep them running and optimized with limited IT resources.

This guide outlines four ways for healthcare practices to simplify network management while also controlling costs, improving visibility into system performance and reducing demands on IT.

- 1 Consolidate your service providers
- 2 Consider an all-in-one solution
- 3 Make the network visible
- 4 Outsource network management



Nearly half of healthcare IT leaders report that integration problems have negatively affected patient care.⁴

1. Consolidate your service providers

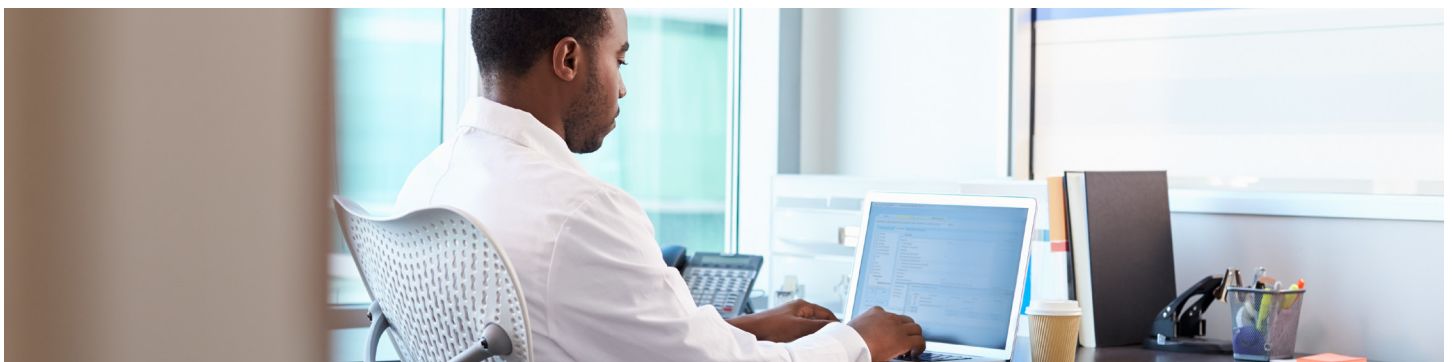
For many healthcare practices, their network architecture is a patchwork of solutions compiled over the years to meet the expanding needs of organizational growth, care delivery and skyrocketing requirements for digital health. The resulting network can rely on multiple vendors providing individual services or hardware with little to no knowledge of how their components contribute to the organization's IT operations as a whole. If a practice experiences a network outage or performance issue, IT personnel must hunt down the part of the network at fault before they can contact the right vendor for resolution. Likewise, when hardware replacements or firmware upgrades are required, it's up to the IT team to ensure the changes won't interfere with existing integrations that keep the network running.

Transitioning to a single provider for networking and connectivity services cuts down the administrative complexity. With one partner delivering networking solutions, connectivity and security services, there is a single number to call for support. Network solutions are designed from the outset to work together with simplified processes for maintenance and adding new locations. Just as important, a provider of multiple services can help the organization uncover cost efficiencies in network design and ensure solutions can adapt to innovation in the future.

2. Consider an all-in-one solution

In many cases, it's possible for healthcare providers to bring entire networks into a single platform. These all-in-one solutions are ideal for IT-lean practices currently tasked with maintaining multiple network solutions at one or more locations. Many integrated networking platforms are offered as managed services and transform capital costs into ongoing operating expenses that reduce the budget impact of network upgrades. These can include routers, switches, WiFi, SD-WAN and security that, individually, would compound the organization's network maintenance.

An all-in-one networking solution also removes the risks and uncertainties of interoperability across components from different vendors. In a recent HIMSS study, 85 percent of respondents said they experienced project delays stemming from integration challenges, and nearly half said integration problems have negatively affected patient care.⁵ Complex networks with multiple integrations also create more potential security vulnerabilities. Threats directed at healthcare organizations are on the rise — an alarming trend in a field where providers are accountable for the digital privacy protections required by HIPAA. One report estimates healthcare will suffer two to three times more cyberattacks in 2021 than the average for other industries.⁶ A unified solution can reduce that risk.



A central portal for an entire network gives healthcare practices greater control in less time.

3. Make the network visible

IT administrators need thorough, up-to-date data to configure their networks for optimal performance. And it's much easier to make effective decisions when they can view all of that data in one place. A dashboard for managing a LAN or WAN, for example, might show an uptick in video traffic. But without visibility into the wireless network, it might not be apparent whether that surge is coming from providers conducting telehealth visits or patients streaming shows on the guest WiFi. Real-time and historic data compiled from multiple network components allows healthcare practices to monitor performance and set effective policies.

Unifying your network services with a single provider opens the potential to visualize and manage a practice's entire network from a central portal. Having a central view across network components also makes it easier to leverage capabilities like traffic shaping, which can prioritize the data of critical applications for faster and more reliable performance. The same is true for security, as a portal simplifies the administration of firewalls, unified threat management and intrusion detection, offering comprehensive security reporting for a holistic view of network threats. A central portal for multiple IT systems gives healthcare organizations greater control of their networks in less time.

4. Outsource network management

Medical practices must now do more with less, even as the demands on their networks grow. Practices surveyed by the Medical Group Management Association reported an average 55 percent decrease in revenue at the beginning of the COVID-19 pandemic, with many forced to lay off staff.⁷ And while there has certainly been a rebound, these same providers face increasing costs associated with care as well as skills shortages in IT.

For small practices, it can be difficult to find one person capable of supporting IT needs, including voice services and network security — let alone all the other roles that same person may have to fulfill within the practice. Mid-size healthcare organizations might have the IT resources to cover IT tasks but would often rather dedicate them to digital initiatives that improve patient care, as opposed to routine maintenance. Managed services offer an alternative that can make IT operations more efficient and expenses more predictable.



A managed services partner can ensure firmware and security updates are automated across network components while providing the hardware for WiFi, firewalls and routing without a capital investment on the part of the provider. Co-managed services can offer centralized control of policies and configuration options while expert support remains available 24/7/365. The results often include improved network performance, faster problem resolution and a smarter allocation of limited resources that can improve the patient experience.

Find the right approach to streamline your network management

Practices continue to adopt new technologies that demand more from their networks. At the same time, the IT teams supporting providers often run lean and can benefit from every opportunity to reduce the day-to-day work of monitoring and maintaining the systems essential for patient communications, secure data transfer and reliable connectivity. By rethinking how networks are designed and managed, new approaches to IT can help healthcare organizations run more effectively as they evolve to meet the digital needs of their patients.

Explore the ways you can simplify your practice's network modernization with Managed Network Edge from Spectrum Enterprise.

[Learn more](#)

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3. Ibid.
4. "Top Integration Challenges in Healthcare IT," HIMSS Media and OpenText, Dec. 12, 2019, <https://blogs.opentext.com/top-integration-challenges-in-healthcare-it/>.
5. Ibid.
6. Steve Morgan, "Healthcare Industry to Spend \$125 Billion on Cybersecurity from 2020 to 2025," Cybercrime Magazine, Sept. 8, 2020, <https://cybersecurityventures.com/healthcare-industry-to-spend-125-billion-on-cybersecurity-from-2020-to-2025/>.
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