

HIMSS research identifies five areas of focus to enhance innovation

Connectivity is critical for healthcare innovation. Prior to the digital transformation of healthcare, connectivity was undervalued and was treated as a commodity, like electricity. But not anymore: Connectivity has moved front and center as hospitals and health systems work to improve patient outcomes and patient experience via digital innovation.

The rapid growth of digital innovation is pushing healthcare organizations outside of their comfort zone in terms of connectivity. That is why they have begun looking to their vendors to serve a more expansive role as innovation partners.

Research by HIMSS Media, in collaboration with Spectrum Enterprise, found that only 1 of 3 healthcare organizations are highly confident they are maximizing the value from their connectivity-vendor relationships (Figure 1). The three-part research series, titled *Anatomy of Innovation*, identified five specific types of technology services where it can be beneficial for organizations to work with their connectivity partners to maximize innovation. The five services are data connectivity, managed network services, TV/video, voice and cloud.

Data connectivity

One-quarter of respondents said vendors have demonstrated "proven innovation" regarding data connectivity (e.g., broadband, fiber Internet, fiber Ethernet). An additional 52 percent said vendors have demonstrated "promising activity" in data connectivity (Figure 2).

Data connectivity is the foundation for healthcare innovations, including real-time, evidence-based clinical decision support and big data analytics. Big data analytics provides

organizations with insight into everything from administrative and process efficiencies to effective revenue cycle management to optimized patient and population health.

Connectivity — with an emphasis on interoperability — is also a priority for the Centers for Medicare & Medicaid Services (CMS). Now that the overwhelming majority of hospitals have adopted electronic health records (EHRs), the EHR Incentive Programs

Figure 1. Maximizing value from connectivity vendor relationships

How confident are you that you are maximizing the value from your relationship with your connectivity vendor?



Anatomy of Innovation: Optimizing Technology Partnerships, conducted by HIMSS Media and sponsored by Spectrum Enterprise, October 2019.

Percentages are rounded to the nearest whole number and may not equal 100%.



"By working with a connectivity vendor as an innovation partner, organizations can identify and implement technology services that will provide a foundation for innovation and help to make their connectivity infrastructure future-ready."

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have been subsumed into the Promoting Interoperability Program.² Data connectivity is essential for executing the new CMS program objectives.

As healthcare organizations evaluate their current data connectivity, they are looking at reliability and security first and foremost, but also capacity, speed, scope, system redundancy and performance. The right connectivity vendor can help organizations assess their existing connectivity and make recommendations for changes or upgrades that support not only today's innovations, but emerging digital innovations, as well.

Managed network services

Seventy-nine percent of respondents said connectivity vendors have demonstrated "proven innovation" (21 percent) or "promising activity" (58 percent) in the area of managed network services (e.g., SD-WAN, routers, security and/or WiFi). Hospitals and health systems are finding that partnering with a vendor with managed network services expertise can help remove the day-to-day burden of managing the organization's IT infrastructure. This lets IT teams focus more resources on innovative initiatives that directly impact patient experience, a primary driver for healthcare innovation.

Managed network services support innovation by providing a connectivity foundation with fast and reliable connectivity, network flexibility and security, and seamless network performance. Also, when the equipment is owned, maintained and updated by a connectivity vendor, organizations don't experience downtime because of outdated hardware.

In addition to support for innovation, respondents identified enterprise growth, concerns about security, network integration, improved WiFi and better patient care as reasons they are looking to expand managed network services. The advantage of working with a vendor as an innovation partner in this area is the vendor has the technical expertise to recommend the most appropriate and cost-effective solutions to support the organization's goals.

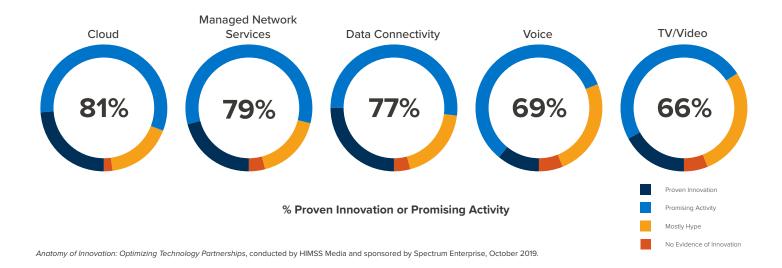
TV/video

In the TV/video category, respondents were somewhat more skeptical of innovation promises. While 2 of 3 respondents felt vendors had demonstrated "proven innovation" (17 percent) and "promising activity" (49 percent) in TV/video services, 1 of 3 respondents felt innovation in TV/video was "mostly hype" (28 percent) or "showed no evidence of innovation" (6 percent).

This is an area where working with a connectivity vendor as an innovation partner can make a difference. For example, the right vendor can offer solutions that integrate with interactive patient systems (IPS), which can have far-reaching impacts on the patient experience.³ An IPS — supported by a high-performance fiber network — can be used to deliver customized patient education, provide patients with room control access (e.g., change room temperature, turn on reading lights) and virtual connection with family and friends.

The HIMSS Media research found that healthcare organizations are particularly interested in leveraging TV/video to increase

Figure 2. Vendors are bringing varying levels of innovation to connectivity solutions



patient engagement. One project manager wrote: "We want to make the member's experience in the inpatient and ambulatory setting better and more immersive. An example of this is utilizing TVs in the exam rooms to show educational content related to their visit." Another respondent said, "We are working with our vendor for patient education content and for interactive patient solutions."

Voice

More than two-thirds of respondents saw evidence of "proven innovation" (11 percent) or "promising activity" (58 percent) in voice services. Yet, 1 of 3 said innovation in voice services was "mostly hype" (25 percent) or "not in evidence at all" (6 percent). At the same time, more than half of respondents (56 percent) identified voice services as either "critical" or "very important" to the advancement of their digital health innovation initiatives.

How to explain these somewhat contradictory results? Voice services are currently in a transitional stage. Reliable voice service has been a foundational part of healthcare delivery long before the Internet came on the scene. So, in one sense, voice is a very old technology.

Nevertheless, voice is at the forefront of many digital health innovations. For example, one large EHR vendor is developing improved clinical documentation-support technologies that include voice-assisted tools to help clinicians complete documentation.⁴ Another example of innovation in voice services was implemented by a healthcare provider in Minnesota. Researchers found that patients who had recently been diagnosed with Type II diabetes had more success in retaining patient education information when it was delivered via a dedicated voice assistant, rather than via a paper pamphlet.⁵

Innovations like these rely on a powerful, reliable, scalable and secure communications infrastructure. In addition to reliability and scalability, hospitals and health systems are looking for voice technology that streamlines and unifies communications

across the enterprise. The right vendor will offer cost-effective voice solutions that leverage technologies such as trunking and unified communications to deliver streamlined, integrated, enterprise-wide voice support.

Cloud connectivity

Eighty-one percent of respondents identified cloud services as an area in which connectivity vendors have demonstrated "proven innovation" (24 percent) or "promising activity" (57 percent). Cloud-based EHR systems continue to gain traction, as healthcare organizations choose to get out of the business of on-premises hardware and application maintenance and move toward software-as-a-service (SaaS) solutions.

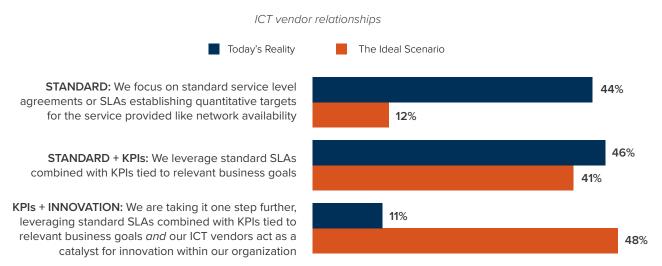
One EHR senior analyst said: "Cloud-based services are helping us future-proof against the changing nature of information services. We are adopting more platform services as opposed to doing everything in-house." For cloud-based innovation to work, however, organizations need powerful, dependable and secure connectivity.

"By working with a connectivity vendor as an innovation partner, organizations can identify and implement technology services that will provide a foundation for innovation and help to make their connectivity infrastructure future-ready," said Theresa Dudley, Spectrum Enterprise Manager of Healthcare Programs.

Vendor partnerships key to enhancing innovation

Hospitals and health systems are beginning to appreciate how working with their connectivity vendors as an innovation partner can accelerate their innovation initiatives. While only 1 of 10 said their vendors currently serve as a catalyst for innovation within their organizations, nearly half of respondents (48 percent) indicated that in the ideal scenario, they would expect to work with their connectivity vendor as an innovation partner (Figure 3). As one respondent said, "I expect my connectivity vendor to have not only a technical skill set with new technologies, but also innovative ideas to meet our organization's goals."

Figure 3. Nearly half of organizations would like to have an innovation partnership with their connectivity vendors



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Working with a connectivity vendor as an innovation partner implies a change not just in perspective, but also in process. Before the advent of transformative digital innovation in healthcare, organizations might have treated their connectivity vendor as an afterthought. In other words, the typical process would be to identify potential innovations internally and then bring the connectivity partner in at the end of the process to provide the infrastructure to implement those innovations.

In this new digital age, it can pay to bring the connectivity partner in at the front end of conversations about innovation. With their breadth of expertise in innovative technology solutions in a healthcare setting, connectivity vendors can contribute to conversations about innovation from the beginning of the process.

"The right connectivity vendor can do more than simply implement solutions and meet standard service level agreements," said Dudley. "As a true innovation partner, the right vendor will be able to proactively contribute ideas and expertise that can advance innovation throughout the enterprise."



Visit <u>Spectrum Enterprise</u> to explore ways your connectivity vendor can serve as your digital health innovation partner.

This white paper is the third of a three-part series by HIMSS Media, in collaboration with Spectrum Enterprise, to uncover what differentiates innovation-ready healthcare organizations from organizations that are struggling to innovate.

References

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