OVERCOMING CHALLENGES TO DIGITAL HEALTH INNOVATION

HIMSS research identifies challenges, suggests solutions to advance innovation

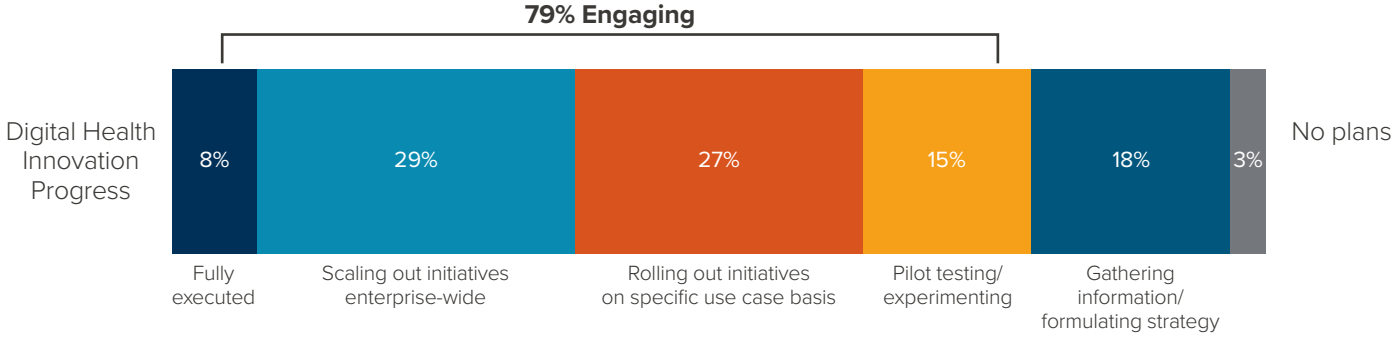
Hospitals and health systems are acutely aware of the importance of digital health innovation and its ability to increase efficiency, simplify processes and attract more patients through an enhanced patient experience.

In a recent survey of 200 healthcare IT decision-makers (ITDMs), conducted by HIMSS Media and sponsored by Spectrum Enterprise, respondents identified "leading innovation or digital health efforts" as a priority that has increased in importance over the past year.[1] And nearly 8 of 10 respondents reported being engaged in digital health innovation at some level, ranging from pilot testing or experimenting with digital health initiatives to full execution (Figure 1).

However, less than one-third of respondents (29 percent) said they have begun scaling out digital health innovation initiatives enterprisewide. Only 8 percent reported having "fully executed" digital health initiatives. What is hindering digital innovation at healthcare organizations? Respondents identified several different challenges they face in seeking to prioritize innovation.

Figure 1. A majority of organizations are engaged in digital health initiatives

What is the extent of your organization's digital health initiatives?



Anatomy of Innovation: Overcoming the Challenges of HIT Innovation – The ITDM Perspective, conducted by HIMSS Media and sponsored by Spectrum Enterprise, August 2019.

Innovation efforts hindered by competing areas of focus

One major challenge reported by respondents is making time for innovation. More than 1 of 4 respondents (28 percent) said it is "very challenging" to find a balance between innovation and day-to-day objectives. Another two-thirds (67 percent) said it is "somewhat challenging" to strike that balance. Information technology decision-makers at all levels of the surveyed organizations cited time constraints as a challenge to innovation.

When asked which activities are the primary focus of their time at work, respondents identified the concerns that compete for their attention (Figure 2). The majority (70 percent) identified "improving operational performance" as their primary concern. Just over half (54 percent) said "managing/resolving routine functional needs" absorbs much of their time. As one nurse informaticist explained: "It's so easy to get bogged down in the day-to-day whack-a-mole of fixing things and not take time to innovate."

The same percentage of respondents (54 percent) named "implementing new approaches, systems, and technologies" as their second-most time-consuming task. Three additional activities that consume a lot of time included "cost control/expense management" (49 percent); "aligning IT initiatives with business/clinical goals" (39 percent); and "redesigning business/clinical processes" (32 percent).

Dealing with multiple areas of focus can leave IT decision-makers with little time to innovate. As Figure 2 shows, fewer than 1 in 4 respondents said they have time for "identifying opportunities for innovation." And only 16 percent of respondents identified "leading innovation or digital health efforts" as a primary focus of their time at work. One CEO summed it up this way: "Day-to-day operations often require a large amount of time and commitment. Creativity and innovation [also] require time, followed by more time, to see these ideas [materialize]."

A digital health innovation 'wish list'

IT decision-makers were also asked, "If you could change one thing to advance digital health innovation, what would that be?" As would be expected, the answers varied. But most answers touched on one of five overarching themes (Figure 3):

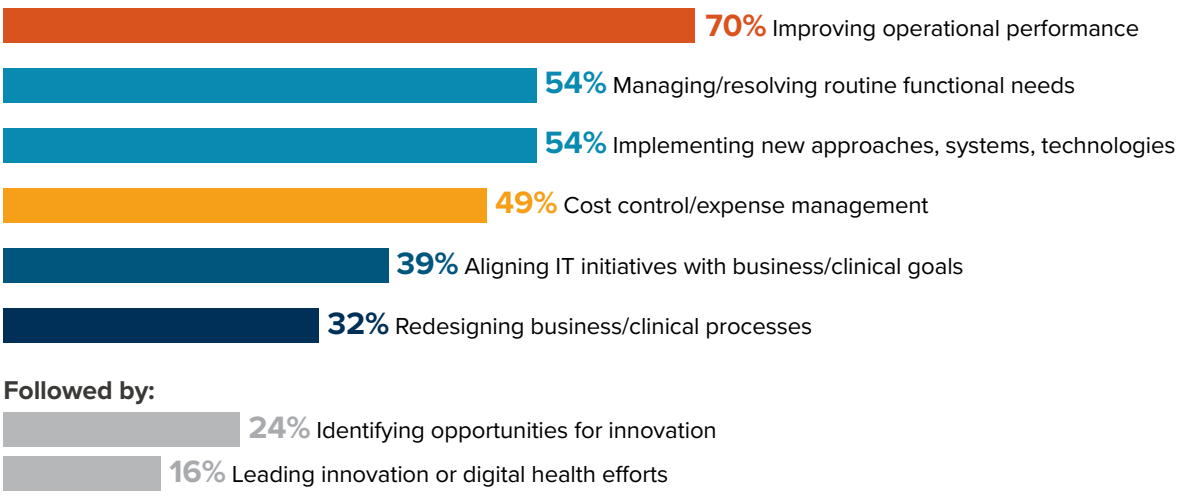
1. **IT modernization.** One of 5 respondents (20 percent) named actions related to IT modernization as the "single thing" they would change to advance digital health innovation at their organization. In this category, some suggestions were very specific. A systems engineer suggested that "improvements to VOIP and video-conferencing communications software and hardware" would be the one change that would advance his organization's ability to innovate. Other respondents were more general. A medical director asked for "more automation." An IT engineer suggested "modernize the infrastructure." And one IT director simply said, "Upgrade everything."

2. **Better cross-functional communication.** Sixteen percent of responses identified better communication as the key to advancing innovation. One COO said: "Communication [is what we need]. We have a very busy hospital and team, and are sensitive to not wasting productive time in meetings, but we need to communicate better across the organization." Several respondents cited "siloed" communication as a problem and emphasized the need for all areas — from IT to front-end users, and from business/financial to clinical — to be able to communicate about IT initiatives.

Figure 2. Competing, day-to-day priorities leave little time to innovate

Which of the following activities are the primary focus of your time at work?

Top 5 chosen



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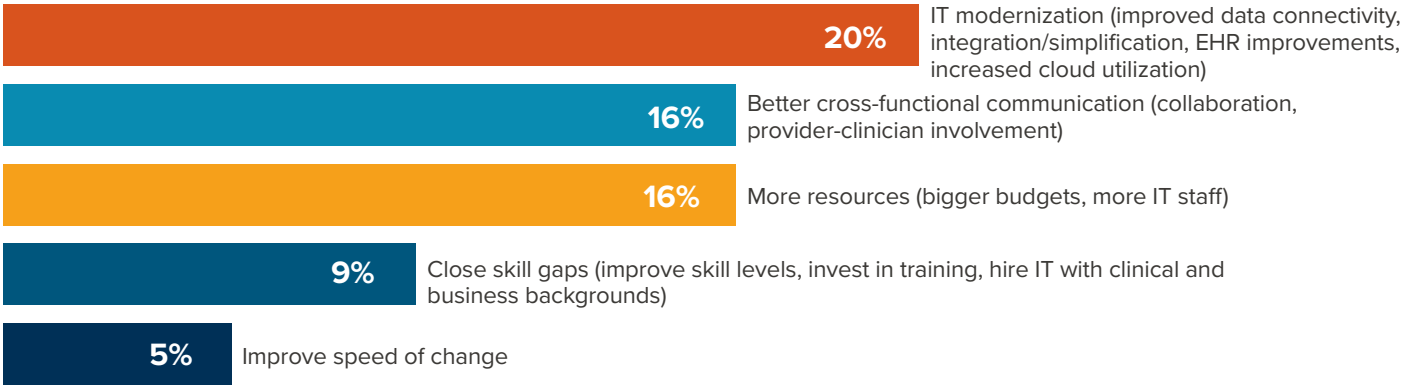
Patient care is the core competency of healthcare organizations. Connectivity and communications technology typically are not, but partnering with an organization with expertise in those areas can help close the skills gap.

Figure 3. If you could change one thing related to communications and connectivity technology to advance digital health innovation ...

Data based on the most commonly themes reported



"Improved communication across the enterprise would increase the organization's ability to innovate [and] advance its digital health initiatives," said a systems analyst. IT also needs to "speak with end users," urged a clinical program coordinator, a sentiment echoed by many other respondents. "Don't put in IT solutions without involving health operations. Those plans don't succeed," said a nurse informaticist.

3. **More resources.** Sixteen percent of respondents identified "more resources" as the "one thing" they need. The desired resources encompass capital budget, operating budget, hardware, software and staff. An IT staff member said, "[We need] a bigger budget, of course!" A clinical nurse informaticist suggested that the key to getting more resources is to "increase [the] importance of IT in the organization and back up that support with an increase in staff, budget and control over IT projects." Many respondents focused on the need for additional staff. One clinical informaticist said: "If you want to be innovative in healthcare, you need sufficient staff to support existing systems, implement new systems, and be readily available for all areas of the hospital. One person/clinical informaticist supporting all aspects of a 400-bed hospital is not sufficient." Sometimes addressing this challenge is about the efficient management of existing resources. For example, outsourcing the day-to-day management and maintenance burdens on the IT department can allow the team more time to devote to innovation.

4. **Close the skills gap.** Nine percent of respondents cited "closing the skills gap" as the one thing needed to facilitate innovation at their respective organizations. Suggestions ranged from "more training opportunities" for existing staff to an emphasis on hiring people with the requisite technology skills. Outsourcing specific technology services — such as using a managed services solution for the connectivity infrastructure — is another way some organizations address the technology skills gap. Patient care is the core competency of healthcare organizations. Connectivity and communications technology typically are not, but partnering with an organization with expertise in those areas can help close the skills gap.

5. **Improve the speed of change.** Five percent of respondents said improving the speed of change was what their organizations needed most in order to innovate. A chief medical officer said, "[We need to] decrease the time it takes to implement new initiatives."

Innovation strategies recommended by successful peers

A small minority of respondents (6 percent) said that finding ways to balance day-to-day objectives with innovation is not a problem at their organizations. What are their strategies for integrating innovation into their organizations' daily work? Three themes emerged from their responses:

1. **Strong strategic planning.** Organizations that are successful at innovation prioritize strategic planning. The

VP of operations at one organization said, “Our strong strategic planning makes [innovation] possible.” Environmental scanning is an integral part of the strategic planning process at organizations that have built a successful innovation culture. A senior analyst at one organization with a successful innovation culture said, “[We are] constantly evaluating and adopting new technologies and methodologies to adapt to changing security, healthcare, regulatory and research environments.”

2. **Effective communication.** Organizations that are successful at innovation also emphasize communication — at every level of the enterprise. One CIO said his organization’s culture of innovation is possible due to the “education of the administration team, board members and middle management of the role that IT plays in the organization.” But communication doesn’t stop with leadership. A senior analyst said: “I think the biggest thing that helps with the balance between forward thinking and day-to-day is that the CIO gathers all of his organization together quarterly, for several hours, and a lot of big-picture content is presented at those gatherings. This gives everyone in the organization, from top to bottom, the opportunity to think and talk about strategy and longer-range thinking, if they are interested in or inclined toward this.”

3. **IT alignment.** Alignment of the IT infrastructure with organizational innovation initiatives is also important. A chief financial officer from an organization that finds innovation “very challenging” said the one thing he would change would be to have “invested much more in our IT infrastructure.”

Leveraging connectivity infrastructure to overcome innovation challenges

Another important strategy used by successful innovation peers is establishing and leveraging a partnership with a connectivity infrastructure provider. Many of the items on the survey respondents’ ‘wish list,’ above, can be addressed with the right technology partner.

For example, a connectivity partner with a broad palate of solutions (i.e., internet, networking, WiFi, TV and voice) can help modernize the IT infrastructure across the organization. A single vendor that offers all of these solutions can provide an efficient and holistic approach to modernizing the IT infrastructure. Working with a single-source provider minimizes the time IT staff spend managing multiple vendor relationships and contracts.

Working with a connectivity provider that offers managed services can also help organizations address the shortage of resources and the skills gap that hinder digital health innovation. Managed connectivity services can reduce the burden of day-to-day activities on in-house IT staff, freeing up more time for innovation. Using managed services also helps IT organizations close the skills gap, by leveraging the IT expertise of their connectivity partners.

Taken together, the survey results show that successful digital health innovators can’t point to just one reason for their success. Instead, it is a combination of factors — including strong strategic planning, effective communication, IT alignment and the right connectivity partner — that makes digital health innovation work at healthcare organizations.

Listen to our webinar to discover how your organization can ignite digital health innovation.

This white paper is the first 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.

[1] *Anatomy of Innovation: Overcoming the Challenges of HIT Innovation – The ITDM Perspective*, August 2019., HIMSS Media conducted an online survey of individuals employed at U.S. hospitals and health systems with 26 or more beds. Respondents were employed in a mix of IT, business/administrative, and clinical functions in both management and staff-level roles.

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