From Crisis to Innovation: Unlocking the Path to True Digital Transformation

CHiME®
DIGITAL HEALTH LEADERS

DIVURGENT

Russ Branzell, President and CEO of CHIME, talked to leaders from a variety of healthcare providers on the cutting edge of digital transformation

Participating CHIME members:

Heather Nelson, CHCIO, CDH-E,
SVP & CIO
Boston Children's Hospital

Lisa Stump
SVP & Chief Information and Digital Transformation Officer
Yale New Haven Health and Yale Medicine

Kevin Conway
SVP, Chief Information & Digital Officer
Baystate Health

Joshua Longiaru, CHTS-PW
Director of Information Technology
United Services, Inc.

Naomi Lenane
CIO & VP of Information Services
Dana-Farber Cancer Institute

Joel Vengco, CHCIO
SVP and Chief Information & Digital Officer
Hartford HealthCare

divurgent.com

"As we emerge from the pandemic years, it's time for leaders to reassess what's possible and recommit to making transformational changes that will lead to longer-term financial sustainability and improved outcomes for patients."

SUMMARY

2023 has seemed like a long, slow exhale from the frenetic pace of the pandemic years. With a sense of increased control over the clinical side of COVID-19, health systems have started to turn their attention back to strategic initiatives, now informed by the valuable wisdom acquired from the crisis.

But for some organizations, it might feel like they are moving out of the frying pan and into the fire. Financial stressors are stronger than ever as staffing shortages, rising healthcare prices, and falling reimbursements combine with increasingly wary investors and a weak national economic outlook.

For others, however, these challenges are just opportunities in disguise.

"They say that necessity is the mother of invention, and we are truly seeing that play out among leading providers across the care continuum," observed Joe Grinstead, Executive Vice President of Delivery at Divurgent during a recent CHIME Thought Leadership Roundtable. "New technologies, new partnerships, and a fresh outlook on how to craft positive experiences are helping these organizations overcome some of the fragmentation that made COVID-19 so difficult to manage."

"As we emerge from the pandemic years, it's time for leaders to reassess what's possible and recommit to making transformational changes that will lead to longer-term financial sustainability and improved outcomes for patients."

The panel, moderated by CHIME President and CEO Russ Branzell, shared their areas of focus for the next several years and took a deep dive into the top trends affecting their organizations, including:

- Overcoming staffing shortages by improving experiences and embracing a hybrid workforce
- Integrating artificial intelligence and automation into clinical and administrative workflows
- Proactively managing cybersecurity to prevent hacks and breaches

CRAFTING AN "EXPERIENCE-LED" APPROACH TO WORKFORCE DEVELOPMENT

The pandemic stressed the healthcare workforce to its limits, prompting an exodus of hundreds of thousands of physicians, nurses, and administrative staff in acute care, primary care, and long-term care. Skilled staff remain hard to find, and healthcare organizations need to be flexible and adaptable when seeking to attract workers in a highly competitive market.

"Our healthcare workforce problem will require solutions that produce impact and experience for our colleagues," said Joel Vengco, CHCIO, SVP and Chief Information & Digital Officer at Hartford HealthCare. "We need to invest in partnerships and technologies that expand staff capacity, optimize their work effectiveness, and improve their work experience, all of which will be important to attract and retain our workforce."

> "Let no crisis go to waste in terms of advancing technology to solve problems."
>
> **Lisa Stump**
> SVP & Chief Information & Digital Transformation Officer
> Yale New Haven Health and Yale Medicine

The workforce experience was top of mind for all members of the panel, especially in light of backlash against stringent return-to-office plans in other sectors of the economy. While much of the business of healthcare does need to take place on site, executive leaders are getting creative about using the virtual environment to augment and extend in-person resources.

"Let no crisis go to waste in terms of advancing technology to solve problems," stated Lisa Stump, Senior Vice President & Chief Information and Digital Transformation Officer at Yale New Haven Health and Yale Medicine. "We are really shaping our people management strategies and digital infrastructure around experience-led delivery, which means focusing less on specific applications and more on how each component of our infrastructure contributes to a unified experience for patients, for care teams, and for operational and administrative staff."

"Thinking about different models to leverage the workforce is going to be crucial, whether it's extending the value of staff via virtual methods or investing in AI and automation in patient care, revenue cycle management, or other operational areas," she added.

For example, Yale/New Haven Health is one of several organizations using virtual nurse preceptorships — licensed clinicians working with students in a clinical setting for a defined period of time — to keep experienced nurses in the workforce for longer so they can pass on their knowledge to new graduates while taking advantage of the benefits of remote work.

Similarly, Baystate Health in Western Massachusetts has deployed virtual sitters for patients who might be a fall risk, reported Kevin Conway, Senior Vice President, Chief Information & Digital Officer.

"Bringing in virtual care extenders is crucial for freeing up clinical staff to spend more time on other aspects of day-to-day care," he said.

At Dana-Farber Cancer Institute, maximizing value from the hybrid environment is also a top priority, noted Naomi Lenane, CIO and VP of Information Services.

"We're piloting a digital competency program for our end users this fall," she explained. "A large portion of our organization is partially or fully remote, which is a very different experience for healthcare than pre-COVID. They've been living in this hybrid world for a while very successfully, but not always efficiently. Hybrid does change the way we collaborate and the way we educate users about updates to workflows and technologies."

"If we're going to continue pushing infrastructure into the cloud, doing major upgrades twice a year, and doing smaller improvements on a monthly basis, we need to set our employees up for success with that rapid pace of change by upskilling and ensuring they are comfortable with everything that's going on with our technology vision."

HARNESSING THE POWER OF EMERGING ARTIFICIAL INTELLIGENCE TECHNOLOGIES

Generative AI has set the tech world aflame in recent months with its potential to revolutionize the way humans interact with large data sets. The healthcare industry has been among the first in line to explore how these tools can simplify and automate cumbersome processes – but as with most technologies that require access to health data, there are some significant issues to address before seeing results.

"The first thing we did when Chat-GPT and Google Bard came on the scene was to send out a memo from executive leadership warning all curious users not to put any patient information in there for any reason," said Vengco.

"The second thing we did was to bring together all of our policies and procedures around data movement, privacy, and compliance so we could really understand how these tools can and should be used. That led to the creation of a governance group that takes first pass at approvals for any type of work we might be thinking about with generative AI. We're still trying to figure it all out, but we feel that putting structure in place quickly has helped get us on the right path."

Establishing strong governance around the use of generative AI is going to be an ongoing issue for healthcare entities, agreed Josh Longiaru, CHTS-PW, Director of Information Technology at United Services, Inc., which provides behavioral and mental healthcare services to Northeast Connecticut.

"It's a difficult topic for people to get their heads around, especially in behavioral health, where patient information is extremely sensitive and there are additional regulations about how it is used and shared," he said. "That's why we're initially looking at generative AI outside the clinical context. Maybe we can stop using Shutterstock for marketing images and start using Midjourney. Or we can adopt a chatbot for scheduling or checking their medication refills. It's very tricky area, but we're interested to see how it evolves."

There are numerous exciting use cases in healthcare for generative AI, which can create net-new visual, audio, or written content after ingesting billions of webpages and other documents during training.

Baystate Health is also looking at administrative efficiencies, said Conway. "We have thousands of patient portal messages coming in every day. It's a huge frustration for our providers, who go to see one patient for 15 minutes and come back to 40 new messages in their queue," he said.

A THOUGHT LEADERSHIP ROUNDTABLE
From Crisis to Innovation: Unlocking the Path to True Digital Transformation

CHiME
DIGITAL HEALTH LEADERS

"Right now, it's impossible to tell which are high-priority and which are more routine. We are piloting some AI capabilities to try to filter messages by looking for key terms and other indicators so we can rank them by urgency and address them in a prioritized manner."

Other members of the roundtable see opportunities for generative AI to provide chart summaries, assist with prior authorizations, and automate documentation or summarize meeting notes via ambient listening technologies.

Patient experiences can also be improved with generative AI, from simplifying website navigation with natural language prompts to scheduling appointments and ensuring that providers are current with each individual's clinical history.

"We'd like to see generative AI help solve the problem of a cancer patient walking in with a huge stack of records from a dozen different providers," said Lenane from Dana-Farber. "If we can have AI assemble a longitudinal record with appropriate summaries of key data, we could save a lot of time while making sure that nothing important gets missed in that fragmented record."

MAINTAINING A SECURE AND PRIVATE DATA ECOSYSTEM

With AI poised to change the way data flows through healthcare organizations, privacy and security will be more important than ever. A series of large, severe data breaches in 2023, including the catastrophic MOVEit cyberattack, has emphasized the importance of having full visibility into all points of infrastructure vulnerability.

"Hope is not a cybersecurity strategy," Lenane advised. "You have to cover all your bases, starting with basics like operating system updates. In the research environment, for example, you might have a microscope that's been hooked up to the same computer for 20 years, and that computer is still running Windows 8. Organizations aren't always very good at maintaining compliance with updates and patches, especially with non-critical infrastructure, but that's how vulnerabilities arise."

Cybersecurity training and awareness should be part of creating a positive, collaborative organizational culture, said Heather Nelson, CHCIO, CDH-E, Senior VP and CIO at Boston Children's Hospital.

"Security is about everyone being a good citizen of the organization and understanding that what they do affects everyone else around them," she said. "It's hard to change what you're used to, especially if you're talking about that microscope that's worked the same way for 20 years, but it'll be the right decision in the long run."

> "Security is about everyone being a good citizen of the organization and understanding that what they do affects everyone else around them."
>
> **Heather Nelson, CHCIO, CDH-E**
> VP & CIO
> Boston Children's Hospital

A THOUGHT LEADERSHIP ROUNDTABLE
From Crisis to Innovation: Unlocking the Path to True Digital Transformation

CHiME
DIGITAL HEALTH LEADERS

"The key for leadership is to reduce friction around cybersecurity education, create awareness of how human behavior impacts security, and encourage people to make those small but vital adjustments that will help keep the entire enterprise strong and secure."

CONCLUSION

The digital transformation of the healthcare industry is nowhere near completion. Providers still have plenty of work to do before their organizations are fully data-driven – and there are still many obstacles in the way that can slow down progress if not handled correctly.

"A lot of organizations are going to be spending 2024 trying to get back on track financially after COVID and investing in developing a workforce that is adaptable, flexible, and resilient," said Conway. "Organizations will need to prioritize the most meaningful clinical and operational projects that require technology to drive business objectives. That's a good thing, because aligning business objectives and strategic goals to our IT resources allocation allows us deploy digital solution at pace."

Simply keeping up with the rapid pace of regulatory, technology, and financial changes is going to be a challenge for all providers, Longiaru agreed.

"The industry as a whole is going through so many changes, even in areas that don't typically evolve that fast, like behavioral health," he said. "Change can be exciting if you have the right perspective, and we all need to make sure we keep a little of that excitement on hand so that we don't feel overwhelmed."

In 2024 and beyond, "true transformation" is the goal, concluded Nelson.

"We always talk about change, and people nod their heads and say they're on board. But when the rubber hits the road, sometimes those positive attitudes don't hold up," she noted. "Technology like AI and virtual care are going to be a part of building and maintaining momentum toward organizational objectives – but culture, leadership, and collaboration are going to be even more crucial for getting where we want to go."

"Every organization needs to figure out what makes it unique, what makes it tick, and lean on those strengths to get their people involved and engaged so they can really make a difference for patients and for the organization itself."

> "Organizations will need to prioritize the most meaningful clinical and operational projects that require technology to drive business objectives. That's a good thing, because aligning business objectives and strategic goals to our IT resources allocation allows us deploy digital solution at pace."
>
> **Kevin Conway**
> SVP and Chief Information & Digital Officer
> Baystate Health

DIVURGENT