

INTRODUCTION

Healthcare has always been, at its heart, a deeply human endeavor. Ask any clinician why they chose their profession, and the answer almost invariably centers on a desire to help people, to heal, to make a difference in others' lives. Yet, as the sector grows more complex, it faces a paradox: while technology and operational efficiencies can drive financial and clinical performance, they often leave people—healthcare workers and patients—feeling disconnected, neglected, or burnt out.

As healthcare leaders gathered at CHIME's Fall Forum 2024, they grappled with a central question: How do we harness technology's potential while preserving—and enhancing—the human connections at the heart of healthcare?

The insights in this white paper are drawn from CHIME's 2024 Fall Forum track session theme “Harmony in Health: Amplifying Voices for Collective Impact,” where healthcare leaders gathered to explore the fundamental challenges and opportunities in modern healthcare delivery. These panels demonstrate that the most effective solutions don't just implement new technology—they reimagine how technology can better serve the people who use it.

BALANCING SAFETY AND WELLNESS FOR PATIENTS, CLINICIANS, AND TECHNOLOGY TEAMS

Burnout in healthcare has reached critical levels, with over 60% of physicians reporting symptoms according to the American Medical Association—a significant increase since COVID-19. The cost is substantial: replacing a single clinician can cost healthcare organizations up to \$1 million when factoring in recruitment, onboarding, and lost revenue. Though even more problematic is burnout's impact on patient safety.

“Burned-out physicians are at a higher risk of depression, substance abuse, and even suicide,” explains Ed Lee, MD and CMO at Nabla. “This not only threatens their own safety and wellbeing but also impacts the quality of care they are able to provide to patients. Issues like reduced quality of care, lower patient engagement, and an increased risk of malpractice are more likely to occur when clinicians are experiencing burnout.”

Jeanette Curry, CIO at Cambridge Health Alliance, and Mark Zirklebach, CIO at Loma Linda University Health, joined Dr. Lee to explore solutions on how healthcare organizations can improve clinician satisfaction while maintaining patient safety.

The key to addressing this crisis lies in reimagining how we evaluate and implement healthcare technology. Before adopting new tools, health systems must ask critical questions: Does this technology relieve clinicians of administrative burdens? Does it integrate seamlessly into existing systems? Does it support clinicians so they can work at the top of their license? In essence, will this technology help to alleviate or exacerbate burnout?

At Cambridge Health Alliance, after provider satisfaction surveys revealed significant frustration, Curry's team launched two major initiatives. At Loma Linda University Health, after provider satisfaction surveys revealed significant frustration, Zirklebach's team launched two major initiatives. They piloted ambient listening technology that automatically converts patient-provider conversations into structured clinical notes. This allows providers to maintain natural patient engagement without typing during visits and reduces after-hours documentation time.

Meanwhile, at Loma Linda University Health, CIO Mark Zirklebach took a different approach by embedding IT teams directly within clinical departments. Instead of operating a traditional help desk model, IT staff were integrated into specific service lines like cardiology and oncology. As Zirklebach explains, “The conversations that happen between the meetings, after the meeting—that’s where the real value is.” This integration transformed the IT-clinical relationship from transactional to collaborative, enabling IT staff to better understand clinical workflows and develop more effective solutions through daily interaction with providers.

When technology is thoughtfully designed to address the fundamental needs of the people using it—rather than forcing people to adapt to the technology—it creates a virtuous cycle: improved clinician wellness leads to better patient care, which drives stronger organizational performance.

SURVEYS ARE FROM 1834. MEET THE 2024 APPROACH: AI FOR EMPLOYEE AND PATIENT ENGAGEMENT

Patient engagement is an important part of building collaborative relationships between patients and providers. It enhances adherence to treatments, promotes healthier behaviors, and leads to better health outcomes. For healthcare organizations, robust patient engagement translates into measurable benefits: decreased readmission rates, optimized resource utilization, enhanced clinical outcomes, and the delivery of truly patient-centered care that resonates with modern healthcare consumers.

Patient surveys play a crucial role in engaging patients and gathering valuable feedback, but traditional methods often fall short. Most surveys rely on rating scales—asking patients to assign a number to their experiences—which can result in empty, uninspired responses that fail to capture the nuances of patient needs and feelings. While these numerical ratings provide some insights, they rarely tell the full story. For healthcare organizations to truly understand their impact, they must go beyond generic scales and embrace more dynamic and personalized feedback mechanisms. This not only allows them to identify strengths and areas for improvement but also signals to patients that their voices are genuinely valued, fostering trust and collaboration.

When Ryan Cameron, VP of Innovation and Technology at Children’s Nebraska, looked at his organization’s patient engagement surveys, he saw more than just declining response rates – he saw a system that had lost touch with how people actually communicate in the modern world. “If we’re inclined to hang up the phone as soon as we’re asked to complete a survey, why do we keep trying to get feedback that way?” Cameron challenged his team to think differently about patient engagement.

The solution they developed was revolutionary in its simplicity: meeting patients where they already were – on their phones. Cameron and his team developed a survey program that leveraged short-form video content, similar to what we see on YouTube or TikTok. Clinicians send their patients, or in most cases at Children’s Nebraska, their patients’ parents a short video asking for feedback and inviting video responses. The switch didn’t just increase response rates, it transformed the quality of the patient feedback they received.

With the video-based approach, people felt more comfortable and relaxed, often sharing their thoughts candidly and authentically. They were more willing to participate, as recording a short video seamlessly fit into their daily routines. The quality of feedback soared, moving beyond the limitations of traditional surveys to capture a fuller spectrum of patient experiences. These open-ended responses revealed insights and solutions in unexpected places, reflecting the unique needs and perspectives of individuals.

BEYOND VIRTUAL VISITS: VIRTUAL HEALTH REMOVES BARRIERS AND ADDRESSES INEQUITY

While Children’s Nebraska enhanced patient engagement by connecting with patients digitally, the Medical University of South Carolina (MUSC) faced a different challenge: finding ways to reach patients where they are physically.

Answering this question meant confronting a stark reality – 41 out of 46 counties in South Carolina are designated Health Professional Shortage Areas. Patients in rural communities often traveled hours to see specialists, if they could get appointments at all. Wait times stretched to four to six months for essential specialty care like rheumatology, leaving patients suffering while their conditions worsened. On the operational side, providers were grappling with burnout and support staff had to trudge through increasingly complex workflows.

Recognizing these challenges, MUSC’s leadership saw an opportunity to reimagine healthcare delivery entirely—focusing not only on improving access for patients but also on supporting the healthcare professionals and staff vital to making quality care possible.

In January 2023, MUSC launched a groundbreaking initiative: a 100% virtual specialty care practice. The virtual practice allowed MUSC to expand their hiring pool, attracting top-tier specialists from across the country who valued the flexibility of remote work. Patients could schedule appointments online in three minutes and see specialists within days instead of waiting months, replacing a frustrating process of phone calls, hold times, and callbacks with a streamlined digital experience. This model not only improved access for rural and underserved communities but also addressed provider burnout by offering healthcare professionals a more balanced, adaptable work environment.

MUSC also built a comprehensive support system around this virtual care model. A dedicated team managed everything from pre-visit technical support to post-visit care coordination, ensuring patients received seamless care despite the virtual setting. When patients needed labs, imaging, or infusions, the team coordinated with local providers and handled prior authorizations, creating a closed-loop communication process that prevented patients from falling through the cracks.

After just 22 months, MUSC’s virtual specialty practice delivered impressive outcomes:

- **Patient Impact:** Over 13,500 visits conducted, with nearly 6,000 unique patients served. Satisfaction scores exceeded those of traditional care models by 4.2%.
- **Operational Efficiency:** Lag times for new patient appointments dropped from 90-120 days to under a week in most specialties.
- **Provider Retention:** By addressing burnout and offering flexible career paths, MUSC created a workplace that retained top talent and reduced turnover—saving the organization an estimated \$1 million per provider lost.

Perhaps most tellingly, patients kept coming back – their high return visit rate dispelled early concerns that patients would prefer in-person care. MUSC’s success illustrates the transformative potential of a people-first approach grounded in cultural alignment. By meeting patients, providers, and staff where they are—physically, emotionally, and professionally—MUSC redefined what accessible, sustainable healthcare looks like. Their model offers a roadmap for other organizations seeking to innovate while staying true to their mission: putting people at the heart of healthcare.

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WORKFORCE WELLNESS: HOW ENTERPRISE TECHNOLOGY CAN ACCELERATE RESULTS

The success of MUSC’s virtual specialty care practice underscores a critical lesson: aligning innovative solutions with the human element drives sustainable impact. When Ellen Wiegand assumed the role of Senior Vice President and CIO at VCU Health in 2022, she stepped into a pivotal moment. The organization had recently implemented ServiceNow, Workday, and Epic simultaneously during the COVID-19 pandemic, while also opening new facilities. This transformation consolidated over 20 disparate systems and reduced operating costs by \$10 million annually. However, the rapid pace of change led to significant IT team burnout, with turnover reaching 200% as every position needed to be rehired twice in just 12 months.

Recognizing these challenges, Wiegand and her team placed workforce wellness at the center of their five-year strategic plan. They launched the “Center for Team Care,” an initiative providing concierge-level care through brick-and-mortar clinics, on-demand virtual visits, and text-to-care services for staff and their dependents. For staff in Richmond, where securing a primary care appointment could take up to a year, this initiative was transformative.

The focus on workforce wellness extended beyond healthcare services to reimagining the daily work environment. While the implementation of Epic, Workday, and ServiceNow marked one of the most ambitious technological overhauls in VCU Health’s history, the transition created significant pressure on staff. Wiegand’s team tackled these challenges by leveraging the new tools effectively. Workday became a central hub for HR processes, making it easier for staff to access resources like payroll, training, and benefits. Leadership incorporated employee feedback into system enhancements, and within a year, IT staff turnover dropped to 7%.

To combat clinical staff burnout, the organization launched an EHR Usability Program, working with provider champions to tailor Epic workflows to their specific needs. The results were impressive: providers reported a 70% reduction in “pajama time” (documentation done outside work hours), and Net Promoter Scores among participating providers increased from -20 to +50. The retention efforts proved financially sound, as each retained provider saved approximately \$1 million in recruitment, onboarding, and lost revenue costs.

The integration of new technology and wellness initiatives drove measurable operational and financial success. In just one fiscal year, VCU Health achieved a \$150 million financial turnaround. Under Ellen Wiegand’s leadership, the organization successfully demonstrated that innovation and compassion can work together effectively, proving that meeting people where they are—whether patients, providers, or staff—is essential to achieving organizational success.

STAY CALM AND OPERATE ON: CYBERSECURITY MEETS PATIENT CARE

Healthcare remains the most targeted critical infrastructure sector for 14 consecutive years, with a staggering 375% increase in the threat landscape since 2019. Recovery timelines are concerning, with over 30 days for initial recovery and 100 to 150 days for full recovery after an attack. These realities underscore the necessity of proactive measures, such as practicing downtime scenarios and focusing on fundamental needs like paper, pens, and toner to ensure continuity when digital systems fail. Dr. Zafar Chaudry, CIO of Seattle Children’s Hospital and Theresa Meadows, CIO of Cook’s Children’s Health System stressed the need for frequent drills, arguing that annual exercises are insufficient to prepare staff for real-world crises.

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The panel also highlighted the importance of managing stress and conflict during incidents. As Chaudry pointed out, even technically skilled teams can crumble under the pressure of a real incident.

“When we had our CrowdStrike incident, I asked my incident team to stand up an incident command—and they had a nervous breakdown,” he revealed. “They had done tabletop exercises, but they had never experienced that level of stress.” This led his organization to implement stress management and conflict resolution training, acknowledging that technical expertise alone isn’t enough.

Meadows added that informatics teams play a critical role in mediating between technical and clinical staff, ensuring smoother communication and better incident management. Informaticists’ mediating role is particularly crucial during security incidents because technical teams are often overwhelmed with solving complex technical problems while simultaneously trying to manage communication with frustrated clinical staff.

The expansion of digital healthcare infrastructure, including remote patient monitoring and hospital-at-home programs, adds complexity to cybersecurity. Meadows highlighted the difficulty of extending security models to patients’ homes, where user expectations often conflict with stringent security requirements. Medical devices, which frequently have elevated privileges, further complicate the issue. Panelists called on manufacturers to design devices with better security configurations to address these vulnerabilities and urged healthcare leaders to develop strong relationships with the third-party vendors they use.

With stronger collaboration between technical and clinical teams, more sophisticated tools, and years of hard-won experience, IT teams have developed the resilience and expertise needed to meet these challenges head-on. Through proactive engagement with policymakers to shape practical, achievable compliance measures, the healthcare technology community continues to demonstrate its ability to transform obstacles into opportunities for improving patient care and safety.

HEALING HEALTHCARE WITH A PEOPLE-FIRST APPROACH

The stories and insights shared at CHIME’s Fall Forum 2024 remind us of something we’ve always known but sometimes forget in our rush toward innovation: healthcare is fundamentally about people caring for people. Whether it’s a physician trying to spend more time with patients and less time on documentation, an IT team member working to keep systems secure during a crisis, or a patient seeking care from their home in rural America—every challenge and every solution comes back to the human element.

We’ve seen how organizations are making remarkable strides by simply asking, “What do our people need?” The answers have led to transformative solutions: AI that lets doctors be doctors again, patient feedback systems that feel more like conversations than surveys, and virtual care programs that bring specialists into communities that desperately need them. When technology serves people—rather than the other way around—the results can be extraordinary.

Yes, healthcare faces daunting challenges. Burnout threatens our workforce, cyber attacks grow more sophisticated, and disparities in access persist. But in every panel discussion, in every success story shared at the Forum, we saw evidence that solutions are within reach when we focus on the humans at the heart of healthcare.

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The path forward isn't just about implementing new technologies or redesigning workflows—it's about remembering why we're all here in the first place: to help people heal, to support those who provide care, and to make healthcare work better for everyone. When we stay true to that mission, the technology, the processes, and the outcomes naturally follow.

Nabla

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