



WHITE PAPER | FUTURE OF HEALTHCARE

Elevate the Healthcare Experience With a Modern Digital Workplace



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Executive summary

Digital technologies are a primary driver of change in healthcare. A crucial part of managing that change is providing the healthcare workforce with the right technical support. As the digital future unfolds, a user-centric, contextual, problem-solving paradigm offers the greatest opportunities for success today and tomorrow.



COVID-19 – has accelerated both the hybrid workforce model and the deployment of additional digital devices and applications.

The workplace is changing – especially in the uniquely constrained healthcare industry. Healthcare providers have much less physical and operational flexibility than, for example, tech startups, where virtual existence is the norm. But the technological, social and demographic drivers transforming the economy at large also impact the healthcare sector.

Technology is a leading change agent. Innovation often disrupts existing procedures, and critical clinical systems require regular updates and refreshes. The incentivized use of electronic health records (EHRs) has led providers to embrace digital workflows and the associated operational challenges. Looking ahead, analysts and other stakeholders anticipate increased use of advanced technologies in the healthcare space, including artificial intelligence (AI), machine learning (ML), robotic process automation, and virtual or augmented reality. In social terms, the preeminent disruption of our era – COVID-19 – has accelerated both the hybrid workforce model and the deployment of additional digital devices and applications. Today's multi-generational workforce is already contributing to the larger Great Resignation, with attrition rates and workforce shortages adding financial burdens and impeding service delivery.

The question is not whether healthcare is changing but how to manage it. This paper discusses several high-level considerations about change and the future of work. It also asks a core question: How can healthcare organizations enable effective, frictionless interaction between the workforce and technology? Implementing the correct support structure is critical.

The evolving workforce



“It is really about putting in place the strategies and approaches to help unlock business and human potential”

Ric Garner
Managing Director
Workforce Readiness Practice
NTT DATA Services

The pandemic showed that, when forced, the healthcare industry can respond quickly. Policymakers reversed longstanding policies that limited remote care, giving the green light to telehealth. Back-office staff packed up and worked from home, including medical coders who may have worked in the same office for a decade or more. Then, in the pandemic’s wake, administrators scrambled to fill gaps left by exhausted clinicians who retired early or quit to work elsewhere.

In any turbulent scenario, it’s better to manage change rather than simply react to it. Healthcare leaders can control the moving parts by identifying trends, analyzing stakeholders and understanding their workforce. “It is really about putting in place the strategies and approaches to help unlock business and human potential,” said Ric Garner, managing director, Workforce Readiness Practice, NTT DATA Services. “You can do that by putting in place the appropriate new technologies and ways of working, along with the right organizational culture, one that is sustainable and enables interaction and collaboration, all the while making sure that the right talent is in place and that learning has a central part in that culture.”

At the more tactical level, especially as the pace of change picks up, healthcare leadership teams need to retain that broad field of vision. “As we’re introducing new tools and new process changes, we also need to make sure that we get the right level of adoption, that we drive understanding and awareness to caregivers for those changes, and make sure the right training, communication and support is in place,” Garner said. Ensuring the necessary support is available to every healthcare professional is the primary focus of this paper.

Status quo support problems



Among practical concerns for any workplace that claims to be digital, none is more fundamental than ensuring the proper technical support. Sudden service failures, malfunctioning devices or equipment, an inability to log in to an EHR system and other IT-related issues can make it difficult — if not impossible — for healthcare workers to do their jobs, leading to life-or-death situations. Yet many support centers, whether in-house or third party, have failed to evolve over the past decade or longer. As a result, they're poorly equipped to handle the broad array of problems that can beset today's digital healthcare workplace.

For example, a longstanding focus has been on the service-level agreements (SLAs) that govern an organization's commitments to clients. One conventional SLA goal aims to increase the percentage of calls resolved on the first interaction. But the goal should be the opposite. "First-call resolution should actually be going down because you should be eliminating the easy items from the environment," said Keith Hansen, principal strategist, Dynamic Workplace, NTT DATA Services. In other words, preempting and proactively resolving simple problems before they reach the service desk (a good thing) will lead to a larger share of complex issues hitting the service desk, reducing first-call resolution percentages.

Standard metrics also may fail to capture relevant events. "Take a nursing station that has eight devices," said Hansen. "If they get an error on one device, they're likely to just hit the restart button, go to the next device and keep working." While that incident is likely to impact the user community regularly, SLA-centric data would miss the systemic issue. Misaligned metrics lead to the so-called "watermelon effect," too, where the service desk sees only "green" lights while users experience "red" levels of dissatisfaction under the surface. It fulfills the SLA, but the clinician experience is negative.

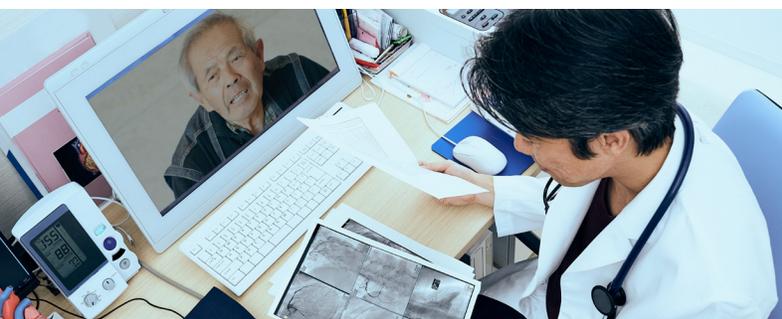
Even when IT departments add new tools to their desks, the result isn't always effective. Early password reset tools, for instance, had automated self-service capabilities. Yet forcing end users, such as physicians, who have no time to spare, to find a website, click on a link and answer a series of questions proved to be a non-starter. "Automation for the sake of automation never goes anywhere," said Brent Rosenbaum, practice leader, Healthcare Provider Solutions, NTT DATA Services. "Meaningful innovation is gained by providing benefit to the clinicians and is proved through natural adoption of new tools." Many solutions can improve metrics, but none will succeed if they're too disruptive or lack user buy-in.

User-first, contextual XLA-based support

The optimal support solution is neither a generic, legacy call center nor one with advanced technology arbitrarily bolted on; instead, it's a multi-faceted support facility designed primarily for end users. For IT support operations serving healthcare providers, as NTT DATA Services does, those users are patient-facing workers and support staff. Interaction occurs across the full range of channels. It recognizes the individuals, their personas and basic demographic information. Interaction also answers contextual questions about, for instance, workstyles, usage status, desired level of involvement in the process, service history and assets involved.

"There are thousands of data points that you can pull from that endpoint to understand user behavior, sentiment assigned to a user device, device health and more," said Joey Dean, managing director, Healthcare Provider Consulting, NTT DATA Services. Consider the full context first, then deploy the right tools to track the user's experience as issues are identified and resolved. Deploying the right tools will build a foundation to understand the end user from a 360-degree perspective, allowing for proactive support opportunities and the feel of "white glove" service to the end user.

With a solid foundation, it's possible to shift from SLA to experience-level agreement (XLA) metrics. To move from an exclusive focus on production, uptime, speed and volume to a better awareness of whether services were available when required and performed to the end user's satisfaction. Compared to SLAs, XLAs are more about emotion, satisfaction and engagement, goals that are relevant in today's hybrid working world. By utilizing data, extensive metrics can remove predictive issues by triggering proactive alerts and enable the support center to focus on identifying and solving problems even before end users experience them.



Digital end user: A day in the life

Consider a request for support through the lens of a contextually aware, advanced support center. This interaction begins using securely automated thumbprint or voice print authentication. Then, the platform taps into the IT service management system and data warehouse for relevant demographics and attributes, and automatically presents those to the service agent. That enables the agent to understand the end user's service history and who they are (for instance, clinician, non-clinician or VIP) and even get a snapshot of what their device looks like. Supported by an intelligent screen, the agent offers a concierge-style greeting and has the contextual awareness needed to quickly serve the contact. Given the initial interaction, an AI system can retrieve relevant knowledge-based articles, helping the agent solve the issue as efficiently as possible.

Modern workplace benefits



Leveraging automated tools can supercharge an agent's ability to serve end users and resolve their problems. The following list details some additional benefits that derive from a user-centric, contextual, XLA-based support center or workplace solution.

Less frustration. The right kind of technical support will not, by itself, eliminate clinician burnout, which reached rampant levels even before the arrival of COVID-19. Yet any reduction in the number of bad encounters with technology amounts to progress. Personalized, contextual awareness reduces stress and facilitates problem-solving. End users who realize the support center can track device health and human sentiments are likely to believe support staff takes their situations seriously.

Better outcomes. Whether the agent needs to onboard a new employee, access EHRs, reset a password, interact with other systems or accomplish another task, the point is to get a particular job done. Skilled specialists, who are aware of clinical workflows yet able to address the full spectrum of IT issues, should be able to take ownership of these problems even if they cross IT domains. Adopting AI/ML technologies to review event logs and other incident data will be conducive to preventative remediation and engineering corrections.

Lower costs. A successful workplace solution generates several financial benefits. Speedy problem resolution decreases time lost and internal charges to IT. Preemptive problem-solving reduces calls or

requests, and the frequency and length of the disruption itself. Greater job satisfaction associated with reduced frustration can lead to higher workforce retention, lower onboarding, offboarding and training costs, and higher productivity due to lower turnover. A robust support center can also enable cost-efficient, hybrid staffing models.

Greater value. In the past, IT departments were cost centers. Today, they also have the potential to drive business value. At the intersection of daily workflows, technical expertise and business objectives, the right kind of support can help unlock human and business value. Promising new clinical models, such as hospital at home, require advanced IT support. Such support solves complex challenges in cases involving the hybrid workplace, boosts workplace satisfaction and may enable better medical outcomes.

Service evolution. Workplace support should be dynamic, part of a continuous improvement and innovation cycle. Paramount to transforming the end-user experience is realizing new benefits and adopting technology and processes as quickly as possible. As change is often incremental, that could mean beginning with the equivalent of a crawl before trying to walk or run. Technology-forward roadmaps and a modernized focus can help organizations hit the right pace and sustain improvements over the long term.

Conclusion

The empowered and forward-looking workplace

The right kind of support is central to the digital workplace. Without functioning tools and digital processes, much of today's work comes to a halt. But support should be forward-looking. "As artificial intelligence, robotics, natural language processing, advanced analytics and other use cases continue to be fleshed out in healthcare, there is a larger scale of adoption as we have increased human and machine convergence," said Garner. "We need to think about how we address those deeper fears, potential frustration and those larger macro-level changes that are completely upending the profile of certain organizations."

A comprehensive forecast of the healthcare workforce would also address workforce orchestration, wellbeing, resiliency and engagement. For example, having seen employees working effectively off-campus, healthcare executives have an opportunity to reimagine their facilities. Activity-based working models, involving a shift from offices to hubs and other dedicated workspaces, can boost morale, facilitate collaboration and help manage costs in environments where occupancy varies from day to day. While these more advanced strategies lie outside the scope of this paper, a common prerequisite is a fully functioning technology infrastructure.

Technologies should be empowering. But a lack of support can drive healthcare workers away. An article in the *Annals of Internal Medicine* from June 2019 (before the pandemic) estimates the societal cost in the United States of clinician burnout at \$4.6 billion annually. Clinicians and non-clinicians should be neither "burned" by technology nor burdened by its overhead. Smartly implemented and supported technology-driven change can lower costs and boost outcomes. User experience metrics tied to the right digital workplace service platform will ensure that healthcare continues to advance on a sustainable human scale.



Sources

1. Shasha Han, MS, Tait D. Shanafelt, MD, et. al. "Estimating the Attributable Cost of Physician Burnout in the United States." *American College of Physicians, Annals of Internal Medicine*. June 4, 2019. <https://www.acpjournals.org/doi/10.7326/M18-1422>

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