



## **3 Ways Cloud-Based EHR Deployment Elevates Healthcare Organizations**

*Benefits include enhanced agility, better security and accelerated innovation*

**A**n increasing number of healthcare organizations (HCOs) are moving their EHRs to the cloud. In fact, cloud-based EHR deployments are expected to grow faster than on-premises deployments for the foreseeable future.<sup>1</sup>

When it comes to cloud adoption, healthcare is behind other industries such as finance, retail and e-commerce. “Healthcare has historically lagged in adopting new technologies because of concerns about the security and availability of systems,” said Tom Miller, Director of Enterprise Operations, Tegria. “But many are now beginning to understand the advantages of moving to a cloud infrastructure.”

Today’s cloud-based solutions offer functionality and scalability that was not available as recently as a few months ago, according to Miller. In turn, modern technology enables improved outcomes for HCOs. Here are three ways cloud deployment can elevate an EHR and improve an organization’s performance:



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**TOM MILLER** | Director of Enterprise Operations | Tegria

**1** **Cloud EHR deployment enhances organizational agility.** Today’s healthcare environment is characterized by rapid and constant change. Changes in regulations, payment models, delivery methods, population health and consumer preferences make it more critical than ever for HCOs to have the ability to pivot rapidly.

The COVID-19 pandemic is an example of how fast the healthcare environment can change — and how important it is to be able to rapidly adapt to those changes. Remote work capabilities and virtual healthcare delivery became priorities during the pandemic. The momentum behind telehealth continues today, with usage rates 38 times higher than pre-pandemic.<sup>2</sup> Configuring an on-premises IT infrastructure to support those capabilities can take months, between buying and provisioning hardware, building it out and testing it.

“A cloud-based strategy allows organizations to scale up something like telehealth much more quickly,” said Miller. “The cloud vendor already has the computing capacity in place, ready for the organization to use.” Unlike on-premises deployments, he pointed out, a cloud infrastructure gives organizations “the flexibility and agility to react fast” with many initiatives — such as enabling a remote workforce — able to be rolled out in weeks instead of months.

**2** **Security and compliance in the cloud is more suited for the future of EHRs.** Now that healthcare and data surrounding care involves connected operational technology/Internet of Things (OT/IoT) devices, and physicians and clinicians are working outside the traditional care facility, CIOs are shifting their long-held use of on-premises EHR systems. Providers must monitor for anomalous user behavior or events from these new vectors and correlate them across systems to properly detect and respond to a threat. CIOs are transitioning from traditional on-premises environments that require multiple third-party applications to address these identity threats, data encryption and governance gaps, and injections of malicious code to move towards the benefits of a cloud infrastructure with native security products woven into the fabric of the environment. EHR vendors as well are shifting their offerings to a cloud-hosted model or SaaS at a rapid pace to lower their own risk profile.

Cybersecurity is critical as incidents continue to rise; for example, in 2021, two-thirds of healthcare organizations experienced a ransomware attack, nearly double the number experiencing an attack in 2020.<sup>3</sup> In the first seven months of 2022, the U.S. Department of Health and Human Services (HHS) Office of Civil Rights has recorded hacking/IT incidents at 315 organizations, resulting

in data breaches impacting more than 23 million patients.<sup>4</sup> Establishing effective cybersecurity in today’s threat environment means not only protecting against intrusions, but also establishing identity management, data encryption, vulnerability management and segmented networks to prevent breaches from spreading, as well as instantly accessible backups to support disaster recovery.

Unfortunately, most HCOs do not have the resources to deploy a robust, multi-layered security approach across physical datacenters, infrastructure and operations. That is where cloud deployment can make a significant difference. “Cloud vendors have a much larger footprint and more experience than a typical healthcare organization when it comes to security,” said Miller. “They have full-time teams dealing with security because they have multiple customers to protect.” Cloud EHR deployment enables healthcare organizations to shift much of the responsibility for security to their cloud vendor, freeing up internal resources to focus on initiatives more directly related to patient care.

**3** **Cloud EHR deployment accelerates opportunities for innovation.** The consumerization of healthcare means that healthcare is more competitive than ever. Consumers



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are combing the internet to identify which providers and organizations offer the most convenient care at the highest quality and lowest cost.

An HCO’s ability to innovate is key to improving patient care and meeting consumer expectations. On-premises EHR deployment can be a formidable barrier to innovation because it keeps the organization’s data locked up in on-premises silos. There are cost and technology barriers associated with exporting that data and using it outside the confines of the on-premises infrastructure.

“Having your EHR in the cloud means your data is much closer to the analytics tools that help you improve outcomes,”

said Miller. Cloud deployment enables innovation and data interoperability by placing the EHR and related data adjacent to advanced tools and technologies such as artificial intelligence (AI), natural language processing (NLP), text analytics and business process workflow analysis tools. The proximity to these advanced technologies makes it easier and faster for HCOs to explore, deploy and scale innovative approaches to everything from patient engagement to care coordination to revenue cycle management.

Cloud-based capabilities ultimately enable HCOs to shift to an innovation culture and to experiment with new ways of delivering healthcare. “EHR deployment in the cloud can help

organizations focus their resources on delivering high-quality patient care instead of on managing the IT infrastructure,” Miller noted. “It can help organizations put patients, rather than technology, at the center of care.”

To learn more about the benefits of moving your EHR to the cloud, visit: <https://aka.ms/TegriaAndAzure>

#### References

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#### About Microsoft

Microsoft Cloud for Healthcare provides trusted and integrated capabilities that makes it easier for organizations to create personalized patient experiences, gives health teams connected collaboration tools, and adopts data standards important to healthcare. Together with Nuance, customers can access the broadest and deepest set of trusted AI solutions to address the biggest challenges in healthcare. Organizations can use AI to give full visibility into data, relieve provider administrative burden, boost clinician productivity, and increase workflow automation to improve quality of care, transform the patient experience, and deliver better care faster and at a lower cost. Our growing ecosystem of partners are dedicated to serving customers by helping provide more integrated healthcare solutions or identify new opportunities for innovation that extend the core cloud and Nuance capabilities across the continuum of care. <https://aka.ms/cloudforhealthcare>



#### About Tegria

Tegria provides consulting and technology services to help organizations of all sizes humanize each healthcare experience. Founded by Providence, with teams throughout the United States and internationally, Tegria is comprised of more than 3,500 colleagues who help their customers integrate technology, transform operations, accelerate revenue and optimize care. To learn more, visit [tegria.com](https://tegria.com).