Whitepaper

Tegria

Cloud-Based Managed Services Enable You to Do What You Do Best: Focus on Patient Care

A Healthcare organization (HCO) that uses a cloud-hosted electronic health record (EHR) system with Managed Services support has a significant advantage over others who continue to use an on-premises (on-prem) model. The cloud-based approach, now central to modern technology strategy, offers distinct benefits for hospitals, clinics, providers, and patients. A cloud-based strategy, managed by an experienced IT services partner, can help the HCO address current needs, build capabilities for the future, and ensure that critical data is always secure and accessible.

Gartner has predicted that 75 percent of all healthcare provider organizations will have a formal cloud strategy in place by 2022. * A mid-2021 industry survey confirms this trend, noting that 46 percent of HCOs already have cloud computing in their EHR strategy, and another 32 percent may be considering the available options: public cloud, private cloud, and on-prem solutions. Benefits of these include improved data security, greater operational flexibility, and scalability, and reduced fixed costs. Perhaps most importantly, shifting to the cloud gets IT healthcare professionals out of the data center business so they can instead focus on bringing innovation and value to the patient experience through improved technology.

Protection Data Against Costly Breaches

The level of core technology required to securely handle patient data is rapidly outpacing the capabilities of hospital IT operations. Nearly nine out of ten HCOs (88 percent) report they have a secondary data center and thus some level of data security. If, however, these are self-managed, they may fall short. Managed Services providers provide best-in-class protection against data-security threats such as the increase of cybersecurity events (phishing, hacking, ransomware). Medical records are high-value targets for criminal extortion. At least 70 percent of all HCO ransomware attacks involve data-extortion attempts (Gartner).

Furthermore, compliance to ever-expanding regulatory roles requires increasingly complex technologies. Meeting these requirements is beyond the capacity of most hospital IT departments. Data breaches — even minor ones — must be reported, often resulting in costly fines, time-consuming data recovery efforts, and a negative impact on a hospital's reputation.

Cloud hosting companies can protect hospitals against hacking threats and data breaches by providing:

- Routine security patches and audits
- Frequent software updates to ensure regulatory compliance
- High-redundancy and air-gapped, geographically distributed backups to ensure fast data recovery in a critical event

*Statistics sources: gartner.com/en/documents/3981487 & tegria.com/about/case-studies/CHIME-Survey

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Well-Maintained Data Storage Facilities

On-prem data centers must also provide stable, secure physical environment for EHR delivery. In-house data centers often occupy less-than-ideal, retrofitted space within a hospital. Typical challenges include keeping the data center dry, providing effective ventilation, controlling for electrical capacity, and maintaining adequate telecommunications.

Third-party data centers solve these and other problems via:

- Reliable redundant heating, ventilation, and cooling systems
- Sophisticated protection against fire and water damage
- High standards for data-center security

Cost Efficiencies, Better Value

Building and maintaining on-prem data center infrastructure is time consuming and expensive. Mid-sized HCOs, for example, have an average of $4 million dedicated to each iteration of their three-to-five-year infrastructure refresh cycle. Managed services providers can help to avoid these recurring capital expenditures and achieve economies of scale that simply aren't otherwise possible, even for large hospital systems. The cost savings are significant — and built into the contract.

- Cloud-based strategies mean that hospitals no longer need to make significant capital investments in data infrastructure. Data management becomes a predictable operational line item/monthly cost.
- As on-prem data centers grow, they may have to compete with clinical spaces for square footage. On the other hand, with minimal data stored on-prem, physical spaces can be repurposed as revenue-generating clinical areas or used to create more office space.

Operational Scalability and Flexibility

Hospitals need flexible EHR platforms that can be customized and scaled to meet specific business needs—quickly and easily. The use of on-prem infrastructure creates barriers that prevent hospitals from taking full advantage of meaningful technologies that lead to innovation.

Cloud hosting solutions allow organizations to implement technology faster with fewer ramp-up barriers.

- New technology rollouts occur without the risk, delay, and cost of capital purchases. For example, during high-load or high-volume events, IT departments can spin up servers to increase processing power, then spin them back down when they are no longer needed. This instant scalability can result in net cost savings to the organization.
- The time savings is significant. For example, purchasing a new server can require 2-3 months to secure funding, work with a vendor and install the hardware. In contrast, managed cloud solutions allow hospitals to spin up a new server in a single day. When the server is no longer needed, the hospital isn't on the hook to maintain it.

- Hospitals can rely on the cloud provider's sophisticated disaster recovery solutions with diverse recovery locations, rather than creating disaster recovery solutions of their own.

Managed services partners offer hybrid solutions that allow a cloud-first, but not a cloud-only, strategy. Data migration to and from the public cloud (e.g., Microsoft Azure, Google Cloud) can happen in stages with minimal disruption to existing operations. Some data, such as legacy EHRs, can be moved permanently to the public cloud.

Automation tools and technologies can simplify data movement between public and private clouds for:

- Routine back-ups and data archiving
- Sandbox versions for testing and development environments
- Database replications for running reports while the primary system operates at full capacity

A cloud-based approach lets the hospital IT system capacity readily expand or contract, depending on business goals and needs. Instead of making large capital outlays for on-prem servers, the organization pays only for the capacity they need.

FMDH continues to enjoy partnering with Tegria. Our deep knowledge, quick and effective customer service, and willingness to jump in at any time to solve a problem makes us their preferred partner for integrating technology and accelerating revenue.

An Improved Platform for Innovation

With cloud-based management solutions, hospitals can leverage new technology rapidly and efficiently to improve service delivery.

- Most innovation is happening in the cloud, not in on-prem databases and software. Examples of this include AI, machine learning, and the big data space, all of which can require huge amounts of processing power at times and much lower amounts of power at other times. Cloud computing provides on-demand resources for which you'll only pay for what you use.
- Third-party IT services partners with deep cloud experience can help hospitals be ready for cloud-native add-ons such as remote patient monitoring, telehealth, and custom lab-management tools.
- Freed from managing an on-prem data center, IT leaders can focus on adding value to the organization and transforming the patient experience through better technology solutions.

24/7 Expert IT Support

Recruiting, hiring, training, and retaining highly skilled IT experts can be difficult, especially in smaller cities and rural areas, but also in urban areas with highly competitive labor markets. And when onsite IT employees are required to provide round-the-clock support, the potential result is burnout. Staff turnover is costly from a financial and operational standpoint. Nearly one quarter of surveyed IT executives identified “lack of technical talent” as their biggest challenge to implementing infrastructure strategy. To mitigate this problem, 63 percent of these HCOs indicated they’re turning to outside support, including cloud-dedicated IT staff via managed services contracts.

As healthcare technology becomes more complex, a cloud-based management team can avert skill gaps – providing deep expertise and 24/7 IT coverage to augment your existing team. Long-term relationships with EHR providers and other vendors allow for proactive data monitoring and troubleshooting.

High Satisfaction for Providers, Employees and Patients

Most HCOs require system downtime for EHR upgrades – as often as four per year, with typical system downtimes as high as two hours per event. This imposes a considerable risk to system disruption and user satisfaction. A well-managed EHR platform provides a consistent high-quality experience with virtually no unplanned downtime. Fast, reliable technology delivery means:

- Transparent IT delivery for patients for accessing their electronic medical records, scheduling appointments, telehealth sessions, etc.
- Providers and staff can focus on patient care and guest services without the technology-based distraction and delays caused by unexpected down time and underperforming infrastructure.
- Hospital IT professionals can dedicate their time and energy to working with providers and employees on local technology solutions to fulfill the organization’s unique needs.

A Strategic Transformation

Experienced cloud-based managed services providers can develop a customized strategy that leverages private cloud, public cloud, multi-cloud, and hybrid solutions to move your hospital’s infrastructure forward. The right partner will customize solutions for the near- and long-term, ensuring that your data is protected from cyberattacks, continually backed up, and always available when your organization needs it.

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