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Optimize Costs and Accelerate Innovation by Migrating Epic Systems to the AWS Cloud with Sapphire Health



Most healthcare IT leaders are aware of the benefits of migrating their systems to the cloud. However, they may still be hesitant to migrate their workloads and data because of misconceptions around what's required when transitioning to the cloud.

While migrating to the cloud involves significant consideration, resources, and strategic planning, there are many instances in which cloud migration initiatives can be more streamlined—and take less time—than many IT leaders may realize.

Cloud migration initiatives can be more streamlined and take less time than many IT leaders may realize. For one, it's not uncommon for organizations to believe that moving to the cloud is always an extensive, years-long process. However, in some instances, moving to the cloud can be done in just a matter of quarters or months—sometimes less depending on the workload. For example, deploying Epic read-only workloads on the Amazon Web Services (AWS) Cloud can be completed in as quickly as eight weeks.

In addition, some organizations believe that moving to the cloud is an all-or-nothing process. There's a misconception that you have to move every single application, workload, and data set to the cloud in order to see tangible benefits. The reality is, there are incremental benefits of moving to the cloud. You can realize substantial cost savings, efficiency gains, and improved performance by moving just one application or workload to the cloud, even while other applications remain on-premises. For example, moving Epic electronic health record (EHR) systems to the cloud—while other applications remain in data centers—can lead to substantial cost savings, performance gains, and new opportunities for innovation.





Sapphire Health is a healthcare IT consulting firm specializing in managing and optimizing Epic systems for hospitals and healthcare organizations.

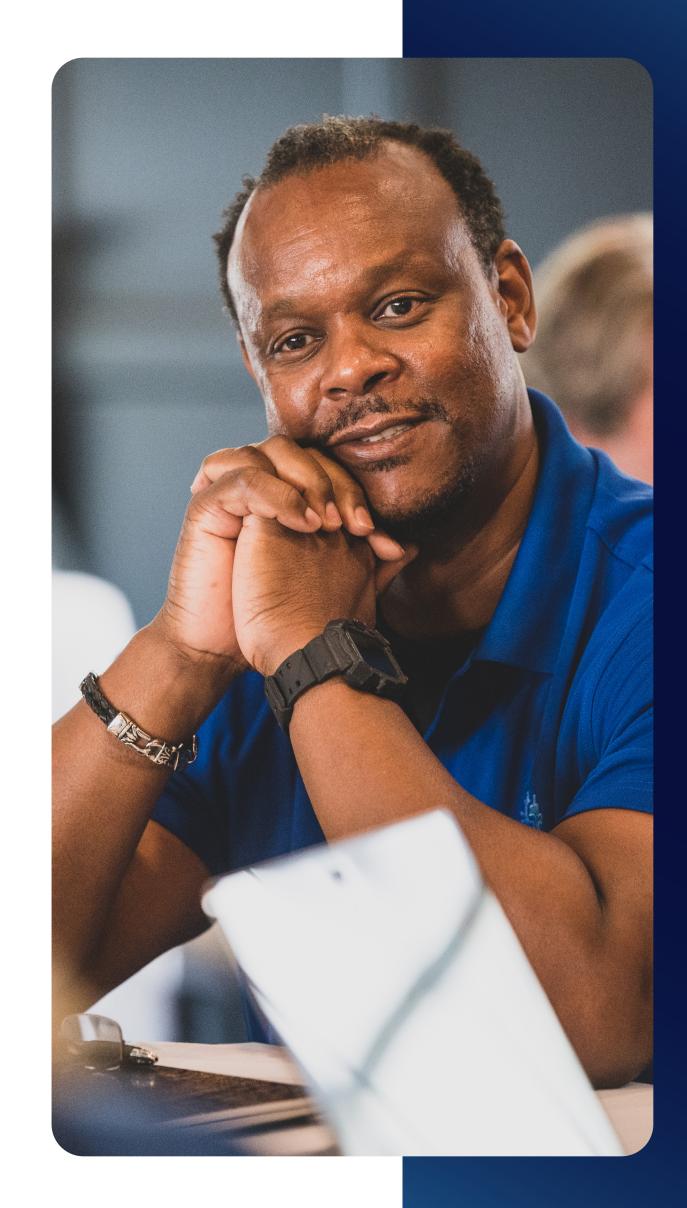
With an exclusive focus on Epic infrastructure, Sapphire Health offers in-depth experience and a history of successful cloud implementations for Epic systems. Sapphire Health has proven, first-hand knowledge of what it takes to migrate Epic environments to the cloud—and how to get the most value out of your Epic systems once they are on the cloud.

In this ebook, we'll explore ways to optimize costs, save time, and free up capacity when moving your Epic infrastructure to the cloud. We'll also explore helpful strategies for attaining the most value from Epic workloads upon having successfully migrated to the cloud. After all, moving to the cloud is only the first step in your cloud journey. From there, it's important to also consider and integrate a number of best practices in order to attain the most value from your systems while on the cloud. There's often a significant culture shift that's required post-migration. If you run applications the same way on the cloud as you do in an on-premises environment, you could be missing out on substantial benefits, cost-savings, and opportunities to attain more value from your data and workloads. Migrating to the cloud may seem like a daunting task, but it doesn't have to be. In this ebook, we'll share best practices for moving Epic EHR systems to the cloud and reveal insights built from many years of experience and a proven history of successful cloud implementations for industry-leading hospitals and healthcare organizations.

We'll also explore the benefits of the cloud, specifically Amazon Web Services (AWS), that help position healthcare organizations to ensure business continuity, enhance compliance, and drive innovation.

Sapphire Health is here to make your cloud migration journey as streamlined, efficient, and rewarding as possible for your organization so that you can accelerate innovation, optimize costs, and ultimately focus on serving your mission delivering excellent patient care and saving lives.

> In this ebook, we explore ways to optimize costs, save time, and free up internal capacity when moving Epic systems and infrastructure to the cloud.



Accelerate and optimize your cloud migration journey



You don't have to go it alone

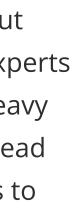
Some organizations try to manage cloud migrations completely in house. This often involves hiring new employees or expending a significant amount of time, effort, and resources in training existing employees with the proper technical skills and knowledge to carry out an effective cloud implementation. While doable, this is often costly as well as time- and effort-intensive.

Not to mention, the in-depth knowledge required to move Epic systems and environments to the cloud is a specialized skill set. Only so many IT professionals in the healthcare industry have first-hand knowledge of moving Epic environments to the cloud. And, for most organizations, moving to the cloud is something that they only do once. Finding someone who has done an Epic migration several times—and who has the experience and technical know-how that comes with having performed an Epic migration—can be rare.

This is where it's beneficial to work with a specialized consulting firm with extensive experience migrating Epic applications and systems to the cloud. Sapphire Health has first-hand experience helping hospitals and healthcare organizations migrate Epic systems to the cloud. With this level of experience and repetition comes an in-depth knowledge of what makes a successful implementation, including the technical nuances that are involved in moving Epic ecosystems to the cloud as well as the foresight into potential common challenges that may arise (plus the experience to know how to get ahead of these).

Some healthcare organizations underestimate the level of knowledge, technical nuance, and experience required to move an Epic environment to the cloud. But it's also an area of opportunity to work with outside experts and free up internal employees to focus less on the heavy lifting that can arise with a cloud migration and to instead focus more on other high-value tasks. Which brings us to our next point.





Free up internal resources to focus on enhancing the patient experience

Most healthcare IT departments have to juggle a number of competing projects and priorities. Allocating employee time and effort towards strategizing, planning, implementing, and managing a cloud migration initiative completely in house means there's less capacity to allocate employee resources to other high-priority projects. This can be especially true for IT departments that are lean and expected to do more with less, which is common especially in regional healthcare organizations, mid-size hospitals, and mid-size provider organizations.

Having trusted experts take care of the nuts and bolts of migrating and managing your Epic environment frees up a considerable level of internal capacity to focus on enhancing the patient experience. With Sapphire Health, organizations have a trusted collaborator that takes care of much of the heavy lifting of migrating Epic systems to the cloud. In addition, once you are on the cloud, Sapphire Health offers capabilities and services for the day-to-day management and optimization of your Epic ecosystem and infrastructure. You don't have to worry about constantly ensuring your environment is up to date, installing the latest versions of your solutions, or responding to any of the technical nuances that can come with managing an EHR system. Having trusted experts take care of the nuts and bolts of migrating and managing your Epic environment frees up a considerable level of internal capacity—enabling hospitals and healthcare organizations to focus on improving patient care and enhancing the patient experience.





Moving to the cloud can take months instead of years

Although moving to the cloud can sometimes be a process that requires several years to complete—depending on the size and scale of your workloads and applications in some instances, the cloud migration journey can be more streamlined than an extensive, years-long process. Depending on your environment, strategies, and migration methods, moving Epic applications and data to the cloud can actually be completed in quarters or even months.

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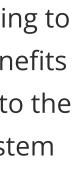
For example, **Sapphire Health's cloud read-only solution** can be deployed end to end in just eight weeks. This includes the deployment of a landing zone within AWS, deployment of a read-only Epic instance, and deployment of limited presentations via either Haiku, Canto, or the web.

can be deployed in 30 weeks. This includes the creation of a landing zone within AWS, deployment of full Epic disaster recovery instances (ODB, ECS, and supporting infrastructure), and production load failover testing. This enables organizations to begin realizing the tangible benefits of moving to the cloud—including resiliency, scalability, reliability, and global availability—and removes the need for a secondary data center for Epic systems.

In addition, Sapphire Health's disaster recovery solution

Not only can the cloud migration process be more streamlined and faster than some organizations may realize, but there are also incremental benefits of moving to the cloud. Organizations can still realize immediate benefits of migrating their Epic applications and infrastructure to the AWS Cloud even if other components of their IT ecosystem remain in on-premises environments.





It's possible to migrate your Epic infrastructure to the cloud with a fixed, predictable cost

Many healthcare organizations worry about the costs of moving their IT environments to the cloud or are concerned about unexpected costs incurring throughout the cloud migration process. Cloud migrations are often perceived as an endeavor that is significantly resource intensive and costly. However, it's possible to move to the cloud with a fixed, predictable cost.

While some healthcare IT consulting firms provide cloud migration services on a time and materials model—which can make the cost of the end-to-end project unpredictable and be challenging for organizations that want to control costs and ensure their migration remains within a set budget with Sapphire Health, organizations receive a fixed price for a committed deliverable. Working with Sapphire Health means you have a set price for a tangible, guaranteed outcome, helping provide peace of mind as well as reduce worries about a cloud migration project unexpectedly going out of budget in the middle of the project. Sapphire Health is committed to guaranteed outcomes, agile services, and being a trusted advisor, collaborator, and project leader throughout your cloud migration journey—and beyond. Sapphire Health serves as an extension of your team and helps ensure that your journey to the cloud is streamlined and successful, enabling you to begin realizing the benefits of the cloud as soon as possible.



The benefits of running Epic systems on AWS

There are a few options when it comes to choosing a cloud platform to host Epic EHR applications and systems. Amazon Web Services (AWS) is particularly wellsuited to help hospitals and healthcare organizations realize tangible performance and cost-saving benefits that help foster business continuity, enhance security for mission-critical systems, and support compliance with several healthcare-specific regulations. Here are just a few of the benefits of moving your Epic applications and infrastructure to the AWS Cloud.



AWS infrastructure and products are highly available, helping healthcare organizations ensure business continuity. The AWS availability guarantee ensures that AWS services will be available at least 99% of the time across any AWS Region.



AWS helps healthcare organizations facilitate compliance with healthcarespecific regulations. AWS supports more security standards and compliance certifications, including HIPAA and HITECH, than any other offering.

Performance

AWS offers powerful compute performance that is capable of handling large Epic workloads.



AWS data centers span 99 Availability Zones in 31 geographic Regions around the globe, with plans for ongoing expansion.



Many AWS services offer flexible pricing structures in which users only pay for the services and usage that they need, resulting in potential significant cost savings.

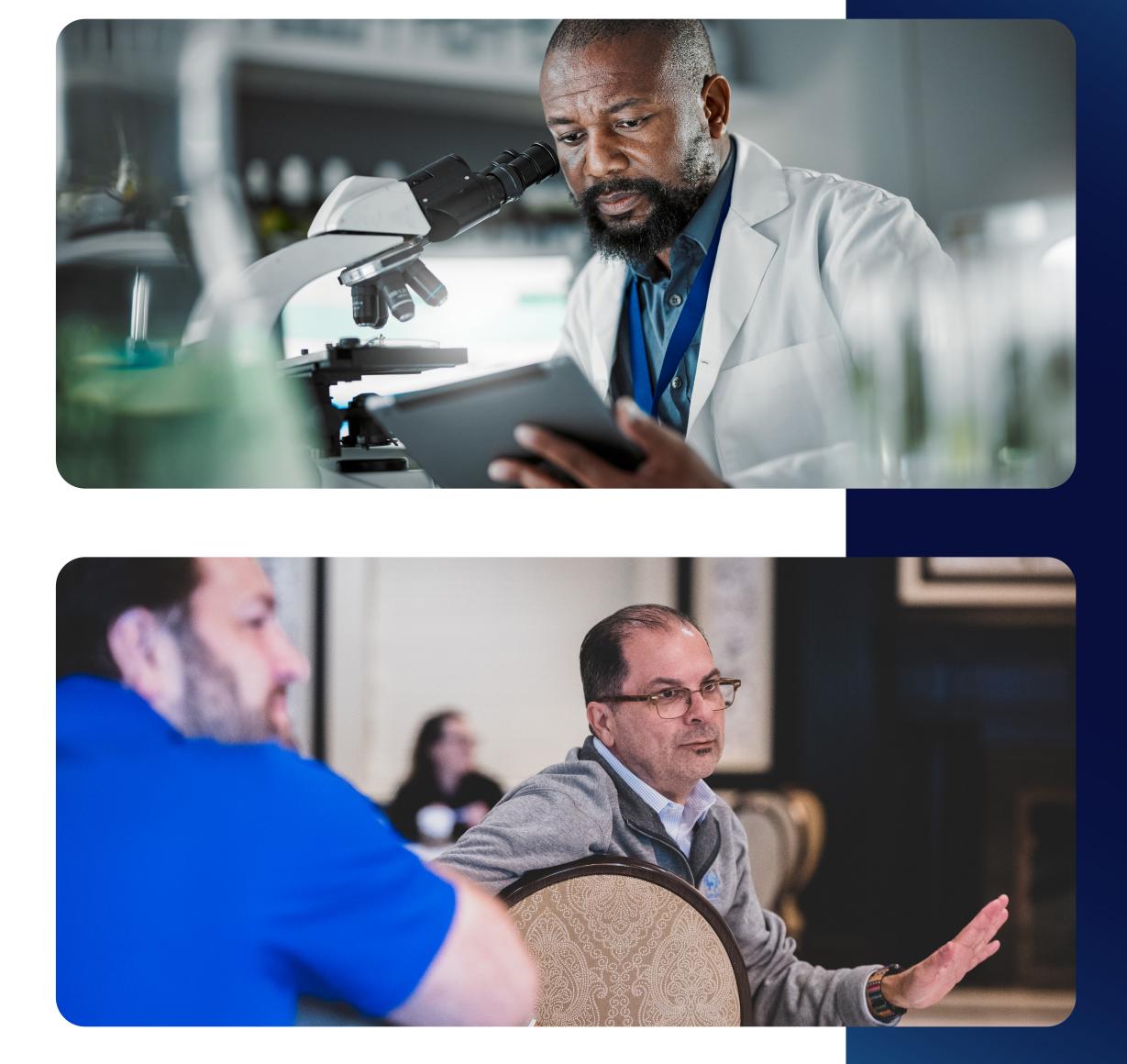




How to get the most value from your Epic systems on the cloud

After cloud projects are implemented, there is often a level of internal culture change that is required in order to successfully maintain those systems and attain the most value from your workloads and data on the cloud. Applications can't be run in the cloud in the same manner that they were run on legacy systems. There's often internal culture shifts that need to happen around utilization, optimization, and understanding new ways of running databases and systems.

Sapphire Health supports organizations with migrating their Epic systems to the cloud as well as managing and optimizing their Epic environments once on the cloud. While Sapphire Health takes care of much of the heavy lifting when it comes to migrating, managing, and optimizing Epic systems, there are a number of best practices that healthcare IT leaders should consider implementing internally with their teams in order to accelerate cloud transformation within their organizations. These internal culture shifts help organizations propel digital transformation and attain the most value from their applications, workloads, and data on the cloud.



Optimize consumption and utilization of your systems.

Applications shouldn't necessarily be run in the exact same manner on the cloud as they are in an on-premises environment. Doing so wouldn't be taking advantage of the elasticity and scalability of the cloud. Many cloud services are structured on a consumption-based or usagebased pricing model. So running applications on the cloud that are no longer needed or are not relevant can add unnecessary costs. Which brings us to our next point.

Wind down applications that are no longer needed.

Spend some time conducting a comprehensive evaluation of your IT landscape. Take a look at the applications you'd like to migrate to the cloud and consider which are mission-critical applications, which are lower-priority applications, and which are rarely utilized. Then, consider winding down those underutilized systems or leaving them in an on-premises environment.

Enhance data hygiene.

Moving to the cloud can be a good opportunity to evaluate and clean your data. Before you move your entire database to the cloud, evaluate which data is truly being utilized and will provide value to your organization. Then consolidate, delete, or de-duplicate data as needed.



Take advantage of the global infrastructure of AWS to better position your organization to enhance business continuity in the event of a natural disaster.



including artificial intelligence (AI) and machine learning (ML) capabilities, to help you accelerate innovation, do more with your data, and find new ways to better serve your mission. In total, AWS offers more than 200 fully featured services, ranging from capabilities for AI/ML, storage, compute, infrastructure management, application development, IoT, security, data analytics, business applications, and more.



to get employees up-to-speed on best practices and guidelines regarding the utilization and optimization of applications running in the cloud. Your team may have varying levels of familiarity with and experience with the cloud, so developing internal training and professional development programs centered around cloud best practices can go a long way in empowering your team to accelerate your organization's cloud transformation.

Position yourself for greater business continuity.

Take advantage of value-added services from AWS.

Implement internal cloud trainings.

Sapphire Health: Helping accelerate and optimize your journey to the cloud

Sapphire Health offers deep expertise in healthcare IT operations and is a leader in migrating, managing, and optimizing Epic applications and infrastructure. Sapphire Health provides comprehensive Epic infrastructure technical services, in-depth knowledge of the healthcare industry, and a commitment to delivering impactful results for clients.

Sapphire Health empowers hospitals and healthcare organizations to focus on what they do best—providing exceptional patient care and saving lives. Sapphire Health serves clients end to end—including helping organizations migrate their Epic systems and infrastructure to the AWS Cloud, taking care of the day-to-day management of that infrastructure, and leading the ongoing optimization of Epic applications for the best possible performance. Because Sapphire Health's mission is exclusively focused on Epic systems, they are uniquely positioned to provide clients with highly focused, specialized services paired with in-depth expertise in attaining the most value from Epic systems and infrastructure.

Sapphire Health's end-to-end services means that healthcare organizations don't have to worry about the ongoing management of Epic infrastructure or the technical complexities and tactical concerns that arise when maintaining and managing Epic environments. Healthcare organizations can rely on Sapphire Health's deep expertise, proven history of results, and utmost commitment to each client's mission.

With Sapphire Health, healthcare organizations are supported in future-proofing their environment, increasing the availability of their mission-critical systems, enhancing business continuity, and increasing performance while freeing up internal capacity to focus on innovation and enhancing the patient experience. **With streamlined cloud migration processes, comprehensive managed services, and a deep expertise in healthcare IT operations, Sapphire Health empowers hospitals and healthcare organizations to focus on what they do best providing exceptional patient care and saving lives.** Learn more about Sapphire Health's technical service offerings for Epic EHR systems.

Schedule a consultation to learn about migrating your Epic applications to the AWS Cloud.

