

Optimize EHR Operations with a Modern Cloud Environment

Get to the cloud faster with Sapphire Health and AWS

In our previous blog, we discussed the value of deploying an Isolated Recovery Environment (IRE), which offers a low-risk first step into the cloud. By setting up an IRE, organizations increase their resiliency and can reduce RTOs while taking advantage of the robust cloud security infrastructure of the Amazon Web Services (AWS) Cloud. As a first step, IRE allows administrators to familiarize themselves with cloud aspects ahead of a larger migration, allowing teams to learn tools, spot nuances in operations, explore available cloud services, and test without impact. When paired with support from AWS Partner Sapphire Health—a specialist in migrating, managing, and optimizing Epic¹ infrastructure—IRE deployment generates architecture design and validation that fits your long-term cloud strategy, positions you for better utilization, and maximizes your Electronic Health Records (EHR) investment.

Optimize efficiencies for your EHR environment in the cloud

The fixed nature of on-premises infrastructure can create a handful of hurdles when optimizing IT operations. For example, finite computing capacity can limit operational capabilities, and hardware acquisition based on your peak workload can leave a large portion underutilized for much of the time, creating unnecessary costs. On-premises infrastructure often requires institutional knowledge to optimize, meaning only a select number of people can manage operations, and troubleshooting can reach a bottleneck. The limits of on-premises infrastructure can affect your operations' reliability, ability to scale, and speed to adopt new technologies.

Moving your EHR database fully to the cloud provides numerous benefits (see Figure 1) and enables greater agility since AWS infrastructure is designed to flex as needs change. The fluidity of the cloud's pay-as-you-go pricing and scalable infrastructure allows organizations to trade finite capacity for optimized work needs with reduced costs. Leaders can proactively control costs by shutting down unused resources, knowing they're available again if needed.



Figure 1: Benefits of moving EHR to the cloud

¹ Epic is a registered trademark of Epic Systems Corporation.

Sapphire Health is the right prescription for on-premises limitations

Sapphire Health understands the unique needs, challenges, and regulations for EHR in the cloud and can help create a smooth migration to the cloud. With their managed infrastructure offerings, Sapphire Health alleviates the need for in-house cloud experts. By delegating responsibility to a specialized provider, you can free IT staff to focus on more complex tasks without diminishing EHR system performance. Additionally, shifting the primary location for your EHR system to the cloud centralizes data and standardizes the experience for both internal teams and patients.

Once your AWS environment is complete, the migration of additional workloads has a soft place to land and is supported by AWS infrastructure's scalability, reliability, performance, flexibility, security, and compliance. Additionally, database and workload presence in the cloud offers access to cloud-native tools that support the execution of various tasks, such as analyzing existing data to operate more efficiently and improve patient care.

Sapphire Health's expertise in migrating Epic systems and infrastructure to the AWS Cloud, managing that infrastructure day-to-day, and leading the ongoing optimization of infrastructure for the best possible performance makes it the perfect partner. With 5 years of completing migrations and setting up IREs, Sapphire Health keeps costs down, frees IT teams for higher-value tasks, and maintains the strict compliance required for healthcare.

Sapphire Health provides managed services in the following functional areas:

Client Systems Administration

- Hardware
- Hyperspace App Delivery
- VM Admin
- Web and Service (EPS, Kuiper, System Pulse, Web Blob, Hyperspace Web, Interconnect, MyChart, DMZ)

Operational Database Administration

- Hardware
- IRIS
- Operating System
- Refreshes and Backups
- Storage
- VM Admin

Epic Cogito Administration

- Caboodle Admin
- Slicer Dicer
- Clarity Admin
- ETL Admin
- SQL Admin
- VM Admin

Cloud Infrastructure Administration

- Cost Optimization

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- Networking and Security
- HIPAA Compliance
- Automation
- Business Continuity

“Sapphire Health delivers high-value managed services with its team of experts in the Epic ECSA, ODBA, and Clarity space. Since Sapphire Health’s mission is solely focused on managing and optimizing Epic environments, we are uniquely positioned to provide focused services and in-depth expertise to customers to attain the most value from their Epic systems.”

Tyler Jordan, Director, Cloud Solutions, Sapphire Health

No matter your catalyst for a cloud initiative, whether it’s transitioning from end-of-life hardware or seeking performance improvements, Sapphire Health’s end-to-end managed services support your migration to the cloud from every angle. Combined with the cloud expertise and leadership of AWS, healthcare organizations get the support they need to optimize their EHR environment, empower scalability, and increase overall performance for their healthcare operations. Together, they create the perfect team for EHR workloads in the cloud.

Use AWS tools to explore healthcare data for insights

Your healthcare data is the key to innovation, transformation, and value, but unlocking its potential requires intelligent data tools. Services like Amazon Redshift, AWS Glue, Amazon SageMaker, and Amazon Bedrock allow for streamlined data processing, transforming existing data into insights. Assessing and exploring your operational and telemetry data can bolster decisions on where to optimize operations.

In addition to the benefits of the transition to a responsive, streamlined cloud architecture that fits your working needs, you can easily connect data cloud-native services (see Figure 2) to uncover health trends, hardware fatigue, and the need for maintenance, all with PAYG pricing.

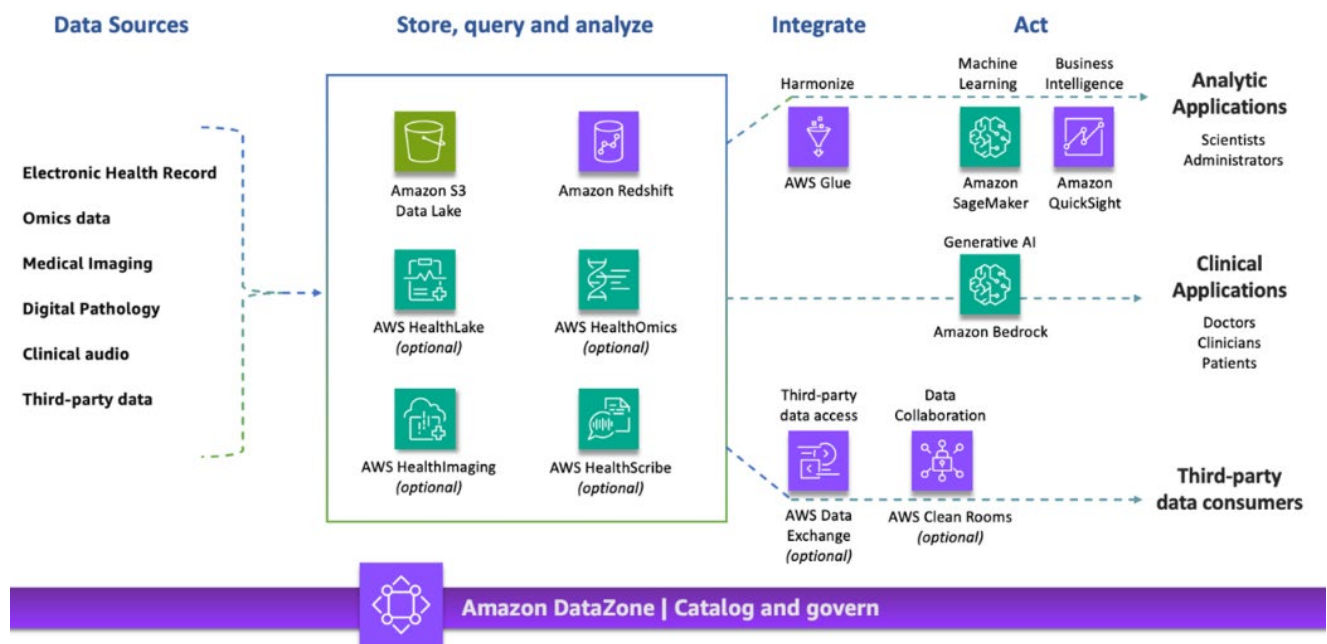


Figure 2: Fast-tracking the Healthcare AI Roadmap: AWS Health Data Accelerator | AWS for Industries

¹ Epic is a registered trademark of Epic Systems Corporation.

"A comprehensive review of your data—not just fragments—reveals hidden patterns, operational inefficiencies, and growth opportunities. By using cloud tools to analyze the full picture, you gain deeper insights, mitigate risks, and make strategic, evidence-based decisions that drive long-term success."

- Tyler Jordan, Director, Cloud Solutions, Sapphire Health

Tying it all together

With streamlined cloud migration processes, comprehensive managed services, and deep expertise in healthcare IT operations, Sapphire Health and AWS empower hospitals and healthcare organizations to focus on what they do best— providing exceptional patient care and saving lives.

Are you curious about Sapphire Health in the real world? Read the recently published [case study](#) about how regional medical non-profit LCMC Health worked with Sapphire Health to migrate their Epic Alternate Production to AWS and their sustained benefits.