



Electronic Health Records (EHR) on AWS

Unlock value from the cloud



EHR on AWS enables cost savings, agility, and the ability to leverage the latest cloud tools such as analytics, artificial intelligence, machine learning and consumer engagement technologies

What are the optimization opportunities?



Static compute capacity

Production compute capacity is purchased in three-to-five-year cycles and statically sized at 150 percent of current production peak load. Disaster recovery capacity is 100 percent of production and after dev/test and other support systems it results in more than **three times production capacity spend**. Cloud elasticity allows growth on demand.



Expensive data growth

Well-architected EHRs retain multiple copies of their production data. Every terabyte of growth results in multiple terabytes of storage consumption often up to 12 times the size. With AWS capacity on demand, you can size capacity as needed.



Geo-redundant disaster recovery

Best practices recommend a **secondary data center facility** with production-equivalent capacity and capabilities, tested annually. With capacity on demand right-sizing your cloud DR environment may only require seven percent of production resources until a test or disaster thus reducing costs significantly.

EHR on AWS objectives



Performance



Reduce operating costs



Sustain through automation



Optimize workforce

EHR

on



Citrix sized for peak demand

Citrix is typically sized **two to three times** production to support DR, three year growth, and maintenance, including supporting infrastructure. Refreshes occur approximately every three years. Elastic infrastructure allows you to pay only for what you need.



EHR release cycle is accelerating

Automation of the infrastructure and application release cycles eases the pressure on your support teams and reduces the chance of human error with **infrastructure as code**.



Access to new enhanced computing/architecture

AWS releases new instance types on a regular basis. Organizations can migrate to new instances without having to incur the technical debt of the older compute systems.

Potential benefits of EHR on AWS go beyond speed and cost.

Sample estimate for a new EHR implementation*

	On-premises	AWS
Total cost of ownership Over five years	\$11M	\$3.3M (70 percent lower)
Speed to market To stand up infrastructure and environments	16+ weeks	<1 week (94 percent faster)

Contact the EHR on AWS team

Eric Foote

Managing Director
Health Care Cloud Engineering
+1 313 657 1799
ericfoote@deloitte.com

Joe Milando

HCLS Cloud Sales Executive,
AWS
+1 617 485 4358
jmilando@deloitte.com

Suraj Ramdeo

Senior Manager
Healthcare Cloud Engineering
+1 954 655 8954
sramdeo@deloitte.com

Marc Perlman

Managing Director
Digital CARE
+1 678 772 1234
mperlman@deloitte.com

*TCO model was built for a client considering implementation of EHR. On-premises costs were provided by client's IT staff based on the EHR vendor hardware configuration specifications. AWS Capacity was estimated based on the same.

As used in this document, "Deloitte" means Deloitte Consulting LLP, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of our legal structure. Certain services may not be available to attest clients under the rules and regulations of public accounting. This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor. Deloitte shall not be responsible for any loss sustained by any person who relies on this publication.