# AWS Ramp-Up Guide: Healthcare

For healthcare business leaders, technical leaders, developers, and compliance officers

These are the most salient learning resources from our classrooms, digital curricula, video library, and AWS Lab Environment, that relate to the healthcare industry.  This guide is not intended to be consumed entirely.  Different sections tackle different objectives.  Some resources will be less relevant to you today.   The guide will help you decide where you want to start your learning journey, and which step should be your next.

Share *your opinion* of this Ramp-Up Guide with us!

## Learn the Fundamentals of the AWS Cloud

| Learning Resource | | Type |
|---|---|---|
| AWS Cloud Practitioner Essentials *or...* | 6.0 | Digital Training |
| AWS Technical Essentials (for IT Professionals) | 4.0 | Digital Training |
| AWS Cloud Economics for Healthcare | 1.3 | Digital Training |

## Cloud Computing for Healthcare

| Learning Resource | Duration (*hrs*) | Type |
|---|---|---|
| AWS Compute Services Overview | 0.7 | Digital Training |
| Introduction to Amazon Elastic Compute Cloud (EC2) | 0.2 | Digital Training |
| Introduction to EC2 Auto Scaling | 0.2 | Digital Training |
| Introduction to Amazon EC2 Systems Manager | 0.2 | Digital Training |

## Data & Analytics for Healthcare

| Learning Resource | Duration (*hrs*) | Type |
|---|---|---|
| Data Analytics Fundamentals | 3.5 | Digital Training |
| Introduction to Amazon Athena | 0.2 | Digital Training |
| Getting Started with Amazon Redshift | 1.0 | Digital Training |
| Introduction to Amazon Quicksight | 0.3 | Digital Training |
| Getting Started with AWS Glue | 1.0 | Digital Training |

## Artificial Intelligence & Machine Learning (AI/ML) for Healthcare

| Learning Resource | Duration (*hrs*) | Type |
|---|---|---|
| Introduction to Amazon SageMaker | 0.2 | Digital Training |

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| Learning Resource | Duration (*hrs*) | Type |
|---|---|---|
| Introduction to Amazon Comprehend Medical | 1.2 | [Digital Training](#) |
| Introduction to Amazon Transcribe | 0.2 | [Digital Training](#) |

## Compliance and Governance for Healthcare

| Learning Resource | Duration (*hrs*) | Type |
|---|---|---|
| Intro to Healthcare and Life Sciences Compliance on AWS | 0.3 | [Digital Training](#) |
| Introduction to AWS Artifact | 1.2 | [Digital Training](#) |
| Getting Started with AWS Config | 1.5 | [Digital Training](#) |

## Game-based Learning

| Learning Resource | Duration (*hrs*) | Type |
|---|---|---|
| $ AWS Industry Quest: Healthcare | 12+ | [Game-based Learning](#) |

## Additional Resources

| Learning Resource | Type |
|---|---|
| ***General Healthcare Systems*** | [](#) |
| Patient and clinician experience solutions | [Website](#) |
| Medical research solutions | [Website](#) |
| Finance and operations solutions | [Website](#) |
| Core health IT solutions | [Website](#) |
| Medical Imaging on AWS | [Website](#) |
| Accelerating Innovation in Healthcare | [Whitepaper](#) |
| AWS Ramp-Up Guide: Electronics Health Records (EHR) on AWS for Healthcare | [Guide](#) |
| Simplify Prior Authorization in Healthcare with AWS and HL7 FHIR | [Blog](#) |
| Automate prior authorization form filling using Amazon HealthLake | [Blog](#) |
|  | [](#) |
| ***Data & Analytics for Healthcare*** | |
| Making sense of your health data with Amazon HealthLake | [Blog](#) |
| Amazon HealthLake: Integrating disparate clinical data with purpose-built health AI services | [Workshop](#) |

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|---|---|
| Health datasets | [Website](#) |
| | |
| ***AI/ML for Healthcare*** | |
| Machine Learning Best Practices in Healthcare and Life Sciences | [Whitepaper](#) |
| Analytics and AI/ML solutions | [Website](#) |
| AI-Powered Health Data Masking | [Solution](#) |
| How to process medical text in multiple languages using Amazon Translate and Amazon Comprehend Medical | [Blog](#) |
| Flagging suspicious healthcare claims with Amazon SageMaker | [Blog](#) |
| Build patient outcome prediction applications using Amazon HealthLake and Amazon SageMaker | [Blog](#) |
| Brain tumor segmentation at scale using AWS Inferentia | [Blog](#) |
| | |
| ***Compliance & Governance for Healthcare*** | |
| Healthcare Compliance in the Cloud | [Website](#) |
| Compliance Resources | [Website](#) |
| AWS Compliance Solutions Guide | [Website](#) |
| Best Practices for Security, Identity, & Compliance | [Whitepaper](#) |
| Architecting for HIPAA Security and Compliance on Amazon Web Services | [Website](#) |
| HIPAA Eligible Services Reference | [Reference](#) |
| Navigating HCLS Regulatory Compliance Requirements on AWS | [Whitepaper](#) |
| HIPAA Reference Architecture on AWS | [Solution](#) |
| Operational Best Practices for HIPAA Security | [Website](#) |
| Frequently Asked Questions About HIPAA Compliance in the AWS Cloud - Part 1 | [Blog](#) |
| Frequently Asked Questions About HIPAA Compliance in the AWS Cloud - Part 2 | [Blog](#) |
| Amazon Web Services: Risk and compliance | [Whitepaper](#) |
| Management and Governance Cloud Environment Guide | [Website](#) |
| How to protect sensitive data for its entire lifecycle in AWS | [Blog](#) |
| How to Monitor, Alert and Remediate Non-Compliant HIPAA Findings on AWS | [Blog](#) |
| Using AWS in the Context of NHS Cloud Security Guidance | [Whitepaper](#) |
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***Additional Resources***

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|---|---|
| AWS Well-Architected Framework: Healthcare Industry Lens | [Whitepaper](#) |