



NextGen Cloud Governance in the Healthcare Industry

The need for rapid innovation is just as urgent for healthcare organizations as it is in any other sector of the market. Whether it's implementing EHR, telehealth, mobile health, e-prescriptions, wearable devices, or big data analytics fed by all of the above, today's healthcare organizations have to step up or be left behind.

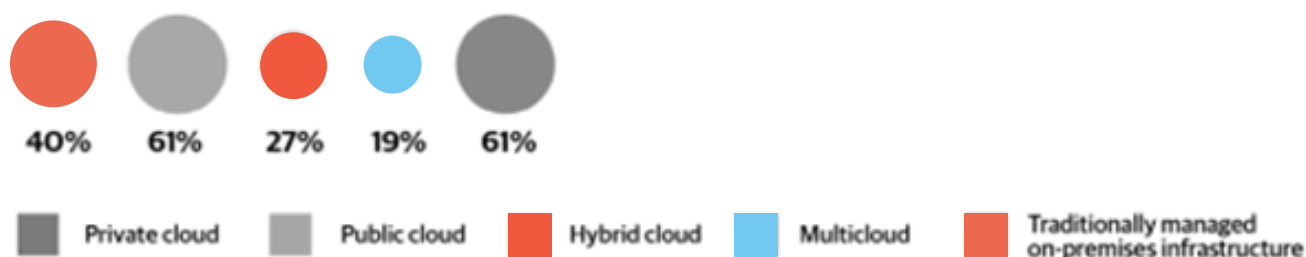
While the cloud has paved the way for innovation across industries, the road to cloud adoption has been long for many healthcare organizations, especially those that were initially unsure whether the cloud could meet the industry's stringent security and compliance requirements. Even now, recent data shows that while 61% of healthcare companies have workloads running in the cloud, 61% also still have workloads running on-premises. Compare that to companies in the retail industry, where 79% run workloads in the cloud but only 53% run workloads on-prem.¹

- Maintain compliance against a rich repository of more than 2,000 policies mapped to specific compliance standards, including HIPAA, GDPR, NIST, FIPS, and many more
- Stay secure while delivering new services with built-in support for CIS standards for Azure, AWS, OCI, GCP, and other platforms
- Build custom guardrails to meet the specific requirements of your organization
- Leverage automation to remediate issues without human intervention and ensure continuous posture control
- Gain new levels of visibility into usage and operating costs with a unified dashboard that consolidates data from multiple cloud platforms





Cloud Adoption in Healthcare¹



More healthcare organizations are moving to the cloud, however – driven by the need for innovation. Take pharmacy chain Rite Aid, for example. With more than 2,300 retail pharmacy locations across 17 states, Rite Aid announced recently that it has tapped Google Cloud for a multiyear technology partnership to ramp up the company’s digital capabilities.² The company says that migrating key applications to Google Cloud will provide better data insights, improve customer experiences, increase agility, and enable more resilient operations.

Moderna has likewise embraced the cloud, selecting AWS as their preferred vendor. This U.S.-based pharmaceutical and biotechnology company was among the first to leverage the cloud to develop their Covid-19 vaccine. Now fully cloud-based, Moderna says migrating their operations to the cloud has allowed them to experiment more rapidly and easily.³

The truth is that the cloud still holds huge potential for the healthcare industry. In fact, a recent McKinsey reports says cloud capabilities have the potential to generate \$100-\$170B in value for healthcare companies by 2030.⁴ And whether for hospitals, medical practices, healthcare equipment and services companies, or pharmaceutical, biotechnology, or other life sciences firms, the major driver of this value is the ability to innovate more effectively.



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Unfortunately, not all healthcare organizations are seeing the promised value. “Despite this potential, many healthcare companies, payers, and providers have not achieved the full potential value of cloud,” McKinsey analysts say.⁴ “In many cases, promising initiatives have stalled after falling short of expectations, never achieving the anticipated scale or value.”

That’s where NextGen Cloud Governance comes in. In order to take advantage of all that the cloud has to offer – and meet the unique challenges facing the healthcare industry – healthcare organizations running workloads in the cloud need more than basic cloud management tools. They need NextGen Cloud Governance.

NextGen Cloud Governance from CoreStack enables healthcare organizations to intelligently and proactively govern rather than just manage their valuable cloud infrastructures. Whether on AWS, Azure, GCP, OCI, or a combination of platforms, NextGen Cloud Governance empowers them to stay secure and compliant. Extending and enhancing cloud-native capabilities, CoreStack’s NextGen Cloud Governance also gives healthcare organizations new levels of visibility into and control over cloud costs and operations. And it helps them to front innovation, providing holistic, multi-cloud support on a single platform that stays up to date with the latest cloud vendor enhancements.

Maintaining Regulatory Compliance

Penalties for HIPAA violations can be severe, with the most egregious ones exacting a minimum fine of \$50,000 per violation.⁵ However, according to Presidio’s 2022 Cloud Transformation Benchmark Report, 56% of IT decision-makers surveyed in healthcare organizations say they now see the cloud as being able to help them achieve compliance.⁶

Keeping pace with security regulatory compliance is a core part of CoreStack’s commitment to delivering industry-leading cloud governance technology. In addition to supporting a growing list of regulatory compliance and industry benchmark standards across multiple sectors, including healthcare, CoreStack NextGen Cloud Governance provides customizable compliance controls, continuous compliance checking, and comprehensive compliance assessment capabilities.



- **Support for compliance standards**

CoreStack provides a wide range of pre-loaded, pre-defined policies that can help healthcare organizations achieve and maintain compliance with regulatory standards, including HIPAA, NIST SP 800-53, GDPR, FedRAMP, SOC 2, ISO/IEC 27000-1 and 27017, and many more. In fact, the CoreStack platform offers a rich repository of more than 2,000 policies mapped to specific compliance standards, any of which can be executed on-demand or scheduled.



Compliance standards: HIPAA, NIST, GDPR, FedRAMP, SOC 2, ISO/IEC, FIPS and many more

- **Customizable compliance controls**

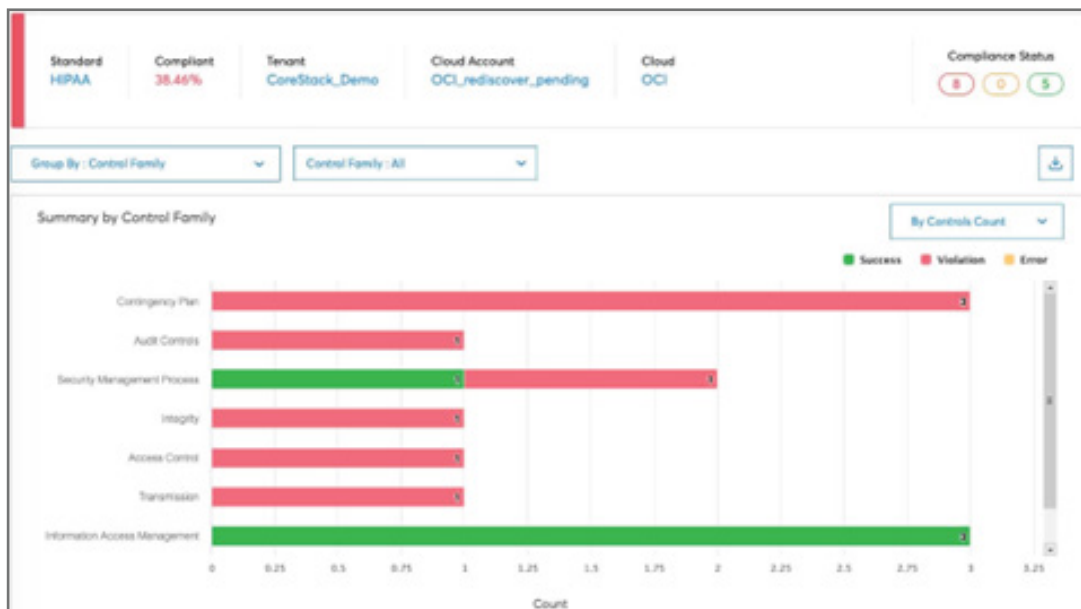
In addition to pre-loaded and pre-defined standards, CoreStack allows you to build custom guardrails based on your organization's specific compliance needs. These guardrails prescribe how a cloud service should behave and are used to assess the configurations of cloud resources so they stay compliant with your corporate standards and service-level agreements. Like other policies in CoreStack, custom guardrails can be set to trigger notification or even auto-remediation, enabling robust compliance automation.

- **Continuous compliance checking**

CoreStack enables a continuous compliance posture, a valuable part of your risk management strategy, with compliance monitoring (ConMon) capabilities, including for HIPAA or FedRAMP. Our compliance tools include a patented convergence technology that executes multiple compliance policies at the same time, accelerating compliance runs and saving costs on the use of resources. CoreStack also maps services to specific compliance standards, such as HIPAA or ISO. And it can tell which ones are similar, so you get full compliance coverage without having to test every type. Violations and other issues can be remediated immediately and at scale directly from the CoreStack dashboard.

- **Continuous compliance checking**

CoreStack’s comprehensive assessments, including the Well-Architected Assessment, also help ensure compliance. One assessment can measure your compliance posture against multiple industry standards, regulations, and best practices relevant to healthcare organizations. Automation of technical items simplifies and speeds up the process, allowing you to run compliance assessments as often as you need. Again, issues and violations identified can be remediated immediately and at scale from the CoreStack dashboard.



Staying Secure While Meeting Patient Demands

Not surprising, about half of IT decision-makers in the Presidio report say security is the top challenge to be overcome for their healthcare organization to adopt cloud technology.⁶ As healthcare organizations work quickly to build, scale, and deliver services for patients and other stakeholders in the industry, they must keep one eye on security at all times. In fact, security has to be baked into the process, allowing for early, proactive, and frequent security checks that don't hinder development efforts. At the pace of innovation required by the healthcare industry, DevSecOps capabilities like these are key to velocity.



CoreStack NextGen Cloud Governance can help by providing built-in support for Center for Internet Security (CIS) standards for Azure, AWS, OCI, GCP, and other platforms and by facilitating DevSecOps. CoreStack provides comprehensive assessments against security best practices, same-day cloud resource discovery, and automated security checking that spots security drift in real-time – all of which help ensure continuous security posture control for healthcare organizations.

- **Comprehensive security assessments**

CoreStack assessments provide comprehensive evaluation against security best practices, including those in the Well-Architected Framework, with automation of technical items that helps accelerate the assessment process. These assessments identify issues and violations as well as steps for remediation, and they establish a benchmark for future comparison and continuous improvement. As with compliance, security issues and violations can be remediated immediately and at scale directly from the CoreStack dashboard.

- **Same-day resource discovery and tagging**

Newly deployed cloud services can pose a risk to security posture, especially if they are running undetected. CoreStack uses schemas and logs to discover new services the day they are deployed so the system can immediately begin tracking the resources and adding them to views. This approach is much faster than traditional solutions that wait for an API to be created, which might take a month. In addition, CoreStack's ML-powered tagging capabilities enable ePHI tagging to ensure that sensitive assets are properly encrypted.

- **Automated security checking**

CoreStack provides continuous, automated security checking that enables you to spot security drift in real-time. These checks are based on security policies that can be configured to trigger notification and auto-remediation. Aligning with a modern DevOps approach, CoreStack's auto-remediation capabilities help facilitate DevSecOps by correcting issues without human intervention so teams can focus on development tasks.

Gaining Visibility into and Control Over Cloud Operations and Costs

Another top driver for cloud adoption, according to the Presidio study, is saving money and driving operational efficiency. 52% of IT decision-makers surveyed in healthcare organizations identified these goals as important to the success of their cloud implementation.⁶

While the up-front cost of deploying services in the cloud may be lower than deploying a new on-prem mainframe, recurring costs based on compute, storage volume, networking capabilities, licenses, support, and other services can quickly spiral out of control. In order to realize the full benefits of the cloud while keeping cloud spend in hand, healthcare organizations need a clear understanding of their cloud costs, including where they can optimize usage.

CoreStack NextGen Cloud Governance enables new levels of visibility, control, and insights into resource utilization and costs across multiple cloud platforms in a unified dashboard. CoreStack gives teams a holistic view of cloud spending as well as granular reporting that fosters a culture of financial accountability. It also identifies opportunities for usage-based optimization that can drive cost savings.

- **Holistic multi-cloud visibility**

With CoreStack, cloud costs can't hide in silos. Whether you run AWS, Azure, GCP, OCI, or others, CoreStack provides a holistic view of spending across all cloud platforms in one unified dashboard. This real-time view, which includes total, budgeted, and forecasted costs for each cloud account, provides a crystal-clear picture of costs and empowers teams to plan more effectively. CoreStack's advanced tagging capabilities enable organizations to attribute 100% of cost spending to the appropriate departments and cost centers.





- **Granular reporting**

CoreStack provides granular reporting that shows teams how much they are spending and what they are spending it on, driving financial accountability for all stakeholders. These flexible reporting options meet the needs of a variety of decision-makers – from the CIO to the VP of Engineering – and provide perspectives of spend across all teams – from holistic monthly reports across multi-cloud accounts to detailed, action-oriented daily reports.

- **Usage-based optimization**

CoreStack provides powerful tools that enable you to optimize your cloud usage, including rightsizing your cloud resources and matching resources to workload, identifying and remediating idle, orphaned, and underutilized resources, and optimizing cloud configurations with custom rules that can be executed to help reduce costs.

The CoreStack NextGen Portfolio

The CoreStack portfolio includes two NextGen solutions, CoreStack Governance and CoreStack Assessments. CoreStack Governance is a suite of modules that leverage AI to provide continuous and autonomous governance for FinOps, SecOps, and CloudOps across multi-cloud. These modules can transform any organization from a reactive posture to a proactive one, enabling predictable increases in top-line revenues and bottom-line efficiencies.

CoreStack Assessments is a powerful assessment solution that streamlines and scales the cloud assessment process, allowing partners to run assessments against multiple cloud-native frameworks as well as custom frameworks. This solution helps partners identify and resolve potential issues in key areas such as security, cost, performance, and reliability, allowing customers to embrace cloud best practices in the most efficient way possible.



CoreStack Governance

- FinOps
- SecOps
- CloudOps



CoreStack Assessments

- Hyperscaler Frameworks
- Custom Frameworks



The CoreStack NextGen Cloud Governance platform is designed to be Continuous, Holistic, Autonomous, Integrated, and Nimble – what we call CHAIN. By harnessing these attributes, NextGen Cloud Governance helps you mitigate risk, accelerate delivery, experiment more, optimize performance, and innovate rather than just improve.

CoreStack in Action

As part of their digital transformation efforts, a global healthcare and diagnostics imaging equipment manufacturer operating in more than 100 countries wanted to increase customer value from device usage. The company currently has four million medical devices in the field, serving 300,000 patients daily. It was also crucial to maintain compliance for the workloads running on the company's AWS cloud infrastructure. And with more than 200 different departments, each with their own cloud accounts, they needed granular visibility into and control over resource usage and costs.

The company implemented the full CoreStack NextGen Cloud Governance platform, specifically SecOps for security and compliance, FinOps for cost visibility and control, and CloudOps for operational excellence. This solution provided the company:

- Support for multiple industry-specific regulatory compliance and industry benchmark standards as well as company-specific policies
- Enhanced security and protection of infrastructure through vulnerability assessment, access governance, and the creation of custom security policies
- Support for AWS Well-Architected Framework assessments
- Integrations with ServiceNow for streamlined incident ticketing management
- Continuous cost governance, including the ability to attribute 100% of cloud spend

The CoreStack solution brought about measurable results. In addition to maintaining 100% continuous cloud compliance, the company increased operational efficiency 40%.

Next Steps

Today's healthcare organizations offer phone apps that can diagnose issues, AI that scans images for anomalies, and telehealth that supports patients in remote locations. With powerful governance capabilities underpinned by intelligent automation, CoreStack helps these enterprises build and deliver life-saving functionality with new levels of efficiency while supporting evolving security and compliance requirements. To find out how CoreStack NextGen Cloud Governance can help your organization, visit www.corestack.io or reach out to us at contact@corestack.io.

Sources

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2. Landi, Heather, "Rite Aid taps Google Cloud tech to ramp up digital, data capabilities," *Fierce Healthcare*, October 11, 2022.
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5. "What are the Penalties for HIPAA Violations?" *HIPAA Journal*, January 23, 2022.
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CoreStack is an AI-powered NextGen Cloud Governance platform that enables enterprises to embrace cloud with confidence, rapidly achieving continuous and autonomous cloud governance at scale. CoreStack helps 750+ global enterprises govern more than \$2B in annual cloud consumption. The company is a Microsoft Azure (Legacy) Gold Partner, Amazon AWS Technology Partner with Cloud Operations Competency, Oracle Cloud Build Partner, and Google Cloud Build Partner.