

UNLEASH THE POWER OF YOUR EHR DATA



Improve patient care with data management solutions that facilitate data interoperability, protect patient information, and reduce costs—without compromising performance and reliability.

Data is powerful medicine

Electronic health records (EHR) have changed healthcare delivery by giving clinicians access to the information they need to make timely, informed decisions about patient care. Using data as a foundation for patient care helps eliminate duplicate testing, reduces medication errors, and improves diagnostics. The ability to share patient records across providers reduces delays in treatment. Automatic reminders, notifications, and alerts help keep patients safe and healthy.

Maximizing the benefits of EHR workloads starts with a modern data infrastructure. Healthcare IT has long suffered from legacy systems that isolate data—a costly and inefficient approach. As the volume of clinical data explodes, so do the challenges of securing, accessing, moving, and managing the information that is crucial for effective diagnosis and treatment.

The heart of healthcare

Data is the lifeblood of healthcare organizations. Technologies such as digital imaging and digital patient records create an abundance of data to use for optimizing patient care. The problem is effectively managing that data.

80MB

Each patient generates 80MB of data each year.

137TB

The average hospital produces 137TB of data per day.

47%↑

The amount of healthcare data is increasing by 47% yearly.

Cure EHR data challenges

To meet the stringent data management and storage requirements of EHR solutions, healthcare organizations need an intelligent data infrastructure that enhances operational efficiency and ensures data security—all while managing costs and delivering exceptional patient care.

NetApp provides comprehensive, high-performance, and secure solutions for running Epic and other EHR systems on premises and in hybrid cloud environments. Designed to meet demanding requirements for performance, scalability, and reliability, an intelligent data infrastructure built on a NetApp® ONTAP® storage infrastructure empowers healthcare organizations to optimize their IT operations with uninterrupted access to critical patient data.

NetApp solutions align directly with the strategic priorities of healthcare organizations:

- **Operational excellence.** Simplify IT operations with NetApp unified storage architecture and automated workflows, reducing complexity and operational overhead.
- **Cost optimization.** Consolidate production, disaster recovery, and nonproduction environments onto a single platform, lowering TCO by up to 50%.
- **Patient-centric care.** Deliver faster access to critical patient data with submillisecond latency, improving clinical decision making and patient outcomes.
- **Regulatory compliance and security.** Protect sensitive patient data with enterprise-grade cybersecurity features, including immutable NetApp Snapshot™ copies and ransomware detection.
- **Scalability for growth.** Seamlessly scale infrastructure to meet growing demands from mergers, acquisitions, or increased patient volume.

Deliver unrivaled performance and availability

Fast, always-available EHR systems enable clinicians to make on-the-spot decisions that can save lives. NetApp all-flash storage solutions exceed the most demanding EHR performance requirements with the ability to get data to care teams instantly.

To keep the data flowing, NetApp storage delivers 99.9999% availability. As patient data continues to grow, NetApp's hybrid solutions enable modular scaling, on premises or in the cloud, to support growing data demands without disrupting critical applications.

Built-in disaster recovery using NetApp SnapMirror® replication software allows healthcare organizations to accelerate failover and minimize downtime in the event of a disaster. Automated backup and restore processes reduce recovery time from hours to minutes, enabling uninterrupted access to your critical applications.

KEY BENEFITS

Deliver unrivaled performance and availability

- Exceed EHR performance requirements with all-flash storage that supports over 850K IOPS over FCP.
- Maintain uninterrupted access to patient data with six-nines availability and built-in disaster recovery.
- Support growing data demands without disrupting operations with modular scaling capabilities.

Simplify data management

- Unify file, block, and object storage under a single NetApp ONTAP operating system to eliminate silos and reduce operational complexity.
- Automate workflows to simplify backup, restore, and environment refreshes.
- Enable your IT team to focus on strategic initiatives rather than reactive troubleshooting with predictive analytics and proactive insights from NetApp Active IQ® software.

Get unmatched data protection and security

- Comply with HIPAA, GDPR, and other regulatory standards with features like NetApp SnapLock® compliance software for secure, tamper-proof data retention.
- Implement a Zero Trust security model with features like multi-admin verification, end-to-end encryption, and primary storage real-time AI-powered ransomware detection with 99% accuracy and recall.

Enable cost efficiency

- Consolidate multiple workloads onto a single platform to reduce TCO.
- Take advantage of inline data reduction technologies such as data compression and deduplication to reduce storage costs.
- Get built-in capabilities to optimize performance and capacity for your Epic EHR storage.

Get unmatched data protection and security

Healthcare data is highly regulated and constantly under scrutiny. Exponential growth can make it even more difficult to keep up with constant security threats and compliance requirements. With NetApp, you can provide trusted data protection, HIPAA and GDPR compliance, and secure access for your distributed, diverse, and dynamic healthcare data.

NetApp enables you to integrate, protect, and secure your entire data pipeline with a Zero Trust architecture. Data encryption at rest and in flight protects data wherever it lives or wherever it moves to. NetApp offers the only hardened enterprise storage validated to store top-secret data. In addition to being NIST FIPS 140 and CSfC certified, NetApp solutions feature quantum-resistant encryption with FIPS 140-3 security.

Not only are the hardware and NetApp ONTAP data-management software certified, NetApp also provides extended features within the software to help secure your environment, including:

- Multi-admin verification
- Creation of write once, read many (WORM) volumes
- Data classification
- Immutable backups
- Built-in anti-ransomware protection

NetApp offers the most secure storage on the planet—no other storage solution provides equivalent security protection. We deliver unmatched data security with built-in versioning and traceability, built-in cybersecurity, and real-time, AI-powered ransomware protection with 99% detection accuracy and guaranteed recovery.

NetApp BlueXP™ classification service automatically identifies and classifies data to help you maintain compliance. Advanced AI and dashboards provide the automation and intelligence that simplify data governance.

Enable cost efficiency

NetApp solutions enable healthcare organizations to affordably modernize Epic EHR infrastructure and patient care without compromising performance, accessibility, or security. Our single, unified platform means that you don't need to train or hire extra people to manage your storage infrastructure. Because file, block, and object data are supported in a single system, you avoid the cost of purchasing three individual systems to support all your data.

You can reduce costs in your test and development environments with NetApp FlexClone® technology that enables you to quickly provision full-copy test environments without needing any additional storage overhead.

For additional savings, NetApp technology automatically tiers cold data to lower-cost storage. Deduplication and compression technologies let you store more data with less storage, resulting in an overall smaller storage footprint that delivers additional savings in power and cooling costs. Performance- and capacity-optimized NetApp RAID-DP® with Advanced Disk Partitioning means that you get the most possible usable space from disks.

NETAPP SOLUTIONS FOR EHR IN ACTION



MERCY TECHNOLOGY SERVICES

- Achieved a 6x improvement in query response times.
- Delivered \$27M in benefits through faster diagnostics.
- Reduced sepsis mortality rates by 50%.

[Read the full story](#)

UNIVERSITY MEDICAL CENTER NEW ORLEANS

- Cut EHR deployment times by 80%, generating environment copies in 20 minutes instead of 16 hours.
- Reduced response time exceptions in EHR by 81%.

[Read the full story](#)

NETAPP CORE CAPABILITIES FOR EHR

- **Complete data protection and compliance.** Make hundreds of point-in-time backups of data volumes with NetApp Snapshot technology. Each Snapshot copy is an immutable set of references that can be mounted for read-only use or replicated to other systems or locations for long-term archiving or use by remote teams. And SnapLock software means that your data is tamper-proof.
- **Simplified data management.** NetApp unified management of file, block, and object storage reduces silos and operational complexity. Automated workflows and predictive, proactive analytics from Active IQ enable IT staff to focus on strategic business tasks instead of day-to-day management.
- **High performance and availability.** Support for over 850K IOPS over FCP and guaranteed write cycles of less than 45 seconds enable optimal performance. 99.9999% availability means uninterrupted access to clinical applications.
- **Cost optimization.** Keep costs under control with data deduplication and compression technologies that enable you to reduce your storage footprint to drive significant cost savings. Consolidation of multiple workloads (EHR production, reporting, disaster recovery) onto a single platform reduces total cost of ownership.

Endless possibilities

NetApp unified data management solutions are the right fit for a variety of EHR use cases, including:

- **Production environments.** Achieve high availability and consistent low latency for mission-critical clinical applications.
- **Disaster recovery.** Automate failover processes to secondary sites, minimizing downtime during outages and enabling business continuity.
- **DevTest environments.** Quickly provision up to 30 full-copy test environments using FlexClone technology, enabling faster application development cycles without additional storage overhead.
- **Regulatory compliance.** Maintain secure, tamper-proof records with SnapLock technology for long-term data retention.

The prescription for success

Over 20,000 customers rely on NetApp to support their mission-critical workloads. By running Epic EHR workloads on NetApp, healthcare organizations can achieve operational excellence while reducing costs and enhancing patient care. With its unmatched performance, robust security features, and seamless scalability, NetApp empowers healthcare providers to navigate the complexities of modern EHR systems strategically, delivering better outcomes for patients and providers alike.

Learn more about [NetApp solutions for healthcare](#).



Contact Us

About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. www.netapp.com

