



Top 10 Reasons Healthcare Organizations Need a Data Hub

HOW PURE STORAGE® IS CHANGING THE DATA LANDSCAPE
FOR HEALTHCARE ORGANIZATIONS.



10 Reasons to Choose Pure Storage for Healthcare

Digital transformation is a driving force in today's healthcare industry. Fast access to the right data is crucial across a wide variety of use cases:

- Clinicians need access to patient records and analytics through electronic health record (EHR) systems.
- Radiologists use artificial intelligence (AI) to make faster, more accurate diagnoses.
- Data scientists create clinically validated applications to improve patient care.

As healthcare systems generate data at an ever-increasing rate, the need for fast, centralized data access has become paramount. A [data-centric architecture](#) can be key to providing what practitioners need to best serve patients.

The Pure Storage [FlashBlade™](#) solution is the industry's first data hub that unifies file and object storage on a single scale-out platform. Not only does FlashBlade provide fast access to critical data, it lets you manage data using a single platform that can seamlessly expand as your needs grow.

A [data hub](#) is a powerful solution to help contain the rapid growth of healthcare data and the applications that rely on it. Here are 10 things a data hub can help your organization do:

1. **Consolidate patient data.** Share data easily across the entire organization.
2. **Revolutionize healthcare with real-world AI.** Enable AI solutions that can dramatically improve healthcare.
3. **Drive advanced analytics.** Make better business decisions in real time.
4. **Optimize clinical accuracy.** Give clinicians the data they need to make the best decisions.
5. **Improve patient experiences.** Drive higher satisfaction with online tools and personalized services.
6. **Support provider satisfaction.** Give providers the high-performance tools they need.
7. **Manage data growth.** Increase efficiency while lowering data-center costs.
8. **Enable consistent application performance.** Provide higher throughput for better performance.
9. **Keep costs predictable.** Make your CFO happy.
10. **Build competitive advantage with data.** Use modern analytics and AI to drive operational and clinical improvements.

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1. Consolidate Patient Data

SHARE DATA EASILY ACROSS THE ENTIRE ORGANIZATION.

Legacy storage infrastructures often lead to data silos and an inability to easily access data across applications. Departmental or location-specific data silos can make it difficult to share data among provider teams or between providers and payers. These challenges limit the ability to collaborate and manage patient care across the network.

Shared data is more valuable than untapped stored data. Pure Storage FlashBlade simplifies sharing data across your organization's applications and dashboards. Using a data-centric architecture delivers the agility and responsiveness healthcare organizations need.

Powered by a massively distributed transaction database, FlashBlade offers a single platform for all data-intensive applications, delivering any data to any client without bottlenecks or hotspots.



Up to

8 petabytes

within a half rack¹

FlashBlade is the industry's only scale-out storage solution that offers a single platform for all data-intensive applications.

2. Revolutionize Healthcare with Real-World AI

ENABLE AI SOLUTIONS THAT CAN DRAMATICALLY IMPROVE HEALTHCARE.

AI has the potential to revolutionize many aspects of healthcare. From helping improve the speed and accuracy of diagnoses to enabling intelligent, real-time revenue-cycle management and claims processing, AI can make a difference.

The Pure Storage data hub evolved from the need for timely storage, management, and delivery of datasets to graphics processing unit–based AI computing environments. This allows researchers to train models faster and bring AI tools to market more quickly. Data scientists and AI researchers need to focus on training and optimizing models, not wait for the storage infrastructure to move data. For example, radiologists rely on AI to augment their capabilities and speed productivity of radiomics processes.

AI calls for a new approach to infrastructure. [AIRI™](#), a converged solution from Pure Storage and NVIDIA, provides a [real-world AI infrastructure solution](#) that is simple, fast, and future proof. With AIRI, teams can focus on AI research and business applications while the solution meets demands and scales as AI use grows. Research can proceed without delays due to the infrastructure “catching up.”

“Data is the fuel driving the AI revolution.”

DR. THOMAS FUCHS //

FOUNDER AND CHIEF SCIENCE OFFICER, PAIGE.AI



AIRI gets you running in
hours instead of weeks or months²


3. Drive Advanced Analytics

MAKE BETTER BUSINESS DECISIONS IN REAL TIME.

Healthcare has become data-centric with the wide-scale adoption of [EHR](#) systems and business intelligence (BI) software. Powerful analytics allow healthcare professionals to use that data to make better decisions in real time.

Combining operational, clinical, and financial analytics is key to measuring performance of service lines. But deriving value from that data requires more. Analytics must be actionable, incorporated into workflows, and available to clinicians and managers.

Pure FlashBlade enables high availability and fast access to vast amounts data. This gives caregivers the information they need to make accurate decisions quickly. With optimized workflows that tap the speed and reliability of FlashBlade, they don't need to wait for critical information.



“The real promise of analytics lies in its ability to transform healthcare into a truly data-driven culture... **We decided to go all-in for the best solid-state solution.** Pure Storage was the obvious choice.”

DALE SANDERS //
PRESIDENT OF TECHNOLOGY,
HEALTH CATALYST

4. Optimize Clinical Accuracy

GIVE CLINICIANS THE DATA THEY NEED TO MAKE THE BEST DECISIONS.

Many health systems struggle to implement modern analytics on top of data from legacy systems. Previous systems stored data for transactional processes, not powerful real-time analytics applications. Applications hampered by slow storage systems prevent clinicians from accessing data in real time, which can risk patient well-being.

Use Pure FlashBlade to improve clinician efficiency by helping electronic medical record (EMR) and analytics systems provide data as quickly as possible. Performance improvements also extend to IT storage teams, which benefit from the ease-of-use and built-in features for which Pure Storage is known.

“Pure is our storage standard. It’s robust, fast, encrypted, and replicates well. What more can we ask?”

MERAZ NASIR //
MANAGER OF INFRASTRUCTURE ENGINEERING,
ATLANTIC HEALTH SYSTEM

75 GB/sec + **7.5 million** = **productive clinicians¹**
read performance input/output operations per second (IOPS)

5. Improve Patient Experiences

DRIVE HIGHER PATIENT SATISFACTION WITH ONLINE TOOLS AND PERSONALIZED SERVICES.

New patient-care models—such as telehealth and in-home care—can challenge your infrastructure and hinder patient care. More importantly, underperforming patient-facing applications can negatively impact patient perception.

Today's consumers expect 24/7 availability of their health data. They want it on a variety of devices, along with the ability to use apps that support their lifestyles. Consumers are generating and sharing data with healthcare organizations, such as that from fitness and in-home medical devices.

Pure FlashBlade can provide the data foundation that gives you the agility required to better serve patient needs. Ubiquitous availability of data across the health system helps patients manage their own health while giving your teams data for better decision making.

“Pure Storage has allowed me to help bring in the right technology so that **we can deliver better patient care.**”

BRETT TAYLOR //

DIRECTOR OF IT INFRASTRUCTURE & OPERATIONS, ST. LUKE'S HEALTH SYSTEM



6. Support Provider Satisfaction

GIVE PROVIDERS THE HIGH-PERFORMANCE TOOLS THEY NEED.

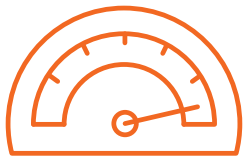
Retaining the best providers means giving them the ability to care for patients and conduct research. It's vital to provide tools that let providers do their jobs without technology getting in the way. Optimize EMR systems with intelligent features, workflows, and security to ease the technology burden on providers.

Give providers a high-performance environment that allows them to efficiently care for patients, communicate with peers, and access research opportunities. Enable AI tools to further enhance productivity. Such work environments can lead to higher job satisfaction, helping to reduce clinical staff turnover, retain patients, and build provider and patient loyalty.

Pure FlashBlade—with its high performance, bandwidth, availability, and built-in security—is a key piece of the puzzle.

“The primary differentiator for Pure was—and remains—**the level of support they bring to our partnership.**”

BILL HUDSON //
ASSOCIATE CIO, JOHN MUIR HEALTH



HIGH PERFORMANCE



BUILT-IN SECURITY



BETTER CLINICAL RESULTS

7. Manage Data Growth

INCREASE EFFICIENCY WHILE LOWERING DATA-CENTER COSTS.

Healthcare is increasingly reliant on powerful diagnostic tools, such as advanced imaging and remote patient monitoring. Personal wearable health-monitoring devices can give providers a wealth of information that aids in patient care. As the proliferation of these technologies accelerates, so does the volume of the data they generate.

Pure FlashBlade features advanced data-compression and [deduplication](#), which lower hardware requirements for growing data volumes. A smaller hardware footprint translates into lower data-center costs.

Even with the high data density of FlashBlade, you'll likely need to expand your storage capacity at some point. There's never a day off in healthcare, so downtime for lengthy data migrations isn't an option. Pure's [Evergreen Storage™](#) business model provides the means to upgrade and scale out systems non-disruptively—without migrating data.

“I've been through numerous data migrations over my long career, and **this was the easiest one** I've done.”

BILL YOUNG //

MANAGER OF SERVER DESIGN, DEVELOPMENT AND ENTERPRISE STORAGE, THE UNIVERSITY OF KANSAS HEALTH SYSTEM



50%

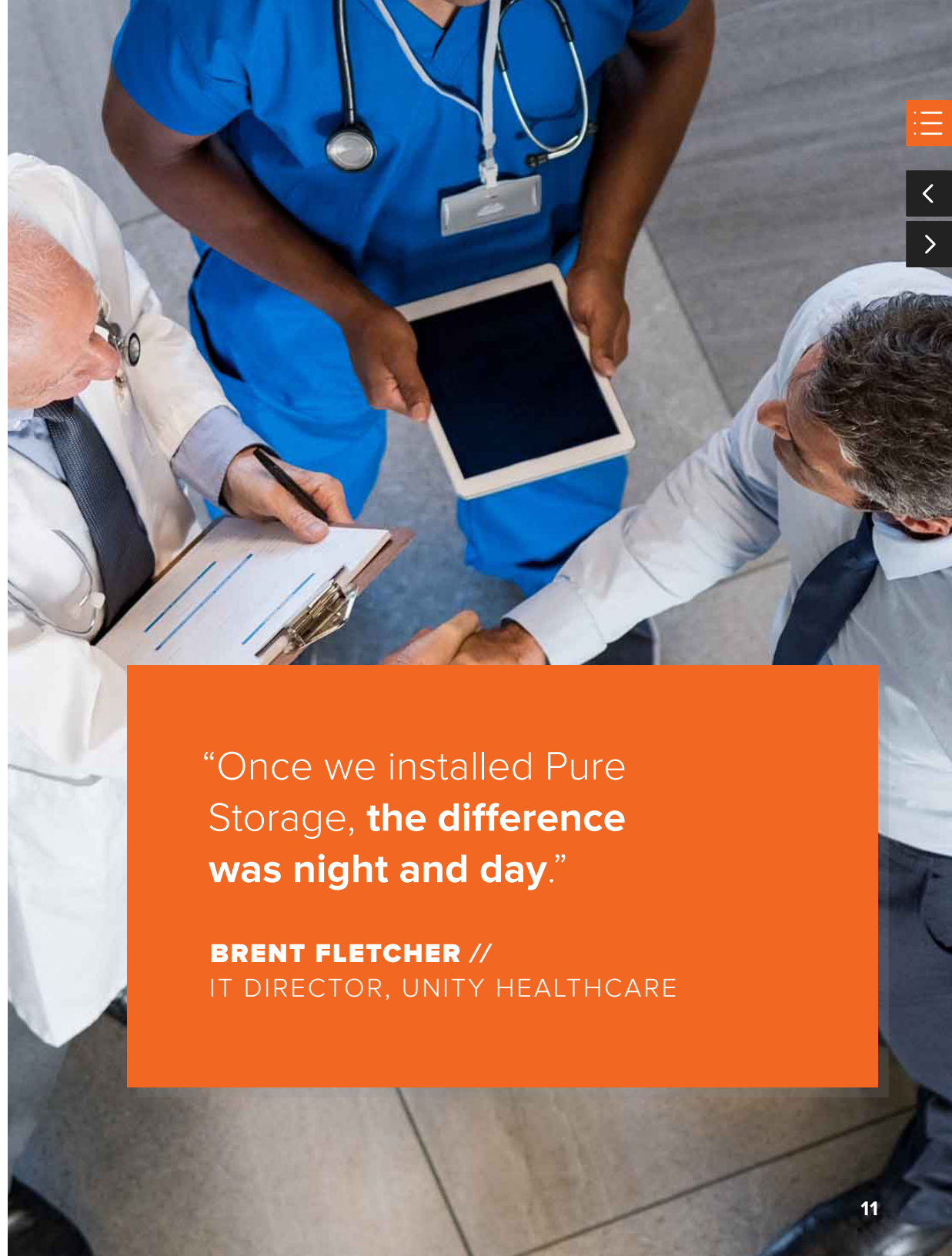
cost savings with data reduction
+ power, cooling, and space³

8. Enable Consistent Application Performance

PROVIDE HIGHER THROUGHPUT FOR BETTER PERFORMANCE.

An Enterprise Strategy Group (ESG) study notes that healthcare business units can suffer from poor application performance.⁴ In the study, a healthcare IT director explains how random application slowdowns affected the company's claims processors, who are paid for each claim they process. Application slowdowns reduced the number of claims processed, which affected both the company and the claims processors financially. Moving to Pure Storage solutions eliminated the application slowdowns.

Pure FlashBlade provides built-in quality of service (QoS) capabilities that provide consistent performance across the data hub. Validated designs also provide converged-infrastructure solutions with key partners to further help support consistent application performance.



“Once we installed Pure Storage, **the difference was night and day.**”

BRENT FLETCHER //
IT DIRECTOR, UNITY HEALTHCARE

9. Keep Costs Predictable

MAKE YOUR CFO HAPPY.

Healthcare involves tight regulatory environments that are always changing. All the while, you're trying to contain patient-care costs. Pure FlashBlade can help reduce the total cost of ownership (TCO) by helping consolidate workloads from specialized silos.

Traditional storage systems are expensive to upgrade as data volumes grow. Your teams must often purchase new systems and migrate data from old systems, paying for twice the storage in the process. Pure's Evergreen Storage model lets you upgrade FlashBlade solutions at any time, with only the amount of storage you need. No lengthy, complex data migrations are necessary.

Pure also reduces administrative overhead and cost with easy-to-use management tools, APIs, and integration with leading virtualization and systems-management platforms. All these capabilities work together to help reduce the burden on storage and system administrators.

“There’s a lot of pain we don’t have to deal with anymore.”

MIKE SCHLENK //

ASSISTANT DIRECTOR OF SERVER DESIGN, DEVELOPMENT AND ENTERPRISE STORAGE, THE UNIVERSITY OF KANSAS HEALTH SYSTEM



65%

less staff time to manage and support FlashBlade⁴

10. Build Competitive Advantage with Data

USE MODERN ANALYTICS AND AI TO DRIVE OPERATIONAL AND CLINICAL IMPROVEMENTS.

Faced with increasing pressures, providers are looking for ways to use analytics to reduce the costs of care delivery. At the same time, there's always a need to raise the bar on patient satisfaction and safety. By lowering operational costs, you can reinvest the money you save into improving the patient experience.

Focusing your systems around a data-centric architecture can increase performance, lower TCO, and enable promising technologies such as AI and advanced real-time analytics. Embracing these technologies can give you the competitive advantage required to flourish.

“We now have storage that takes up significantly less space, has significantly more performance, and comes at a much better cost. With Pure Storage, we see more consistent retrieval times for studies and **we no longer have any problems.** That's a huge advantage.”

BILL HUDSON //
ASSOCIATE CIO, JOHN MUIR HEALTH



LOWER
operational costs



HEALTHIER
bottom line

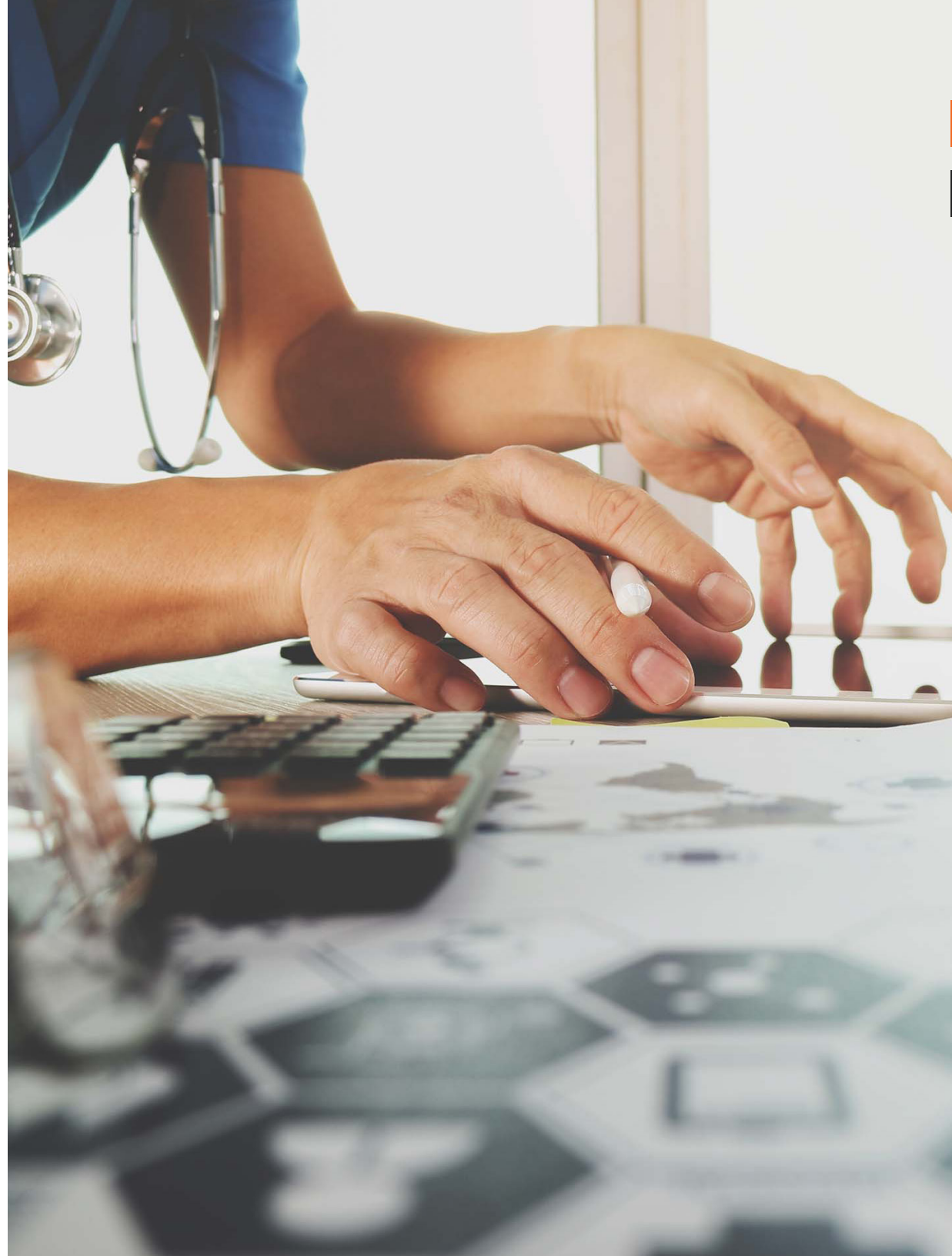


Where to Go Next

Pure Storage is helping drive digital transformation in the healthcare industry with the Pure FlashBlade data hub. Contact us to learn how to revolutionize your healthcare organization's data needs.

800-379-PURE (7873) // sales@purestorage.com





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- 1 "FlashBlade Sets the Bar for the Scale-Out Storage Industry," Pure Storage, July 2017, <https://blog.purestorage.com/flashblade-sets-bar-scale-storage-industry/>.
 - 2 "Meet AIRI™, Your First AI-Ready Infrastructure At Scale," Pure Storage, 2018, www.purestorage.com/content/dam/purestorage/pdf/datasheets/ps_sb_ai-ready-infrastructure_01.pdf.
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 - 4 "Pure Storage: Transforming Healthcare," ESG, July 2017, www.purestorage.com/content/dam/purestorage/pdf/whitepapers/ESG-WP-Pure-Storage-Healthcare-Econ-Value-July-2017.pdf.
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