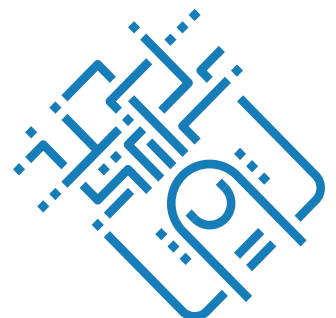# Advancing Health IT Transformation in the Digital Era

Healthcare providers have new opportunities to use data to improve patient care. By 2019, 60% of healthcare applications will collect real-time location data, device data, and start to discover patterns.[1] That said, the influx of data (clinical and operational) requires Health IT to adapt faster and deploy modern IT infrastructure to meet ongoing demand. Eighty-one percent of global healthcare leaders say they can't act in real-time using this information, today.[2]

Enter new opportunities to scale genomics and pathology, increase patient engagement, capitalize on predictive analytics for clinical, financial, and operational improvements, and create more personalized care. And, while trying to store and analyze this increasing data, providers must simultaneously protect against breaches and cyberattacks – by 2018, ransomware attacks on healthcare organizations will double.[3]

Dell EMC is uniquely positioned to power your digital transformation with best-in-class technology for applications, data, infrastructure, and security – from the edge to the core to the cloud. Leveraging our strategically aligned businesses, global partner ecosystem, robust services, and financial offerings, we help simplify Health IT, reduce operating costs, and deliver faster time to value, leading to improved patient care outcomes.

1   https://www.idc.com/getdoc.jsp?containerId=US41864316
2   http://transformhealthit.com/pdfs/EMC_Making_Waves_Infographic.pdf
3   https://www.idc.com/getdoc.jsp?containerId=US41864316

DELLEMC

Health IT Transformation

Modernize Health IT infrastructure, automate process and management, and transform operations

Connected Health

Enable a modern workforce on modern devices to improve staff efficiencies and foster better patient engagement

Precision Medicine

Power research, analysis, and collaboration for personalized medicine and population health management

Security Transformation

Adopt an intelligent, business-driven security strategy for data protection
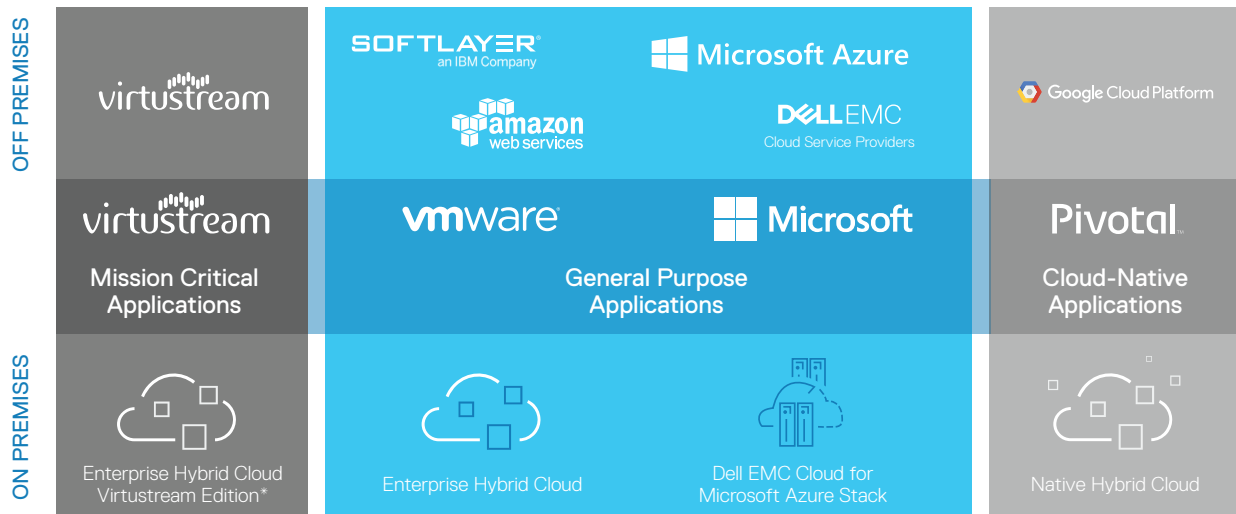
HEALTH IT TRANSFORMATION

Dell EMC offers a portfolio of solutions, products, and services to accelerate IT transformation including certified clinical solutions with leading Healthcare ISV Partners. Solutions include:

◆ **Clinical Application Optimization** – Improve clinical application performance with Flash, Converged and Hyper-Converged infrastructure, modern servers, and scale-out architectures, certified and tuned in Dell EMC labs

◆ **Advanced Imaging** – Support PACS, VNA, genomics, and prepare for next-generation imaging analytics with modern infrastructure designed to scale and leverage cloud

HEALTHCARE DATA NEEDS A HEALTHCARE CLOUD

Dell EMC delivers ultimate cloud flexibility, balancing business and clinical workloads:

Dell EMC Multi-Cloud Portfolio

OFF PREMISES			
virtustream	SOFTLAYER an IBM Company / amazon web services	Microsoft Azure / DELLEMC Cloud Service Providers	Google Cloud Platform
virtustream **Mission Critical Applications**	vmware / Microsoft **General Purpose Applications**		Pivotal **Cloud-Native Applications**

ON PREMISES			
Enterprise Hybrid Cloud Virtustream Edition*	Enterprise Hybrid Cloud	Dell EMC Cloud for Microsoft Azure Stack	Native Hybrid Cloud

* Coming Soon

PRECISION MEDICINE TRANSFORMATION

With clinical research data continuing to grow, IT must be ready to scale and handle data acquisition, storage, distribution, and analysis while adhering to regulations. Solutions include:

- **High Performance Computing** – Solve the most complex medical challenges with the power of Dell EMC compute leadership

- **Genomics Research** – Manage genomics and pathology workloads with purpose-built high powered servers and best-in-class storage

- **Predictive Health Analytics** – Analyze and identify key patterns for clinical and non-clinical use cases with data lake technology and data analytics tools

CONNECTED HEALTH TRANSFORMATION

Accelerate workforce transformation and improve patient engagement with connected health technologies. Dell EMC securely connects caregivers with each other and the information needed to better serve patients. Solutions include:

- **Innovative Devices and Specialized Devices** – Keep every member of your workforce productive, connected, and secure anytime, anywhere, no matter the task

- **Telehealth** – Enable cost-effective alternatives to primary care onsite visits with virtual health, improving care access

- **Digital Workplace** – Deliver anytime, anywhere access to apps and services through VDI environments optimized with integrated identity, application, and enterprise mobility

SECURITY TRANSFORMATION

Healthcare data continues to be a top cyber attack target and providers need the right tools to ensure patient safety, whether protecting from ransomware, Advanced Persistent Threats (APTs), or insider threats. Health IT needs to protect the hospital from the edge to the core and in the cloud. Solutions include:

- **Network Monitoring and Response** – Enhance threat detection with tools to prevent, detect, and remediate evolving cyber threats; Leverage GRC frameworks across multiple tools and environments

- **Authentication and Access Control** – Deploy role-based access to simplify HIPAA and General Data Protection Regulation (GDPR) compliance by removing unauthorized access to applications that contain Protected Health Information (PHI) and Personally Identifiable Information (PII)

- **Advanced Data Protection** – Improve backup efficiency and recovery times of clinical and enterprise data, on-prem and in the cloud. Create isolated, off-network copies of critical data unalterable and secure from lockout by cyber hackers

DELL EMC

DELL TECHNOLOGIES HELP ADVANCE HEALTH IT TRANSFORMATION

DELLTechnologies

DELL	DELLEMC	Pivotal	RSA	SecureWorks	virtustream	vmware
Innovative devices, services and solutions designed for the way people work (and play).	Transforming the data center with industry-leading servers, storage and converged infrastructure	Leading intersection of Big Data, PaaS and agile development leveraging data on one cloud-independent platform	Premier provider of security, risk and compliance solutions solving your most complex challenges	Elite and trusted intelligence that strengthens security and reduces risk in a dynamic landscape	Leading enterprise-class cloud software and solution provider	Most trusted virtualization solution for desktop, data center and applications

LEVERAGE DELL EMC'S ROBUST PARTNER ECOSYSTEM

Dell EMC's robust partner ecosystem of ISVs, resellers, integrators, outsourcers, and service providers is working side by side with healthcare providers and life sciences organizations to build and secure their modern Health IT infrastructure.
We combine industry-leading capabilities, global expertise, best practices, and lab capabilities to deliver jointly engineered, tested, certified, and pre-integrated solutions that provide the highest levels of performance, availability, security, and automation. Armed with our partnerships, lab resources, services, and industry experts, Dell EMC is your leading strategic partner to help transform Health IT.

WHY DELL EMC IN HEALTHCARE-LIFE SCIENCES?

6,000+
hospitals worldwide deploy Dell EMC IT Infrastructure

7 of 10
pharmaceutical companies are Dell EMC customers

160 billion
network security events are processed daily by Dell SecureWorks

OVER 66%
of U.S. hospitals are Dell EMC customers

41%
of U.S. hospitals are using Dell EMC servers

51%
of storage infrastructure in U.S. hospitals run on Dell EMC

Learn more about Dell EMC solutions

Contact a Dell EMC Expert

DELLEMC