

THE CLOUD COMES TO HEALTHCARE

INCREASING PATIENT-CENTRIC CARE, REDUCING COST & COMPLEXITY

DIGITAL PATIENT CARE IS NOTHING NEW

The healthcare industry has been on the leading edge of the digital transformation curve in many ways, some of which the COVID-19 pandemic has expedited. Life-critical patient data in the form of electronic health records (EHRs) and diagnostic-quality images stored in Picture Archive and Communications Systems (PACS) accompany patients as they interact with caregivers throughout the continuum of care. These tools, which have been in use for decades, can be consumed through traditional on-premise models or as-a-Service delivery (via multiple vehicles).

With the patient experience now largely automated, the connective tissue - patient portals and other health care data platforms - among local care providers and between localities and counties, cities and states, and states and the federal government has become well established. Because of this, the US Centers for Disease Control and Prevention (CDC) was able to relay data on COVID cases across the country seemingly in real-time. In fact, the CDC-developed Public Health Information Network (PHIN) was established in 2004, years ahead of its time, to enable just such real-time reporting and responsiveness.

That said, given the incredible capital expenses associated with healthcare equipment, the foundational IT systems and infrastructure can still become an afterthought. As a result, highly automated and advanced software used to manage patient care often runs on outdated, insecure, and less than optimized infrastructure. Furthermore, the compliance regulations around patient privacy and data sovereignty have led healthcare organizations to lower usage rates of public cloud services, compared to many other industries.

According to a recent [Nutanix study](#), however, 90% of healthcare respondents agree that hybrid multi-cloud is an ideal IT model for their organizations, despite this lagging adoption rate. And one area where healthcare does project adoption of public cloud services is in disaster recovery/business continuity.

DOES DIGITAL PATIENT CARE AND MANAGEMENT REQUIRE THE CLOUD?

Like their counterparts in other industries, healthcare IT professionals feel pressure to move to the "cloud." C-level executives, trying to achieve greater operational agility while driving down costs, see the cloud in the abstract as nirvana.

However, healthcare IT directors, administrators, and practitioners involved in implementing these cloud strategies understand that it is a journey. And the end of that journey resembles a hybrid, multi-cloud environment in which data and services span on-premises to multiple clouds and are securely governed and managed.

It is common to conflate the need for cloud-like operations and economics with the need for the public cloud. This misunderstanding is often discussed in conversations with healthcare IT professionals.

The needs of the healthcare IT organizations are pretty straightforward – deliver the services necessary to support the needs of the healthcare professional services faster, cheaper, and in a manner that allows for a quick onramp for that cloudified end state.

PATIENT CARE AS-A-SERVICE

Moor Insights & Strategy (MI&S) believes new consumption-based services from the likes of Hewlett Packard Enterprise (HPE) with GreenLake, combined with Nutanix Cloud Platform, can deliver the benefits of the cloud while mitigating concerns around privacy and security, data sovereignty, and unanticipated costs.

GreenLake, HPE's "as-a-Service" offering, can deliver fully optimized and managed operating environments to organizations, leading to greater operational agility and lower, predictable operating costs. When deploying GreenLake with Nutanix, IT organizations can further simplify their infrastructure management operations and focus on the more pressing needs of healthcare providers.

What is especially interesting about Nutanix in the healthcare solution stack is how deeply it embraces and enables the healthcare independent software vendor (ISV) ecosystem. The company seems to focus on ensuring the predominant ISVs are enabled and optimized to run on its platform, as demonstrated through its [relationship with leading electronic healthcare records \(EHR\) providers](#) Epic, Cerner, and MEDITECH. In fact, Nutanix is the most widely deployed full-stack certified hyperconverged infrastructure (HCI) platform, and the only one supporting the entire

MEDITECH suite. Many of the Nutanix healthcare customers also run full-stack Epic, from Cogito to Hyperspace to complementary third-party products. Additionally, Nutanix is certified to work with all leading picture archiving and communication (PACS) system vendors.

The breadth and depth of Nutanix's support for the leading EHR and PACS applications, combined with its pervasiveness in the healthcare market, should give prospective customers confidence in the value that can be realized from this partnership.

Another area in which Nutanix shines is one of the most common use cases in inpatient care – end-user computing (EUC). Virtual desktop infrastructure (VDI) has long been IT's answer for the ever-roving healthcare professional. And VDI pioneers such as Citrix have been the choice for many healthcare IT organizations.

Nutanix simplifies the deployment and management of Citrix in the healthcare environment, and HPE GreenLake can support the ever-increasing needs of doctors and professionals. Accessing life-critical patient data and viewing diagnostic-quality images necessitates capable infrastructure. And GreenLake enables the resources that facilitate the peak usage periods without paying for those resources when they sit underutilized.

IS THE HEALTHCARE CLOUD VIABLE?

In short, the answer is yes. However, the "cloud" isn't necessarily, or only, the "public cloud." As it applies to healthcare, MI&S sees "the cloud" as a broad term that applies to private and public cloud(s) and services through managed service providers (MSPs) and Software-as-a-Service (SaaS) providers.

While trying to satisfy the tensions between achieving cloud adoption goals and meeting the real-world needs of the organization, MI&S believes IT organizations should focus on the following guiding principles:

1. **Mission-critical = Life-critical.** This statement is not hyperbole. Falling short in healthcare doesn't mean a credit card transaction fails or an order is processed slower. Falling short can literally be the difference between life and death. Because of this, the healthcare industry operates differently. And every technology decision should be guided by this understanding. The cloud journey is different for healthcare.

2. **Cloud-like operations don't require cloud adoption.** Organizations looking to embrace the cloud for agility, cost, and operational efficiency can do so without introducing risk. Nutanix has a strong portfolio of delivering cloud operations in the healthcare industry. And HPE GreenLake can deliver on the promise of cloud economics with a "pay only for what you use" model.
3. **Change is inevitable – embrace it.** Transformation and change can cause a healthcare IT professional many sleepless nights, as change can introduce risk. Because of this, evaluation of next-generation infrastructure operating environments should be considered through the lens of enabling change without introducing risk.

FINAL WORDS

MI&S tracks technology adoption across virtually every vertical and industry. And while IT organizations across different sectors speak to what makes their specific business unique, the technology needs across business types are more common than one would initially think. The one outlier is healthcare.

Because of what's at stake and events such as the COVID-19 pandemic, healthcare has been forced to accelerate technology adoption in some areas faster than other industries. Conversely, the healthcare industry has constraints limiting what technology is adopted and how. This is due to several factors, including cost, security, and minimizing disruption in the clinician/patient relationship and care dynamic.

MI&S sees Nutanix as a robust platform to support healthcare IT management systems due to its versatility, security, and ability to enable the healthcare journey. And when optimized on HPE GreenLake, healthcare providers can reap the benefits of the cloud while minimizing risk.

Because of this, MI&S believes Nutanix and HPE GreenLake should be seriously considered by any healthcare organization considering or in the throes of IT modernization.

IMPORTANT INFORMATION ABOUT THIS PAPER

CONTRIBUTOR

[Matt Kimball](#), Vice President, and Principal Analyst at [Moor Insights & Strategy](#)

PUBLISHER

[Patrick Moorhead](#), Founder, President, & Principal Analyst at [Moor Insights & Strategy](#)

INQUIRIES

[Contact us](#) if you would like to discuss this report, and Moor Insights & Strategy will respond promptly.

CITATIONS

This paper can be cited by accredited press and analysts but must be cited in context, displaying the author's name, author's title, and "Moor Insights & Strategy." Non-press and non-analysts must receive prior written permission by Moor Insights & Strategy for any citations.

LICENSING

This document, including any supporting materials, is owned by Moor Insights & Strategy. This publication may not be reproduced, distributed, or shared without Moor Insights & Strategy's prior written permission.

DISCLOSURES

Nutanix commissioned this paper. Moor Insights & Strategy provides research, analysis, advising, and consulting to many high-tech companies mentioned in this paper. No employees at the firm hold any equity positions with any companies cited in this document.

DISCLAIMER

The information presented in this document is for informational purposes only and may contain technical inaccuracies, omissions, and typographical errors. Moor Insights & Strategy disclaims all warranties regarding the accuracy, completeness, or adequacy of such information and shall have no liability for errors, omissions, or inadequacies in such information. This document consists of the opinions of Moor Insights & Strategy and should not be construed as statements of fact. The views expressed herein are subject to change without notice.

Moor Insights & Strategy provides forecasts and forward-looking statements as directional indicators and not as precise predictions of future events. While our forecasts and forward-looking statements represent our current judgment on the future, they are subject to risks and uncertainties that could cause the results to differ materially. You are cautioned not to place undue reliance on these forecasts and forward-looking statements, which reflect our opinions only as of the date of publication for this document. Please keep in mind that we are not obligating ourselves to revise or publicly release the results of any revision to these forecasts and forward-looking statements in light of new information or future events.

©2022 Moor Insights & Strategy. Company and product names are used for informational purposes only and may be trademarks of its respective owners.