

# Embrace Digital Transformation in Healthcare

Rely on proven, powerful solutions to satisfy competing demands for growth, security, and productivity.



Remote access technology for clinicians ensures anywhere, anytime access to support data driven patient decisions.

## **Medical professionals need new approaches to help them work faster and more efficiently.**

Clinicians and healthcare staff are highly mobile by nature. They roam not only from one patient room to the next, but also from one specialized type of medical arena to another. Today, the need for crucial case information extends beyond the institution walls to home offices or remote work locations as well. In the 24 x 7 x 365 mobile world in which doctors and clinical staff must operate, healthcare solutions from Hewlett Packard Enterprise and Citrix combine to enable

instant access to health records, data, and applications that can make a significant difference in driving positive patient outcomes. This joint solution—proven to withstand the rigors of hospitals and clinical environments—empowers clinicians and staff in healthcare entities to work anytime, anywhere, and on any device from a secure digital workspace.

A secure digital workspace enables you to deliver the full range of capabilities that your user base needs, starting with a rich, virtual, clinical application environment and seamless access to electronic health records (EHRs), and continuing with Windows apps, Web apps, legacy systems, and data. You can centrally

## Solution brief



manage the entire environment, while ensuring that patient data resides in the data center, rather than on individual endpoints. The result is greater security—and a user experience that is completely consistent from one person to the next, one device to the next, and one location to the next.

The solution that makes this possible combines the power of best-of-breed HPE data center technology with the industry-leading **Citrix Workspace**, together allowing you to:

- **Accommodate popular EHR platforms:** Securely provide access to patient data on all major EHR platforms.
- **Efficiently serve the needs of a wide range of users:** Quickly onboard new staff and centrally provision clinical apps for hundreds or thousands of users on any corporate-issued or BYO device in any location and improve workflow for multi-disciplinary care delivery teams.
- **Rapidly deploy access to legacy systems:** Securely allow physicians and staff to use popular legacy applications—without the burden of the legacy devices or interfaces.
- **Mitigate risk:** Keep confidential patient health information (PHI) confined to the data center—so loss or theft of endpoint devices does not compromise sensitive information. No corporate data is accessible on a lost or stolen device.
- **Accommodate organic growth or mergers and acquisitions:** Easily scale up the environment to accommodate organic growth or the needs that arise from combining healthcare entities and their IT operations.
- **Centralize and automate provisioning:** Roll out back-ups, updates, and fixes from the data center — from a single pane of glass and a single image.
- **Reduce IT complexity, CapEx, and OpEx costs:** Create a better balance between IT staff workloads and hospital operational costs.
- **Easily manage the transition to cloud computing:** Regardless of where you are in the cloud journey, capitalize on the Citrix tools and HPE platform that will help you get there.

The combination of HPE data center infrastructure and Citrix Workspace enables medical professionals to securely access apps, desktops and data from anywhere. Citrix

**Citrix XenApp** and **Citrix XenDesktop** provide the app and data capabilities. **Citrix XenMobile** delivers the mobility management component. **Citrix ShareFile** facilitates content collaboration and **Citrix NetScaler** ensures network security.

For mobile clinicians, a Citrix Workspace follows staff members from device to device and department to department, so they can shift seamlessly among the personal and organizational devices that best suit their needs. For example, a clinician can start a task on a laptop in the office, resume it on a tablet at lunch, complete it on a home office PC, and then send it to a colleague for review from a smartphone. The combined HPE and Citrix solution integrates network connectivity, access control, and app optimization, ensuring a superior experience for your users. This tight integration harnesses the power of analytics, increases security and simplifies achieving regulatory compliance.

The Citrix Workspace also creates opportunities for operational efficiency. For example, clinical locations such as exam rooms, ERs, ORs, and nurse stations can now use a single endpoint device to serve multiple caregivers with a range of specialties. Collaborating providers who deliver patient care in different environments have specific jobs, so it is common for each provider to leverage a different set of clinical applications. However, thanks to the efficiencies enabled by the Citrix Workspace, and regardless of various staff members' preferences in the application stack, any staff member can use the same (often low cost) endpoint.

## Align IT investments with demand

The Citrix Workspace runs on all HPE platforms, including HPE Secure Virtual Workspace® featuring HPE Moonshot®, HPE SimpliVity®, HPE ProLiant® DL series Gen10, and HPE Synergy®. Reference architectures are available that combine each of these platforms with the Citrix Workspace. Depending on the use cases of the organizations you support (locations such as ER, OR, various wards; their particular application mixes, etc.), one or more of these platforms will be the optimal match. Some cases may require a hosted desktop environment — for example, dedicated,



**BENEFITS ACROSS THE DATA CENTER**

Because the combined Citrix and HPE solution is comprised of both hardware and software, you can leverage it to help your organization realize a host of benefits across your IT environment.

CapEx and OpEx reductions are a given: Typical improvements include:

33%

increase in speed relative to traditional desktop endpoints

65%

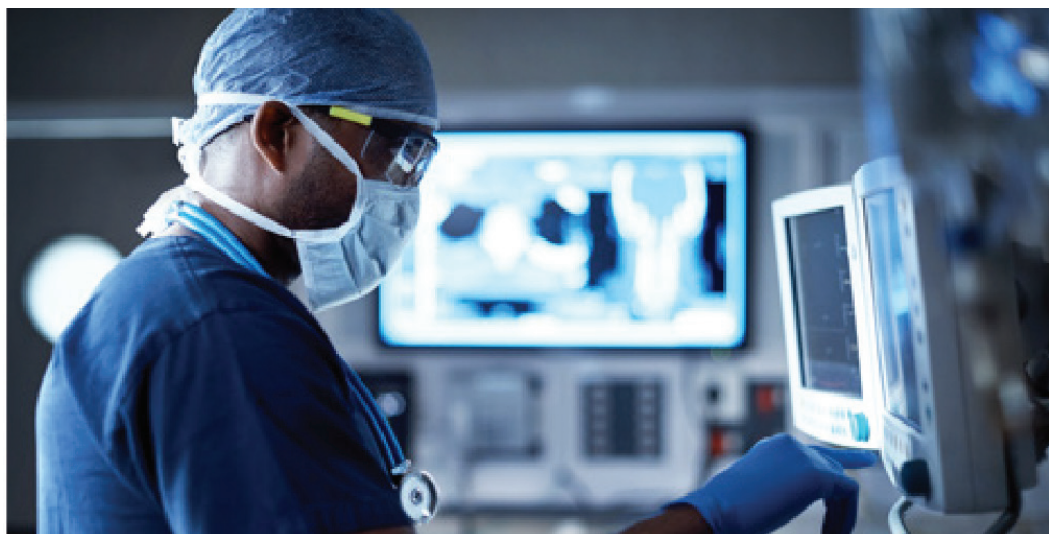
reduction in power consumption<sup>1</sup>

90%

reduction in data center footprint<sup>1</sup>

98%

reduction in cabling.



high-performance or graphics-intensive end-user systems must be hosted in a server environment, and multiple displays of the system(s) (such as in an OR setting) dictate the need for dedicated resources. In other cases, it's not about high performance or high-end graphics—it's about the ability

to access, in a serial fashion, screens from various laboratory devices or applications across multiple devices, while preserving context and state. Regardless of the specific use case, this solution allows you to configure and optimize Citrix and HPE technology capabilities to meet your users' needs.

## A Citrix + HPE SimpliVity Use Case

In a traditional server-based IT scenario, managing the transmission of PHI isn't easy. In the past, securely hosting a workload containing sensitive patient healthcare information and virtualizing it required eight to twelve discrete devices as well as several software packages.

HPE SimpliVity, a virtualization-friendly platform with accelerated data efficiencies and streamlined backup and recovery functions, significantly cuts the time window for these processes: Elapsed time decreased from twelve hours to, in the case of one healthcare customer, just one minute! This represented a lower total cost of ownership (TCO), saving up to 69% over a five-year period.

And because HPE SimpliVity is a pay-as-you-grow platform, you can pace your investment to match your users' expanding needs: You can start with as few as two nodes, then easily scale the platform to accommodate additional virtual machines and virtual desktops as well as additional nodes once you need them.

“HPE SimpliVity's built-in data replication, deduplication, and optimization features really stood out. HPE SimpliVity packs the entire IT stack, including data backup and recovery functionality, into one device. With our old system, it used to take 12 hours to perform a local backup of our 1 TB SQL database. With HPE SimpliVity, we can back it up remotely in just one minute.”

– Jason Lewis, Director of IT Infrastructure and Security, Penobscot Community Health Care



<sup>1</sup>Source: Unisphere Research survey sponsored by Oracle and conducted among 303 members of the Independent Oracle Users Group





Clinicians can spend more time with their patients when using follow me virtual technology.

### **Modernize, consolidate and reduce TCO**

Budgets are shrinking and government regulations seem to be multiplying. Therefore, while provider organizations strive to deliver the highest level of quality care, they also work to cut costs. With a joint solution from Citrix and HPE, healthcare organizations can implement a partnered solution that delivers benefits across the entire IT stack. The solution features unified management, eliminates point products and alleviates inefficient, siloed IT architectures.

### **Isolate client virtualization environments and reduce on-site support**

Desktop workloads tend to be volatile and unpredictable. This makes segregating client virtualization workloads from server workloads important for many reasons. Placing servers and desktops on a separate physical infrastructure helps ensure that hospitals' peak desktop traffic does not impair server workloads—and vice versa.

For example, desktop and server software upgrades tend to happen on different schedules. Therefore, it is less burdensome to separate the two into distinct environments. Also, some hospitals have distinct server and desktop administrative teams: In such scenarios, a segregated environment can eliminate administrative conflict. Additionally, the resulting appliance approach reduces the need for specialized skills on-site at healthcare facilities.

### **Access a complete portfolio of services**

Leverage the expertise, experience, and best practices of HPE and Citrix to optimize your deployment and increase user productivity. HPE Financial Services provide unique financing and technology refresh programs, enabling you to create the financial flexibility you need to drive change in IT consumption and behavior, while also reducing costs.

### **Deliver business agility and drive growth**

Realize the business advantage that comes with delivering the right mix of secure data visualization, speed to decision, and mobile flexibility. Rely on the combined power of HPE and Citrix to empower your clinicians and achieve your organization's goals.