Redefining IT for federal healthcare agencies

Virtualization solutions for clinicians and patients: Anytime, anywhere, on any device
Executive summary

These days, healthcare agencies know the familiar feeling of being squeezed from both ends: Demands for improved customer service, patient information confidentiality, standards compliance, and workplace efficiency run head-first into the realities of slashed budgets, staff reductions and more. Now more than ever, a dramatic paradigm shift is called for to meet the unique needs of federal healthcare services.

A global leader and the most trusted name in desktop and application delivery solutions, Citrix has established a central presence in the healthcare industry, with the top five global healthcare organizations and the top 15 U.S. healthcare organizations amongst its customer base. This executive briefing explains how Citrix solutions provide a pathway toward cheaper, more efficient healthcare IT for federal government—while improving patient care and privacy, reducing staff workload and providing unlimited data access anytime, anywhere and on any device.

The juggling act for federal healthcare IT

IT departments within the federal healthcare space face a laundry list of daily concerns, requiring proactive and reliable solutions in order to keep up with clinician and patient demands. They include:

**Enabling the mobile clinician.** Citrix arms the mobile clinician with “follow-me” desktops, applications and patient data for smartphones, iPads, laptops, tablets, thin clients, PCs, Macs, Androids and more. Citrix solutions give federal workers simple, secure and reliable solutions for connecting to the information and tools they need to remain productive while working remotely or from room-to-room. These technologies, including application, desktop and server virtualization, provide a high level of data security; are easy and cost-effective to implement, use, and support; and deliver excellent reliability and consistent performance across different usage cases.

**Keeping expense and complexity low while maintaining high patient care quality.** Amidst ongoing budget constraints, healthcare providers are looking for approaches that allow for clinical modernization without the trouble and expense of upgrading their entire infrastructure to support new applications.

**Safeguarding patient privacy.** As any practitioner knows, patient data confidentiality is of paramount importance. Consistent information access must interface with data control mechanisms that can be efficiently managed, along with password security and single sign-on access to Windows, web, and proprietary and host-based applications on a wide range of desktop clients.

**Seamlessly integrating new technology into staff work processes.** Even the most well-conceived Electronic Health Record (EHR) adoption strategy
can be derailed if doctors and their staff do not feel comfortable accessing online apps and information. Ease of use, simplicity and a reliable experience can help win over staff to a more modern IT system.

**Optimizing productivity through clinical modernization.** Healthcare agencies require a high-level, holistic approach to IT—a simple, transparent method to connect information supply with information demand that fully supports IT modernization, while providing the ease of use that users demand and the data security that HIPAA and similar regulations mandate.

**Improving compliance to meet government regulations.** Providers oversee ongoing efforts including maintenance, auditing and process improvements to ensure continual compliance. Centralization of patient data, encryption of communications and reduction of data on client devices are ways that IT can reduce exposure and satisfy government-mandated standards.

**Achieving “meaningful use” EHR standards for incentives.** To achieve “meaningful use” status for Medicare/Medicaid incentives, eligible providers must implement and use Electronics Medical Records (EMR) for all patient encounters.

**Citrix: Comprehensive solutions for healthcare**

Citrix understands how federal agencies use desktops and applications to operate more efficiently and effectively, and develops virtualization solutions based on the needs of healthcare providers and customers alike. Instead of limiting IT solely to modernizing systems and optimizing business processes for better operating efficiencies, Citrix makes IT relevant to the healthcare entity itself, giving the flexibility to change on demand and across technical, physical and agency dimensions.
Deliver desktops and applications as a service. Citrix desktop and application virtualization transforms healthcare IT into an on-demand service by centralizing the management and delivery of EHR apps and clinical desktops, thus easing the transition to clinical automation and improving clinical outcomes. It simplifies IT operations by managing a single image of desktops, applications and servers, accelerating app rollouts and reducing IT operating costs up to 50 percent.

Cut costs and complexity. Citrix solutions provide caregivers with powerful information management tools and a centralized architecture that streamline implementation, administration and support of new healthcare applications such as EMRs and CPOE, as well as upgrades and patches. Because desktops and apps are centrally installed, configured and maintained on the server instead of on each device, federal IT can deploy them in a fraction of the time and at significantly less expense compared to traditional methods.

Facilitate EHR adoption. Rather than having to manage hundreds or even thousands of different staff devices, IT can simply and quickly install and manage a single desktop and EMR application package in the datacenter. Virtualized desktops and EMR apps can then be delivered in a matter of minutes and updates can be made instantly throughout a hospital, medical center or healthcare system.

Optimize user experience. Partnering with Citrix allows agencies to improve both the practitioner and patient experience while keeping PHI secure. Convenience, speed, simplicity, consistency, flexibility and high care quality are all critical to both the adoption of online systems that replace paper files and orders. Citrix virtualization gives limitless access from any device, anywhere, anytime.

Address government compliance regulations. Citrix solutions enable IT to control access to information residing behind the firewall, while giving medical staff the ability to connect to data securely over the Internet. Virtualization features that support compliance include desktop and application processing behind the firewall; standards-based encryption; SSL VPN access with Advanced Access Control; password expiry management; enhanced event logging; multi-factor authentication; and web application firewall.

Secure file sharing and collaboration. Citrix offers the ability to share data securely with more agencies and to reduce staff and clinician training costs and time by providing HIPAA-compliant file sharing and collaboration.
Snapshots: Citrix federal healthcare implementation

**Veterans Integrated Service Network (VISN) and Hospital**
Citrix application virtualization/delivery is used throughout all VISNs and hospitals for both clinicians and end users to get to their VA health applications (QuadraMed, VisTA) and office applications from any location both inside the hospitals and remotely.

**Veterans Benefits Administration (VBA)**
Citrix provides VBA a standard desktop used for TIMS application, for external entities to support Chapter 33 Education Bill and for expediting training remotely for new hires.

**Centers for Disease Control (CDC)**
With CITGO (CDC IT on the Go), Citrix enables CDC mobile users to access their published applications and virtual desktops, anytime, anywhere and on any device.

**Military Health System (MHS)**
The Application Virtualization Hosting Environment (AVHE) is an MHS EI initiative to virtualize and centralize major clinical-based EHR applications for delivery to MTFs using a Software-as-a-Service (SaaS) model. AVHE will be used as the mechanism for deployment of applications into all DoD, VA and joint facilities across the federal healthcare enterprise.

Citrix solutions help federal healthcare enterprises build simpler and more cost-effective environments that deliver IT as a service and make it easy for clinicians to work in the most optimal way—anytime, anywhere and on any device.

*Citrix healthcare partners*
- Hewlett Packard
- Dell
- AppSense
- ThinPrint
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- Epic
- McKesson
- Siemens Medical
- Cerner
- Allscripts
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