Healthcare Solutions - Franciscan Missionaries of Our Lady Health System - Case Study

Franciscan Missionaries of Our Lady Health System (FMOLHS) is a nonprofit, mission-focused Catholic health system headquartered in Baton Rouge, Louisiana. As the largest health system in the state, the organization provides care to nearly half of Louisiana's citizens through a network of hospitals, clinics, physicians, elderly housing and integrated information systems. FMOLHS manages approximately 1,600 beds, employs more than 13,000 people, and works with as many as 10,000 contractors and affiliate physicians. Approximately 250 employees work in the Information Services department at FMOLHS.

The Challenge: Supporting clinicians while adapting to government mandates and driving greater efficiency

Like nearly every healthcare organization in the United States, FMOLHS had to grapple with the rapidly changing government, business, clinical and patient requirements that are indicative of a new healthcare landscape. To thrive, FMOLHS needed to support its core mission of caring for patients while taking advantage of economies of scale and maximizing efficiency. In the past few years, FMOLHS undertook a major transformation, with its Information Services department leading the way.

From supporting electronic medical records (EMR) and computerized physician order entry (CPOE), to enabling secure, bring-your-own-device (BYOD) access, the IT team at FMOLHS faced numerous challenges:

- Delivering EMR in both inpatient and ambulatory settings to meet meaningful use and CPOE requirements
- Improving physician and nurse productivity and satisfaction
- Reducing IT costs and improving the efficiency of the IT organization
- Addressing device proliferation and BYOD requests
- Mitigating the risk of HIPAA security breaches and open workstation kiosks on hospital floors

"Our goal has always been to support the physicians, saving them time so they can spend more of it with patients," says Johnny Brister, manager of infrastructure and technology systems at FMOLHS. "They're doctors, not IT people. They shouldn't have to worry about the computer. We needed to get them access to the applications they need when and where they need them." FMOLHS wanted to get out of the device business and move to a zero-client environment, embracing BYOD capabilities along the way. "We wanted to be able to say, 'You need only four things no matter where you are and we'll get you the patient information you rely on: a user name, password, Internet connection and a device that supports Citrix,'" says Brister.

The Solution: Building a clinician-centric IT strategy and infrastructure
To reach its goals, the IT group developed a strategy that focused on being clinician-centric, aligning its efforts over time with core initiatives such as CPOE and the build-out of a new hospital. In fact, the new hospital became a launching pad and showcase for IT as it evolved the application delivery infrastructure for greater efficiency and flexibility.

Beginning in 1999 with Citrix XenApp, FMOLHS now provides employees and contractors with an end-to-end mobile workspace based on Citrix XenDesktop virtual desktop infrastructure (VDI) and application virtualization, Citrix XenMobile Enterprise with Worx Mobile Apps and Citrix ShareFile, and Citrix NetScaler. The customized healthcare-specific workspace takes advantage of critical Citrix partner solutions including tap-and-go badge access from Imprivata, medical-grade dictation software from Nuance, and a zero-client footprint using Dell Wyse Xenith clients.

Key Benefits

FMOLHS relies on Citrix solutions to streamline clinician workflows, reducing the time it takes to get to the "point of productivity," while ensuring patient privacy and compliance with HIPAA (Health Insurance Portability and Accountability Act) security rules. The FMOLHS mobile workspace delivers less than five-second access to desktops and all of the nonprofit's 130 clinical applications, including EMR systems from both Cerner and Epic. It enables on-the-go staff and clinicians to securely and seamlessly roam across devices, facilities and networks, gaining instant access to critical patient data that could take away precious time with patients. It also helps the IT team address high-priority CPOE mandates.

At the same time, the IT group can better accommodate custom requests for a specific user group, improving user satisfaction and empowering unique medical specialties with exactly what they need. "We don't need to shy away from specific user requests like many typical IT departments do," says Brister. "For instance, we can customize a web page or desktop in ways that make sense for that target user group rather than for all users."

Delivering faster access to applications directly impacts the bottom line for FMOLHS. By reducing the number of clicks from four or five per endpoint interaction to just one click for initial login and zero clicks for subsequent reconnects with a badge and PIN, the IT team cut the time to access health records by 30 seconds per interaction, which saves the provider nearly $750,000 per year.

Citrix helps FMOLHS reduce the time, cost and resources associated with desktop and application management, despite the provider's growing footprint. "With the old way of doing things [not zero client], we experienced a 10 to 15 percent failure rate for patching and updates to desktops and applications. It then took as many as 20 people across the state to clean up the failures," says Brister. "Today, it takes one person for updates and we have a zero failure rate." In fact, at FMOLHS, only three people are needed to manage the entire desktop virtualization infrastructure.

With VDI and application virtualization from Citrix and zero clients from Dell, FMOLHS also cut device rollout and replacement times and device costs. "When new zero clients need to be deployed due to a failure or other issue, it's a simple swap out and the device is up and running in minutes. A great example of this occurred when our team went through the first hospital to swap out. We had to replace
every device on six floors of one hospital. It was projected that it would take five weeks to accomplish, but our two-person team finished in four days."

Previously, FMOLHS had shared desktops on each hospital floor where any employee could walk up and log in. A clinician could accidently save a file with a patient's personal health information to the shared desktop, unintentionally enabling another user to access it at a later point. This posed a significant risk of HIPAA breaches occurring, with hefty associated fines. With its new secure-by-design platform from Citrix and two-factor authentication (badge and PIN) from Imprivata, the nonprofit no longer has to worry about potential breaches on shared desktops.

"We've used Citrix to implement security controls and prevent breaches from occurring," says Brister. "Citrix XenApp, Citrix XenDesktop and Citrix XenMobile have all been critical in how we deliver essential applications or services while maintaining a very high level of security."

"We started by enabling our clinicians to walk around the hospital and still get right back into their applications, effectively bringing their desktops with them wherever they were in the hospital," says Brister. "Then we gave them the ability to do that anywhere—on their home PC or iPad, or whatever device they have." When the CIO made the decision to allow BYOD, the IT group implemented it in less than two weeks because the infrastructure was already in place to support it.

Looking Ahead: Leveraging IT to increase revenue and deliver value-based, patient-centered care

The IT group is not resting on its laurels. With a highly efficient and manageable infrastructure for delivering applications, the group plans to continue expanding mobility capabilities in the near future—with a larger mission in mind. "We want to give people one screen to get absolutely everything they need from any device, including access to files created or residing on a Microsoft SharePoint site," says Brister.

This strategy and infrastructure will enable the IT team to satisfy clinicians, improve the patient experience, and help the business quickly introduce and develop new business ventures. Part of the expansion includes extending mobility and collaboration capabilities to the nonprofit's Healthy Lives group, a new spin-off business unit that offers FMOLHS' own highly successful wellness services to employers across the United States. The IT team will also enable FMOLHS to offer a complete clinical-grade desktop with EMR, email, and other applications as a service to any practice or medical facility across the state.