imprivata®

Deliver fast, secure authentication and virtual desktop access to optimize Epic workflows

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- Joshua Wilda, VP of Information Technology, Metro Health

Organization

Locations: Western Michigan
Employees: 2,200+
Industry: Healthcare
EHR: Epic

Challenges

- Care providers performed up to 60 logins per day
- Roaming and mobile providers, ambulatory and inpatient environments
- Strict security/compliance requirements
- Paper prescribing caused significant inefficiencies for both providers and patients

Results

- No Click Access to patient records
- Increased physician satisfaction with personalized, roaming desktops
- Fast, convenient DEA-compliant EPCS workflow
- Estimated annual savings of $2.3 million using Imprivata with desktop virtualization

Metro Health: University of Michigan Health is an integrated healthcare system with a regional 208-bed hospital and 25 clinics serving Western Michigan. It includes nationally recognized heart and vascular services, inpatient and outpatient specialty services, a cancer center, and a wellness education program. In 2016, Hospitals & Health Networks named Metro Health one of the nation's most wired hospitals for the seventh consecutive year.

The business challenge

Metro Health's motto is "expert care, made easy," which the IT staff adopted for its approach to information technology. In an effort to provide higher quality and consistency of care across its network, Metro Health implemented an electronic health records system from Epic to provide EHR access from the hospital, neighborhood outpatient centers, and participating physicians.

While Metro Health had successfully rolled out Epic, they began to identify workflows which could be streamlined to optimize the full investment of their EHR solution. First, the mobility of clinicians proved to be a challenge. With physicians and nurses moving across campus and between locations, the need to constantly log in to the Epic EHR solution was interrupting clinical workflows and detracting from patient care.

"As our users in both ambulatory and inpatient settings moved from workstation to workstation, accessing the different applications and data they need during a shift proved burdensome," said Joshua Wilda, VP of Information Technology for Metro Health. "In studying clinician workflows, we found that physicians and nurses were reconnecting with their desktops as often as 60 times per day. With each complete login taking about 60 seconds, our users were spending about an hour of their day just waiting for access to the systems and information they need. From an IT perspective, this is completely unacceptable."

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Second, the process for prescribing medication, especially controlled substances, was creating a dual workflow that lead to concerns about clinician efficiency and patient satisfaction.

Physicians were electronically prescribing non-controlled substances, but they used printed prescriptions for opiate-based medication and other controlled substances.

"Paper prescriptions required patients to visit their doctor every time they needed a refill. This caused significant patient dissatisfaction, especially amongst patients that need controlled substances as part of their regular regimen—for example, those with chronic pain," said Wilda. "There are also significant inefficiencies in using paper from a clinical perspective. If a patient needed medication, the physician would be required to come into the office, print the prescription, and make sure the script got to the patient. This not only created an inefficient, dissatisfactory workflow, but it also created potential security gaps that could lead to drug diversion or fraud."

Deliver fast, secure access to roaming desktops

Knowing they needed a solution to streamline workflows and improve efficiency, the IT staff elected to implement VMware View desktop virtualization solutions to streamline and standardize its technology environment, particularly for mobile and roaming care providers. However, the IT staff realized virtualization alone would not be enough to solve its workflow efficiency challenges.

"While virtualized desktops gave us the flexibility to deliver clinical applications and patient information at the point of care, users were still required to provide login credentials at each station. To truly create a dynamic but secure environment for roaming access, we needed a way to make the login process more efficient," said Wilda.

After evaluating several possibilities, Metro Health selected Imprivata OneSign® to enable No Click Access® to virtual desktops. Imprivata integrates with VMware View to enable fast, secure access to clinicians' personalized desktop from any endpoint. The support from Imprivata for Teradici PCoIP-enabled endpoints also enabled Metro Health to replace its workstations with zero client devices.

"Zero clients provide faster performance than thin clients or traditional PCs, and they eliminate the overhead for maintaining the front end," said Wilda. "By integrating Imprivata, the overall VMware solution is significantly faster and more efficient, allowing clinicians to maintain their focus on delivering high-quality patient care."

One of the established goals for Metro Health's: University of Michigan Health virtualized desktop project was to provide roaming access to users' active back-end session in 10 seconds or fewer. Using virtualized desktops integrated with Imprivata OneSign, the IT staff was able to accomplish this by enabling care providers to log in once at the beginning of a shift, then quickly access their desktops from any endpoint throughout the hospital or clinical environment.

"The combination of virtualized desktops and Imprivata saves each user about 50 seconds every time they access their desktops. While this time savings alone has a significant benefit to improving workflow efficiency and allowing more time for patient care, we have also been able to calculate its economic impact," said Wilda. "Based on the number of clinicians we typically have on staff in a given 24-hour period and their average hourly rate, we estimate that our virtualized desktop environment supported by Imprivata saves us more than $2.3 million annually."

Today, Metro Health has more than 70 applications integrated with Imprivata OneSign. To further enhance its virtualized environment, Wilda and the IT staff plan to implement proximity cards to enable users to more quickly access their desktops by simply tapping in or out.

"Our objective as an IT staff is to give clinicians freedom to perform their daily tasks instead of being forced to deal with cumbersome technology. With virtualized desktops integrated with Imprivata, we are able to meet this objective while maintaining compliance with security and regulatory requirements," said Wilda. "Imprivata offers a flexible, agile, and secure solution for simplifying access for clinicians, which, when combined with virtualized desktops, has a calculable productivity and economic ROI."

Enabling DEA-compliant EPCS workflows

To address its challenges with paper-based prescriptions, Metro Health decided to move to electronic prescribing for all medications. But this required meeting the DEA regulations for electronic prescribing for controlled substances (EPCS), including provider identity proofing, logical access controls, and two-factor authentication.

After evaluating options, Metro Health elected to implement Imprivata Confirm ID™, the fast, secure signing solution for EPCS. Imprivata Confirm ID streamlines provider identity proofing, enables supervised enrollment of providers' credentials, integrates seamlessly within the Epic EPCS workflow, and offers the broadest set of DEA-compliant authentication options. It also integrates with Imprivata OneSign to deliver a robust, end-to-end EPCS solution from the same Imprivata infrastructure at Metro Health.

"Imprivata Confirm ID is the ideal solution to meet our EPCS needs. Not only does it help us meet the DEA requirements for EPCS, but it gives our physicians a fast, convenient e-prescribing workflow," said Wilda.

With Imprivata Confirm ID in place, Metro Health has improved patient satisfaction by removing the need for patients to visit their doctor when they need medication refills. Instead, the prescription is sent directly to the pharmacy. The move to EPCS also improves the prescribing workflow for physicians and greatly reduces the security and fraud risks associated with paper prescriptions.

"Our physicians love EPCS because they recognize both the tremendous efficiency gains as well as the overall boost in patient satisfaction," said Wilda. "With Imprivata Confirm ID, we've delivered these benefits in a fast, convenient workflow, which has really driven adoption. Now, instead of managing a paper-based process, physicians can manage caring for patients."

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About Imprivata

Imprivata, the healthcare IT security company, enables healthcare securely by establishing trust between people, technology, and information to address critical compliance and security challenges while improving productivity and the patient experience.

For further information please contact us at:
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www.imprivata.com

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Lexington, MA USA
Uxbridge, UK
Melbourne, Australia
Nuremberg, Germany
The Hague, Netherlands

A comprehensive platform

Together Imprivata OneSign and Imprivata Confirm ID form the Imprivata authentication and access management platform which was fundamental to a successful healthcare IT security strategy at Metro Health.

Wilda confirms, "Because Imprivata Confirm ID leverages the same infrastructure as Imprivata OneSign, Imprivata allows us to meet all our enterprise single sign-on, virtual desktop access, EPCS, and other authentication needs from a single, comprehensive platform, from a company we view as a trusted, strategic IT partner."

The Imprivata platform allowed Metro Health to optimize the full potential of their investments in both EHR and virtualization technology by improving productivity and allowing clinicians to spend more time focused on patient care.

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