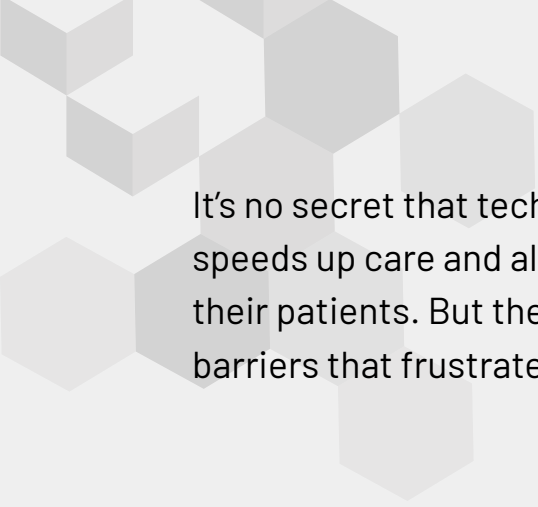# The proven ROI of SSO

Better experience, better return,
no compromise

imprivata®

It's no secret that technology can impact patient care. Good technology speeds up care and allows nurses and doctors to focus on what matters most: their patients. But the inverse of that is true, too. Bad technology introduces barriers that frustrate care providers and take time away from patients.

In the name of bolstering security and privacy, providers need to contend with lengthy, manual login processes that require multiple complex passwords for systems and applications that often have perfectly imperfect timeout policies.

It should come as no surprise, then, that in the absence of a streamlined access solution, providers resort to writing passwords down, storing them in less-than private places, or just plain forgetting them.

Further compounding the problem is the reality of a providers' daily tasks. The average care provider needs to log in to workstations and applications 70 times a day – processes that just aren't scalable if each login requires a manual, time-consuming, and potentially complex process. In fact, logging in to workstations and applications can cost a single provider 45 minutes of their day – time that they, and the organization, would rather was spent on patient care.

Healthcare organizations have historically been made to choose between enabling streamlined clinical workflows and ensuring security; maximizing time spent with patients and keeping PHI safe; technology that streamlines workflows and technology that bolsters security.

The question is: why? Yes, healthcare organizations could continue to grapple with balancing convenience with security. Or they could implement a solution that enables both – and that also positively impacts the bottom line.

The right enterprise single sign-on (SSO) solution should help healthcare organizations ensure fast, efficient access workflows and enable the reclamation of time and dollars.

Better experience and better return

By removing repetitive manual logins with an SSO solution, care providers are able to gain back valuable time and instead use it to focus on patient care. But the right solution must do more than just streamline access – especially for healthcare.

Healthcare needs a purpose-built enterprise access solution that brings together authentication, single sign-on, and virtual desktop roaming; one that takes into consideration specific and complex clinical workflows; one that enables efficiencies for IT staff and care providers.

The bonus? You can do all that to usher in a new era at your healthcare organization: one of better experience and better return.

Healthcare needs a purpose-built enterprise access solution that brings together authentication, single sign-on, and virtual desktop roaming.

The Imprivata advantage

Imprivata Enterprise Access Management (formerly OneSign) is the leading healthcare enterprise SSO and virtual desktop access platform. With Enterprise Access Management (EAM), healthcare organizations have been able to:

- Quickly and securely access patient information across every major EHR and clinical application, and through the industry's broadest thin and zero client support

- Reduce the need for passwords, improve security, and support HIPAA compliance requirements

- Save providers an average of 45 minutes per shift, per day

- Realize tremendous financial savings

But you don't have to just take our word for it: our customers have been reclaiming dollars and efficiency with EAM for years, no matter the size of the organization, their location, or their existing technologies. It's a time-tested, proven ROI.

CHRISTUS estimated that clinicians were required to recall, and periodically refresh, anywhere from eight to 20 or more passwords at the application level. Time lost by clinicians navigating, entering multiple usernames and passwords, and resetting forgotten credentials, is valuable time that competes with, and diverts from, their care of patients.

To do more than just operate under that assumption, CHRISTUS went about performing a qualitative test with the objective of assessing the impact of SSO implementation in reducing clinician time logging in to various clinical software programs and in financial savings from migrating to a thin client that enabled replacement of traditional hard drive computer workstations.

After their test, it was clear that CHRISTUS experienced a true return on investment after deploying single sign-on and virtual desktop infrastructure. CHRISTUS Health calculated that, across the enterprise, 49,057 hours of clinician time were liberated per year, with a total annual value of $3.2 million in cost savings.

"Single sign-on accelerates and eases EHR use, while increasing the security of personal health information. In 19 general hospitals, SSO delivered substantial time savings in the workflows of physicians, nurses, and ancillary clinicians and SSO implementation achieved a recurrent return on investment of $3.2 million per year."

– Dr. George A. Gellert MD, MPH, MPA, former Regional and Associate System CMIO, CHRISTUS Health

CHRISTUS Health

$3.2 million dollars' worth of liberated clinician time

CHRISTUS Health is a 5,558-bed independent delivery network operating in six US states and three foreign markets with 49 hospitals, 350 other services, and over 15,000 physicians.

EHR: Meditech

Location: Irving, Texas

Beds: 5,558

The $3.2 million annual value of liberated clinician time observed in the present analysis is almost double the initial expected value of $1,658,745 that was projected in 2017. Given the demonstrated cost savings over time and the positive effects on clinician satisfaction, single sign-on has continued to exceed expectations during its implementation at CHRISTUS Health.

With a commercially available EHR and application products – as well as some homegrown ones – the IT team at Johns Hopkins set out to give providers fast, secure access, thus eliminating password confusion and wasted time, as well as meeting HIPAA requirements for access and authentication.

The Johns Hopkins Hospital selected EAM for its SSO and access management needs. With EAM, The Johns Hopkins Hospital saw enhanced end user experience, decreased time spent accessing applications, fewer password resets, and improved security.

In fact, after the initial two-month implementation period, total time savings for The Johns Hopkins Hospital for just one full month were estimated to be 2,550 man-hours.

"The time savings is real because you're looking at several seconds per authentication that you're saving that provider and when you scale that across the number of individuals who are authenticating these apps the time savings is significant."

– Dwight Raum, VP and CTO, Johns Hopkins

Johns Hopkins

2,550 man-hours saved monthly

The Johns Hopkins Hospital is a 1,154-bed hospital in Baltimore, Maryland. Johns Hopkins has a long history as an academic medical center, with cutting-edge research and a legacy of exceptional patient care.

EHR: Epic

Location: Baltimore, Maryland

Beds: 1,154

The team at Mahaska had evaluated their workflows and had discovered that a typical RN would log in to approximately 15 end points per shift, with each login taking three minutes. This evaluation revealed that care providers were wasting 45 minutes per shift on logging in and out of applications. Based on the hourly rate of these providers, the time wasted on 'waiting' equated to $112 per provider, per week. Mahaska needed a solution that would improve provider workflow and efficiency without sacrificing security.

Mahaska selected EAM as their solution for SSO. EAM proved to be a workflow enabler that ensured security of patient and organizational information and that ushered in tangible ROI.

In fact, the Mahaska team calculated that by saving care providers the 45 minutes per day that they were wasting, they were able to save $5,600 per year, per care provider, which equates to an 11-week ROI.

But there's more: EAM has also strengthened the hospital's security posture and improved its ability to comply with HIPAA reporting requirements, enforcing password policies automatically, and tracking and auditing all application access for reporting and compliance purposes.

"Imprivata has reduced the time it takes clinicians to access electronic medical records and other data, streamlining their workflow and improving productivity. We receive positive feedback from our clinicians, as they are able to access their data much more easily. SSO takes the authentication burden off the clinician, while supporting multiple levels of security, and improves clinician workflow and patient care."

– Kristi Roose, IT Director, Mahaska Health Partnership

Mahaska Health Partnership

An 11-week ROI

Mahaska Health Partnership is a critical access hospital located in Oskaloosa, Iowa, that provides services from birth to end-of-life, for emergency, elective, and preventive care.

EHR: Healthland

Location: Oskaloosa, Iowa

Beds: 25

Metro Health's motto is "expert care, made easy," which the IT staff adopted for its approach to information technology. In keeping with that motto, after successfully rolling out Epic, the IT team began to identify workflows that could be further streamlined to optimize their investment in their new EHR system.

One area that needed exploration? Mobility. With care providers moving across the campus and between locations, the need to constantly log in to the Epic EHR solution was interrupting clinical workflows and detracting from patient care.

To help streamline workflows and improve efficiency, the IT staff elected to implement VMware View desktop virtualization solutions. However, they realized virtualizations alone would not be enough.

After evaluating several possibilities, Metro Health selected EAM to enable No Click Access™ to virtual desktops. EAM 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, further streamlining processes.

"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. 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."

– **Joshua Wilda,** VP of Information Technology, Metro Health: University of Michigan Health

Metro Health: University of Michigan Health

$2.3 million saved annually

Metro Health: University of Michigan Health is an integrated healthcare system with a regional 208-bed hospital and 25 clinics serving western Michigan.

EHR: Epic

Location: Western Michigan

Beds: 208

South Shore Hospital clinicians and healthcare staff needed a way to quickly, and easily sign-on to their desktops and applications, as well as have more efficient workflows. Frequent problems included poor roaming workflows, long login times, and short grace periods.

To support the demands of the clinicians, South Shore Hospital needed to implement a system that would improve workflow efficiency, reduce authentication and sign-on times, and minimize the time spent redoing data entry in patients' medical records, ordering tests, writing prescriptions, and other patient-related tasks.

South Shore Hospital elected to implement EAM alongside VMware View to enable fast, secure access to systems and applications. Rather than forcing care providers to do repetitive manual logins, EAM enables them to gain instant access to their desktops, clinical application, and patient data with just a tap of their badge, and initial password entry.

Moving to a single sign-on and roaming desktop environment used by all 5,500 of South Shore Hospital clinical users has reduced sign-on time, increased user productivity, and improved security.

"Previously, the clinicians had to physically log in, start each application, log in to multiple applications, and the reverse to log off a workstation, all of which could take up to a minute or more. Multiply that across an entire shift, and that could be up to an hour of time logging in and out of applications throughout the day. Now, they can get to their complete desktop with applications open in less than thirty seconds during the first login of the day, roam their workstations to a different device in under 10 seconds, and reconnect to the same workstation in three seconds. The clinicians are much happier with this solution."

– Thanh Tran, Director of Technology, South Shore Hospital

South Shore

A 695% annual ROI

South Shore Hospital is a 318-bed regional provider of acute, outpatient, home health, and hospice care to residents of southeastern Massachusetts.

EHR: Epic

Location: Southeastern Massachusetts

Beds: 318

South Shore Hospital clinicians were each able to save 15 minutes per day, and the rest of the care providers, such as nurses and other clinical team members, were able to save 10 minutes per day. This realized an overall organizational saving of 583 hours per day. These productivity savings were quantified based on the average annual, fully loaded cost of an employee, and by using a correction factor to account for the inefficient transfer between time saved, and additional time worked.

South Shore Hospital saw a total time to value, or payback period, in only 1.2 months. After the initial cost of implementation, South Shore Hospital saw an annual ROI of 695% – about $5,690,000 every year.

Western Sussex Hospitals NHS Foundation Trust is a 1,038-bed health system in West Sussex, United Kingdom. The Trust serves a population of more than 450,000 people, of which a relatively high proportion are over the age of 65.

The organization supports more than 300 applications which are accessed daily by care providers. Each application requires a username and password to be entered when used – a process that can occur several times during an average shift. The administration burden on the users was becoming insurmountable and the trust wanted a solution to securely speed up access.

An SSO solution seemed the logical choice. After a proof of concept was conducted, and feedback from care providers who had been involved was universally positive, EAM was selected.

"Imprivata was the stand out winner from all the systems we evaluated, the solution is incredibly intuitive and user friendly, and the feedback from staff continues to be overwhelmingly positive."

– Grant Harris, Head of IT Operations, Western Sussex Hospitals NHS Foundation Trust

Western Sussex Hospitals NHS Foundation Trust

A 53-second sign-on reduction

Western Sussex Hospitals NHS Foundation Trust is a 1,038-bed health system in West Sussex, United Kingdom. The Trust serves a population of more than 450,000 people, of which a relatively high proportion are over the age of 65.

EHR: Homegrown

Location: West Sussex, UK

Beds: 1,038

The solution is used by 3,000 frontline staff that access the system via their NHS smart card, which has a proximity chip that is scanned by the proximity card readers. Instead of being required to remember and repetitively enter usernames and passwords, clinicians simply tap their badge to the proximity card reader and coupled with their PIN, gain access to the systems they need. The EAM platform has streamlined the authentication process and reduced login times for common applications by 53 seconds. At over 100,0000 logins per week, this equates to 7.88 weeks of time gained and re-allocated to patient care per week. Clinicians can focus more on patient care and less on technology.

iimprivata®

Imprivata is the digital identity company for mission- and life-critical industries, redefining how organizations solve complex workflow, security, and compliance challenges with solutions that protect critical data and applications without workflow disruption. Its platform of interoperable identity, authentication, and access management solutions enables organizations in over 45 countries to fully manage and secure all enterprise and third-party digital identities by establishing trust between people, technology, and information.

For more information, please contact us at 1 781 674 2700
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