Single Sign-On Transforms Healthcare At Michigan Hospital

Munson Medical Center IT department's implementation of a single sign-on system did more than increase efficiency for the hospital's healthcare workers -- it changed IT's approach to solving problems.

Single sign-on wasn't the highest item on Munson Medical Center IT department's to-do list. Clinicians, however, were fed up with the long time it took them to log on to computers and access applications -- and these excruciatingly complex processes were having an impact on the healthcare staff's work and on patients' satisfaction.

Over the years, IT had considered various alternative approaches to its multi-faceted but very secure log-on approach, said Dale Atkins, technical architect at the Traverse City, Mich.-based hospital, in an interview. But the technologists had never found anything that met its requirements. That turned out to be the problem.

"We had been looking at single sign-on solutions for many years. We've always looked at single sign-on solutions, regardless of the nature of them, from an IT perspective, and we never were successful. We never listened to what the [user's] problem was," says Atkins.

Typically, it took each user three to five minutes to log onto a PC. Accessing the hospital's Cerner electronic medical record took another minute or two. Every time mobile physicians and nurses moved on to another patient or PC, they'd repeat the entire four- to seven-minute process, many times per day.

Clamoring for change, clinical staff described to the medical director and IT options they'd discovered at conferences, in publications, and from peers, he says.

Determined to resolve single sign-on for employees, the IT group invited a diverse array of hospitalists, physicians, nurses, lab managers, and other key users to a two-day discussion of workflows, challenges, and wish-list items.

As IT managers watched hospital staff at work, they came to a harsh realization: "We found out the clinical staff in particular were finding ways to do their jobs in spite of the technology we were providing to them. We thought we were doing them a favor, [but] in reality, it was getting in the way of them doing their job," he says. "We thought we had the right solutions for them years ago. We realized we really didn't."

With this knowledge firmly in mind, Munson's IT team investigated multiple single sign-on solutions and tested a couple in proof-of-concept within the department.

"Once we came across Imprivata and found it would integrate with our existing Citrix environment and our Citrix XenApp, we knew Imprivata had the hooks we needed," says Atkins. "With Imprivata's help, the consultant's help, [and] the IT staff working together, we were able to meet what our end-users really did need: a desktop that follows them around."

Having already installed Imprivata One Sign at four hospitals, Munson expects to roll it out to three more -- including two recently acquired facilities -- by the end of June. At that time, the system will support about 4,000 users of 14 user-identified applications.

MUNSON MEDICAL CENTER

Most users are happy with the faster, simpler system, according to Atkins. "One of our physicians [calculated] 50 to 60 different logins each day and the amount of time it would take before. We could get it down to 35-45 seconds for initial logins and 5- to 10-second reconnects, and our physicians alone are well into soft savings of in excess of $1 million a year," he says. "That's time those physicians have to spend with more patients."

An early IT survey of nurses found that most are satisfied with Imprivata, he added, and the department plans a follow-up poll to a broader base of users. With the new software, nurses who previously camped on one computer to avoid cumbersome multiple log-on processes can now use in-room or hallway PCs to log information more efficiently.

Munson's IT team is using the lessons it learned from the single sign-on implementation to change its approach to technology. "We weren't ignoring our users -- we just weren't listening to them describing what they really needed," he says. "It's up to us to understand the workflow process. We didn't spend the time to understand the workflow process when we designed new technology for them."

Technologists plan to measure the return on its single sign-on investment, considering such factors as additional surgeries doctors can perform, improvements in patient satisfaction, and extra time nurses and other staff can spend with patients. Improvements in how IT and end-users partner on implementations, while invaluable, may be harder to measure.

Alison Diana has written about technology and business for more than 20 years. She was editor, contributors, at Internet Evolution; editor-in-chief of 21st Century IT; and managing editor, sections, at CRN. She has also written for eWeek, Baseline Magazine, Redmond Channel Partner, ZDE's custom group, and CIO Insight, as well as many of the industry's leading vendors and channel organizations. She can be reached on Twitter at @alisoncdiana; on LinkedIn at AlisonDiana, or Google+.