

Box Butte General Hospital Gains Security and Clinician Convenience by Integrating Virtual Desktop Infrastructure with Single Sign-On

INTRODUCTION

Since 1976, Box Butte General Hospital, a non-profit, critical access facility based in Alliance, Nebraska, has been serving the needs of residents and visitors of Box Butte County. The staff of 265 are committed to providing excellent healthcare and promoting healthy lifestyles.

THE BUSINESS CHALLENGE

The hospital undertook an electronic charting initiative as a means to better manage patient care, improve productivity and trim costs. However, the initiative required the hospital's nurses and physicians to remember multiple user names and passwords—on top of the many they already had. As a result, [password-related calls](#) to the helpdesk soared. "In an average week, more than ten percent of our employees were calling for assistance," explains Mandy Whaley, network administrator at BBGH.

The hospital's small IT staff quickly recognized the potential impact on productivity and security, and they knew they needed a way to enable convenient access to all applications. "Not only did we need to prevent clinicians from sharing or writing down passwords in light of HIPAA regulations, but we also wanted to ensure optimal productivity and extract the most value possible from our electronic medical records initiative," continues Whaley.

THE IMPRIVATA ONESIGN SOLUTION

The hospital's IT director attended an Imprivata OneSign demonstration at the annual HIMSS conference and knew immediately it was the right solution. "He liked the fact that the appliance was affordable, and would be easy for our small staff to deploy and maintain," says Whaley.

The team embarked on a phased implementation, starting with the department that faced the most application access demands and challenges. "We knew the medical records department would put Imprivata OneSign SSO through the paces so it made sense to start there. In fact, we were able to SSO-enable their critical applications with no problem," continues Whaley.

Next, the team enabled applications in the business office, and then moved on to applications used by clinicians. Employees access approximately 15 critical applications during the workday, including [Healthland](#) (formerly Dairyland) with modules for time and attendance, 3M Care Innovation, CareMedic and Microsoft Outlook via the Web. "We focused on the most widely used applications first. Now we're enabling all other applications, including more than 100 used by the business office alone," says Whaley.

At the same time, Box Butte's IT team was preparing to SSO-enable the nursing staff, and the IT department was planning to deploy Sun Ray virtual display clients with built-in smart card readers for authentication and secure [remote access](#). "The decision to move to Sun Ray clients was based on the obvious benefits of dramatic reductions in hardware and energy costs, along with the green factor. The fact that we could use the Sun Ray Smart Cards with Imprivata OneSign for [strong authentication](#) and



COMPANY

- Not for profit
- 265 employees

INDUSTRY

- Healthcare

APPLICATIONS

- Healthland, 3M Care Innovation, CareMedic, Microsoft Outlook

CHALLENGES

- Too many passwords
- Overburdened helpdesk
- Clinicians wasted 40 min/day on logins

RESULTS

- Clinicians saved 37 min/day
- 50% less helpdesk calls
- Improved security

BEFORE IMPRIVATA ONESIGN	AFTER IMPRIVATA ONESIGN
Electronic charting initiative burdened clinicians with additional credentials to remember	Users quickly and securely access the data they need, authenticating with Sun Ray Smart Cards
Clinicians spent 40 minutes per day logging in and out of applications	Clinicians saved 37 minutes per day with single sign-on to applications
10% of staff called the helpdesk each week for assistance with password problems	Helpdesk calls decrease by 50% because of streamlined log on process

SSO was an added bonus,” says Whaley. The hospital seized the opportunity to provide clinicians with convenient and secure access to patient data.

The IT team trained all employees simultaneously on authentication, SSO, and electronic-scan document-retrieval, through one hour training sessions, offered during the days and evenings. The hospital’s computer education coordinator then conducted similar training with physicians at their regularly scheduled weekly meetings. Over a three-week period, the team trained all employees at the hospital.

THE RESULTS

Now, users log on to the Sun Ray client once at the start of their shifts, authenticating with their smart cards, and they are given access to a terminal server. Once the user’s credentials are verified, they have access to all the applications they are authorized to use. Even when users remove their smart cards from the Sun Ray client, their sessions remain open on the server for 12 hours. At any time during that period, they can reinsert their card and access applications without logging in again.

Furthermore, now that medical charts are digitized, the hospital is able to ensure that employees only access information pertinent to their patients. “Our electronic charting initiative may not have succeeded without the combination of Imprivata OneSign SSO and the Sun Ray systems. Not only do they make it easy for our clinicians to use electronic charting, they simplify the auditing process,” explains Whaley. Now the hospital can easily ensure that users only access applications they are authorized to use. “For example, if a nurse is not on duty but we see that she is logged in, we know someone is using her card illegally or against policy. We can narrow it down to the exact Sun Ray client location and time of login,” explains Whaley.

The new system enables the hospital to ensure simple and secure access to the data that employees need. “No matter where our employees are, they can use Sun Ray clients with Imprivata OneSign SSO to access applications and information—without having to remember passwords,” continues Whaley.

This ease of access has translated into higher productivity—both for users and the IT staff. Prior to implementing single sign-on, time tests determined that clinicians were spending 40 minutes of their day on logins. After OneSign, clinicians were spending only 3 minutes - saving them 37 minutes per day. “The time our clinicians once spent logging in and out of applications is now spent attending to patients,” says Whaley. Further, password-related helpdesk calls were reduced by at least 50%, allowing the IT team to focus on more strategic projects.

“The overall capabilities of Imprivata OneSign SSO set it apart. Installation was a breeze, and now so is application access.”

*-Mandy Greve
Network Administrator
Box Butte General Hospital*