

Delivering fast, safe, and secure access to clinical applications and vital signs devices with Imprivata

“Imprivata has been the single most important project for the clinical team. For those delivering care this has been a leap in both clinical safety and efficiency that, in their words, they ‘dreamed of.’”

Richard Corbridge, CIO, Leeds Teaching Hospitals NHS Trust

Key facts

Industry: **Healthcare**
Location: **Leeds, UK**
Employees: **17,000 +**

Leeds Teaching Hospitals NHS Trust provides services for the population of Leeds and surrounding areas and is a regional centre for a range of specialist services including cancer, neurosurgery, heart surgery, liver, and kidney transplantation. It is one of the largest trusts in the country, employing over 17,000 staff across six main sites and treating over 1.6 million people each year.

Challenges

- Streamline system access without diluting secure practices
- Remove barriers to using technology effectively
- Eliminate manual processes and deliver real-time data

Business challenge

The trust operates a busy Renal unit with several clinics running concurrently. As patients arrive, a nurse completes full observation checks which is provided to the doctors prior to the patient's appointment. As the Renal clinics have expanded, the legacy system which recorded patient observations struggled to keep pace and eventually ceased working, prompting the trust to fall back on using paper records. The department presented the ideal opportunity for a proof of concept pilot for a new way of working.

Results

- Fast and secure access to applications and medical devices
- Improved patient care through access to real-time data
- Increased productivity by removing the need for manual recording of vital signs

The trust uses an open platform which multiple applications integrate into, though each one has its own login credentials. On average, clinical staff had to log into nine different applications per clinical session and as work stations are shared this would often result in a backlog. The trust wanted to simplify and speed up login times to essential applications without compromising security and explore automating manual processes such as the recording of patient vital signs.

The new solution had to provide fast, secure access to essential clinical applications, have the ability to scale when required, and support ongoing digital transformation within the trust through the automation of manual processes.

The solution

Imprivata OneSign® Single Sign-on and Authentication Management was selected and deployed within the Renal unit. The driving factor for selecting the solution was Imprivata's capability in developing new functionality to support interoperability to legacy third party systems.

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The streamlined single sign-on (SSO) process made an immediate impact on productivity and was well received by staff. The success of deployment led the trust to launch a further pilot project within the Renal unit using Imprivata's authentication management platform to securely access Welch Allyn's patient diagnostic device quickly and easily. This is the first deployment of this type outside of the USA.

“Imprivata has an established product road map and is at the leading edge of technology developments within the sector, says Andy Weissenborn, Head of Technology Office at Leeds Teaching Hospitals NHS Trust. “However, the deciding factor for us was the pro-active customer engagement from the pre-sales team in ensuring we had a solution that worked in harmony with our existing workflows.”

Trust-wide deployment

Following the successful deployment of the solution within the Renal unit, Leeds Teaching Hospitals have expanded the use of Imprivata OneSign Single Sign-on and Authentication Management across the entire trust.

- 60 commonly used applications have been profiled
- 4,500 staff now using solution daily, rising to 18,000 by end of 2019
- 2,400 clinical devices activated for use
- Solution deployed to 42 wards (38% of target) and five outpatient units

The trust has also implemented Imprivata OneSign Self Service Password Management, allowing users to easily reset their own passwords or be notified of their network and application passwords without delays or help desk intervention.

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Facilitating care pathways

With the deployment of Imprivata OneSign Single Sign-on and Authentication Management, clinicians and care providers have fast and secure access to clinical applications without the need to repetitively sign into multiple applications. Login times have decreased, allowing swifter use of shared workstations. Following on from the successful deployment of Imprivata OneSign, the trust was keen to pilot the use of interconnected diagnostic equipment in healthcare to streamline clinical workflows and ensure that important patient health data is secure.

With renal patients it is imperative that their vital signs are taken and recorded each time they are seen in clinic. Observations, blood pressure control, temperature, fluid status, and fluid balance are essential information needed by clinicians and care givers in the management of renal patient care. This information is stored within a specialist Renal Information Management System, known as BHLY which is an acronym of the regional locations that use the solution (Bradford, Hull, Leeds, and York).

The cross functional team of specialists involved in Renal patient care across the region use BHLV as the central repository of information so it is vital that patient information is up to date. Since the implementation of the Imprivata authentication management platform, clinicians can securely access Welch Allyn's patient diagnostic device quickly and easily.

Imprivata Medical Device Access enables clinic nurses to securely log in to Welch Allyn's Connex® Spot Monitor devices with a tap of their RFID badge, replacing the need for repetitive manual entry of passwords. Using the attached reader, the nurse scans the patient's bar code, securely accessing their records. Once patient observations are taken, the information is immediately logged into the patient's record and can be accessed in real-time by clinicians to inform patient care. The real-time data is also proactively used by the regional multi-disciplined team who can remotely access the clinical data to decide who needs to be seen as part of their care pathway.

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Results and benefits

- **Improved security and data governance** – The No Click Access to systems using smart cards to tap in and out of applications has increased security ensuring only trusted users can gain access to networked medical devices and improved audit trails and data governance. The scanning of patient barcode ensures the correct patient record is accessed and updated in real-time with vital sign information.
- **Improving patient outcomes** – Access to real-time data has transformed the way clinicians are using systems. Clinical appointments are spent focusing on patient care, not grappling with technology, and, armed with real-time data, clinicians are able to make informed decisions without delays, improving patient outcomes. The regional teams are able to remotely access the system and proactively plan next steps in the patients care plan.
- **Increased productivity** – Since implementing Imprivata, patient vital sign information is instantly logged from the device into the patient's electronic health record, negating the need to manually record and input the information into the system. The real-time data is available to all authorized clinicians and care providers involved in the patient's care pathway.

The new way of working has been popular with staff working in the wards with much positive feedback from users.

Joanne Reischman, Clinical Sister, Leeds Teaching Hospitals NHS Trust comments, "Imprivata solutions have allowed us to spend the length of the clinic session in discussion with the patient on their pathway of care, secure in the knowledge that the data we are seeing is up to date, accurate, and correctly attributed to the patient in front of us."



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.

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