

# One of the first health systems to enable Electronic Prescribing of Controlled Substances with Imprivata

## Organization

**Location:** Evanston, IL  
**Employees:** 2,400  
**Industry:** Healthcare  
**Applications:** Epic, SureScripts

## Challenges

- Inefficient e-Prescribing workflow for providers
- Longer patient wait times at pharmacies
- Increased risk of potential medication errors or forgeries

## Results

- Improved e-Prescribing workflow efficiency
- Increased physician and patient satisfaction
- Minimized risk of prescription inaccuracy or fraud
- Easy-to-use fingerprint biometric authentication
- Reduced paperwork
- Improved reporting

## Introduction

NorthShore University HealthSystem (Evanston, Ill) is a comprehensive, fully integrated healthcare delivery system serving the Chicago region. The system includes four hospitals, more than 100 medical group offices and about 2,400 affiliated physicians. It is also the principal teaching affiliate for the University of Chicago Pritzker School of Medicine and is the only Illinois organization to receive the American Nurses Credentialing Center's Magnet designation as a healthcare system.

NorthShore is also a recognized national leader in its implementation of technology. In 2003, it was among the first systems in the country to successfully implement a system-wide electronic medical records (EMR) system, and in 2009, it was among the first hospital systems to achieve Stage 7 on HIMSS Analytics' EMR Adoption Model. In 2013, NorthShore's ambulatory clinics became the first to achieve HIMSS Analytics Stage 7.

## Challenge

NorthShore's physicians have been using electronic prescribing since 2008. This has proved to be an efficient, accurate and safe approach that is convenient for both providers and patients, but a gap existed when it came to controlled substances.

At that time, the U.S. Drug Enforcement Agency (DEA) did not allow electronic prescribing of controlled substances (EPCS), so physicians were required to use paper prescriptions. This created a number of efficiency and patient safety challenges for NorthShore.

Specifically, writing a controlled substance prescription slowed down provider e-prescribing workflow and increased patient wait times at pharmacies. It also increased the risk of potential medication errors, inaccuracies or forgeries. At that time, NorthShore's physicians were writing about 7,500 orders for controlled substances per month, so it was clear that finding a more efficient process could have a substantial impact on provider satisfaction, productivity and patient safety.

In 2010, the DEA issued an interim final rule allowing controlled substances to be prescribed electronically and in 2012, Epic—NorthShore's EMR system—received its certification for EPCS. This served as the catalyst for NorthShore to begin developing a project plan to enable EPCS and meet provider demand for a more efficient solution.



### 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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As the IT staff progressed through its plan, it faced several challenges as an early adopter of EPCS functionality within Epic and SureScripts. Not only would EPCS introduce changes to provider workflows, but it would necessitate updates to operational policies and procedures. The DEA requirements for EPCS also mandate the use of specific modalities for two-factor authentication within the prescribing application at the point of access control approval and signing. This required NorthShore to thoroughly evaluate technology options that would enable EPCS while fitting seamlessly into provider workflows.

### Solution

NorthShore's initial steps in its EPCS plan included upgrading its SureScripts interface to version 10.6 and integrating Epic Crystal to ensure log reports were accessible to providers directly in the EMR system. With these prerequisites in place, NorthShore turned its attention to two-factor authentication.

After evaluating several options, NorthShore elected to deploy Imprivata. Not only does it meet DEA requirements for a FIPS-compliant solution for EPCS, but it offers API-level integration with Epic, which fit NorthShore's existing clinical application infrastructure.

### Results

Following a successful proof of concept using Imprivata fingerprint biometric identification for EPCS, NorthShore initiated Phase One of its rollout plan, which began production in January 2014. Phase one included 3 departments and 21 physicians. After just a few weeks, the participants agreed the pilot was a success.

The second phase of NorthShore's EPCS implementation strategy began in February 2014 with the plan to implement EPCS to its medical group offices, starting with primary care practices and then specialty practices. As of June 2014, NorthShore had 46 departments and more than 200 physicians live on EPCS. The number of EPCS orders written totaled 1,651 in April, and grew to 3,648 in May.

Providers are able to use Imprivata's fingerprint biometric authentication technology to prescribe controlled substances in just seconds, which improves productivity, increases patient satisfaction and puts stronger controls in place as compared to using paper prescriptions.

Longer term, NorthShore is also evaluating EPCS within its acute care facilities, particularly for inpatient discharges and the emergency department, which will constitute phase three of its EPCS plan. Going forward, NorthShore plans to roll out EPCS across its entire Medical Group, followed by its four acute care hospitals.