

Positive Patient Identification: The Key to Improving Revenue Cycle Efficiency and Reducing Denied Claims

Hospitals across the country are exploring ways to reduce patient identification errors – a problem that poses serious risk to patient safety, undermines patient satisfaction and leads to revenue loss.

Patient identification errors are fairly common, with as many as 7 to 10 percent of patients misidentified during medical record searches at hospitals, according to Imprivata, a health IT security company based in Lexington, Mass.

Although patient misidentification is a pervasive problem, hospitals across the country have been able to significantly reduce these mistakes by investing in the right technology.

The Causes of Patient Misidentification

Patient misidentification can occur in a number of ways and is often rooted in the rudimentary oral registration processes hospitals rely on.

There is ample opportunity for mistakes when patients vocally relay information to registration staff who manually enter the information into a sophisticated electronic system. For example, a patient could intentionally provide false information, such as an incorrect Social Security number, at registration. This most commonly occurs in hospital emergency departments and, in most cases, it's simply because the patient is trying to avoid a hospital bill, according to Mollie Drake, former senior director of corporate access management at San Diego-based Scripps Health. Patients will also sometimes provide incorrect information to avoid immigration issues, she said.

Some hospitals pull information from a patient's photo ID at registration, but that can also lead to identification problems. For example, a patient who has been to the hospital on numerous occasions may get married and change the last name on their driver's license, causing the registration worker to create a duplicate record missing the patient's medical history. This raises patient safety concerns, as the duplicate record may lack the patient's allergies, medications or other vital information. A physician who relies on this fragmented view of a patient's medical history may order duplicate or unnecessary tests or prescribe medications that negatively interact with other prescription drugs the patient takes.

A duplicate record may be created even when a patient provides correct and up-to-date information. Schedulers at hospitals are under very tight time constraints and may not have time to locate the correct patient in the electronic system. "If a name is typed in and 183 records pop up, a new record is likely created," said Ms. Drake.

A more serious problem occurs when numerous records pop up during a search and the hospital worker selects the wrong patient's medical record. This results in overlays, which occur when patients are mistakenly sharing a medical record. Such a serious mistake can cause physicians to rely on the wrong information when treating a patient.

Patient Identification Problems Hurt a Hospital's Bottom Line

Hospital and health system reimbursement is more closely tied to patient satisfaction than ever before, and the direct link between patient satisfaction and revenue is expected to strengthen in coming years. Patient misidentification can cause hospitals to lose revenue, as it negatively affects patient satisfaction in a number of ways.

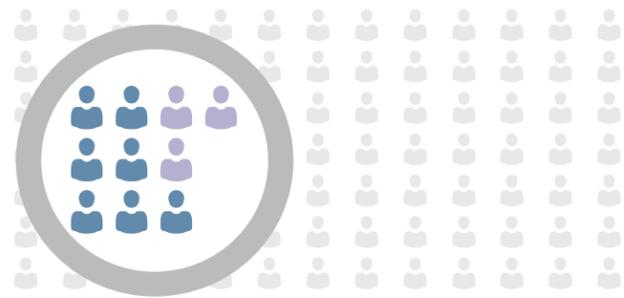
For example, when a physician mistakenly relies on a duplicate medical record, the patient may have to endure the trouble of undergoing unneeded tests and subsequently shoulder the cost of that care. Or, when the wrong patient's record is selected at registration, a patient may receive a bill for another person's medical treatment.

Patient identification errors also contribute to revenue loss by causing insurers to delay payment or deny a hospital's claims, according to Aaron Miri, vice president of government relations and CIO of Imprivata and former CIO of Walnut Hill Medical Center in Dallas.

If an insurer can't identify a patient based on information supplied by the hospital, the insurer will deny the claim for reimbursement. According to the Advisory Board, demographic and technical errors are by far the leading source of claim denials and write-offs, causing healthcare organizations annual losses of net patient revenue from 1-5 percent, or \$2 million to \$3 million annually, for an average 300-bed organization. Therefore, it is critical that hospitals provide accurate information for the more than 300 data el-

Patient misidentification happens all too often.

This creates a long series of **costly** and potentially **life-threatening** mistakes.



7-10%

of patients are misidentified during health record searches



92%

of patient identification errors were caused by registration mistakes

Costs of misidentification errors

6%

of identification errors result in an adverse event – doing harm to 60 out of 10,000 patients

440,000

Preventable medical error deaths have been estimated to cause 440,000 patient deaths in the U.S. each year

\$7M

The average 250 bed hospital lost more than \$7M in 2013 because of inaccurate and incomplete documentation

\$2.3M

An estimated 2.3 million individuals were impacted by medical identity fraud in 2014, an increase of 21.7% from 2013

\$2-3M

annual loss of patient revenue from claim denials for an average 300-bed hospital

Carolinas HealthCare System, a 36 hospital health system, has been able to **reduce duplicate medical record rate to 0.01%** of their patient census, which is 80 times better than the national average.

Carolinas HealthCare System



For more information on how to identify, treat, and cure your patient identification crisis read our white paper at: <https://www.imprivata.com/resources/whitepapers/healthcare-suffering-patient-identity-crisis-here's-how-we-can-cure-it>

Put a **stop to medical errors** and insurance fraud while **improving patient satisfaction**.

For more information, visit www.imprivata.com/patient-identity



ements in a claim. It is fairly common for hospitals to provide faulty patient information in a claim when a patient provides information verbally at check-in or when registration staff pulls information from a patient's ID.

Although hospitals are given the opportunity to rework or appeal claims that are initially denied, that process is a drain on a hospital's finances. According to a Medical Group Management Association report, it costs approximately \$25 to rework a single denied claim, which quickly adds up.

When a claim is properly reworked, a hospital typically receives payment once the claim is resubmitted to the insurer. However, there are times when patient identification errors force hospitals and health systems to absorb certain costs in full. For example, when a physician relies on a duplicate medical record that was erroneously created and orders redundant or unnecessary medical tests, hospitals are responsible for the bill, as insurers will not cover this cost.

When patient identification errors occur, hospitals must go through the expensive process of cleansing the inaccurate patient records from the EHR. According to Ms. Drake, it typically takes registrars many hours to perform this manual process. Accounting for the human labor and time involved, the cost to cleanse a single duplicate medical record tops \$1,000, according to Imprivata.

If a duplicate medical record is created for a patient, merging those records is an "incredibly tedious process" that has to be performed manually in most cases, said Ms. Drake. This process involves comparing information, such as surgeries and medications, in the patient's medical history to ensure all information is merged into the final record.

Reducing Patient Identification Errors with Biometric Authentication

To reduce problems caused by duplicate medical records and patient misidentification, some hospitals have invested in biometric patient identification technology, which uses one-of-a-kind biological identifiers to match patients with their unique medical identification number.

Many hospitals and health systems are using palm-vein biometric authentication for patient identification, as patients typically find this technique less intrusive than other biometrics, such as fingerprinting. This biometric of choice takes a scan of a patient's palm vein pattern. Since no two palms are the same, any misidentification issues are eliminated.

Health systems across the country, including Scripps Health, Charlotte, N.C.-based Carolinas HealthCare System and Tampa, Fla.-based BayCare Health System, have successfully reduced patient identification mistakes using Imprivata PatientSecure™. This tool integrates a palm vein recognition scanner with advanced patient matching software. The solution is installed at more than 65 health systems comprising more than 350 hospitals across the nation.

Ms. Drake, formerly of Scripps, said the system saw immediate improvement after implementing bio-

metric authentication. "Scripps' patient identification error rate dropped by 30 percent after switching to biometrics," she said. According to Ms. Drake, staff acceptance of the new technology was high, as most employees were glad to be given a tool that not only helped with patient identification but also sped up the registration process.

Ms. Drake said most patients were happy with the switch as well. With growing concerns over medical identity theft, patients were pleased they no longer had to provide personal information, such as their Social Security number, in a public area and weren't bothered with showing ID.

Patients at BayCare's facilities were also concerned about the risk of identity theft and were uncomfortable sharing demographic information in a public space. That concern prompted the 14-hospital system to implement palm-vein biometrics.

In addition to eliminating patients' worries about their information being stolen, BayCare also saw a substantial reduction in duplicate records after switching to biometric authentication. Within one year of implementing the technology, the system reduced its cases of duplicate medical records by 42 percent.

Since Imprivata PatientSecure provides interoperability between facilities and hospital IT systems, Carolinas HealthCare deployed palm-vein scanners at registration desks throughout its hundreds of locations. Like other systems, Carolinas HealthCare saw its rate of patient identification errors and duplicate medical records drop significantly – from about 10 percent to .01 percent – after implementing biometric authentication. That is about 80 times better than the national average of 10 percent. The system also reduced patient check-in times by 70 percent after the switch, thereby boosting patient satisfaction.

Once a system invests in palm-vein biometrics, the technology can be implemented quickly across all facilities. Ms. Drake said training is simple with Imprivata PatientSecure. "It takes about 15 minutes to train someone to use it," she said.

Although biometric authentication is typically used on the front-end, nurse managers and physicians are also using it, according to Mr. Miri. He said hospitals are deploying this technology in innovative ways, such as to identify patients before administering medications and to identify unconscious trauma patients who arrive in the emergency department.

Time to Invest in Biometrics

The broad reimbursement changes in healthcare make it critical for hospitals to focus on improving quality of care, efficiency and patient satisfaction, as the three areas are becoming increasingly intertwined. Implementing biometric authentication such as palm vein recognition can help achieve all three of these goals, according to Mr. Miri.

"I convey to hospital CFOs and others that it would be remissive to not invest in technology that can improve quality, reduce the overall burden of care for the patient, has a quick return on investment and will help increase HCAHPs," he said. ■