

Medication Administration check MAK Technology Designed to Increase Patient Safety

The quality and safety of the care we provide our patients continues to be a key focus for Equinox. MAK, an important new tool in helping us improve quality and enhance safety, is well underway in its development.

On a national level, the administration of prescription drugs is error-prone even though up to 88% of medication errors are preventable.

Medication administration-related errors that result in patient harm are the leading cause of in-patient deaths, an estimated 7,000 annually. Hospital patients, on average, are subject to one administration error a day, according to the Institute of Medicine.

The Journal of the American Medical Association reports medication administration-related errors occur at all stages of the medication process: ordering (56%), administering (34%), transcribing (6%), and dispensing (4%). Nationally, medication administration-related errors cost hospitals an estimated \$3.5 billion dollars annually.

Using barcode technology from Siemens

Medical Solutions, Catholic Health is embarking on a major transformation of the medication administration process. This will ensure that the

“five patient rights of medication administration” are followed. Barcodes on the medication, the patient’s wristband and the clinician’s I.D. badge will be scanned and information reconciled in the computer. If any of the information does not reconcile, the computer will alert the clinician with a warning that something is wrong.

Developing a system like MAK affects so many other processes - from medication packaging to name badges and patient wristbands. Much of the work to redesign the direct and indirect processes needed to make MAK work have been completed and fact-finding visits to hospitals already using MAK have been planned. The schedule for Catholic Health hospitals to go live on the new system is still in development.



The Five Rights of Medication Administration

1. Right Drug
2. Right Route
3. Right Patient
4. Right Dose
5. Right Time


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The Equinox News

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Catholic Health Lab Information System Undergoes Major Upgrade

Catholic Health's Laboratory Services underwent a major technology upgrade for the first time in nearly a decade. Last month, the Lab Information Services (LIS) department completed a major upgrade to the SoftLab system in a 24-hour window that minimized the impact of the system being offline for our clinical areas.

The SoftLab system supports more than four million tests each year, and is a major component of the clinical technology on which our physicians and other clinicians rely. "This was an important step for our lab as we look to improve both quality and efficiency for the medical professionals who rely on us day-in-and-day-out," said Connie Bauer, Vice President, Laboratory Services.

More than 50 Catholic Health Associates worked long hours to make the SoftLab upgrade as smooth a transition as possible. About 20 laboratory "superusers" worked to validate 65 instrument interfaces and train about 400 laboratory end-users. The SoftLab system also has dozens of interfaces to other registration, clinical and billing systems. The laboratory LIS and integration teams worked diligently to ensure the accuracy of every interface.

SoftLab not only communicates with other Catholic Health computer systems like Soarian, but it must also interface with the Electronic Medical Records (EMRs) of more than 300 physicians

throughout the region using three different software vendors. Beyond our own embedded connectivity with these physicians, Catholic Health's Lab feeds information to HEALTHeLINK, the Western New York Clinical Information Exchange.

In addition to the software upgrade, the project also involved new CPUs and a conversion to an Oracle database. Dozens of workstations (computers) had to be deployed to accommodate the enhanced SoftLab system. The IT networking and engineering teams were integral in the setup of the hardware, networking and printing. "We deployed approximately 115 new workstations across multiple locations so that our lab associates would be able to take full advantage of this new and much more powerful system," said Pete Capelli, Vice President, IT Network & Infrastructure.

The result of all this hard work is an LIS tool that is much faster and far more user friendly. There are significant enhancements in the system that will allow for better accounts receivable processing, producing a positive financial impact for the lab. Improved functionality includes the ability for Synoptic Reporting, a feature necessary for community cancer center designation.

Soarian Clinicals Update

Well-Established Clinical Tool Continues to Expand

Results, orders, and documentation --- just three short years ago, nurses throughout Catholic Health had practically as many ways of doing/accessing these things as there were nursing stations. Today, clinical information is reported, documented, and ordered virtually the same way at each acute care site.

Soarian has unlocked a whole new potential for improved quality and patient safety through both the technology itself, and the standardized processes that were developed for its use. Soarian Clinical Access was the first module to “go-live” and gave us a tool to access results on any patient anywhere in our acute care settings. It also gave physicians access to information from anywhere - extending care beyond the hospital walls.

Soarian Common Clinicals followed soon after, providing a common system for nurses to place orders and a way to “hard wire” best practices and automated alerts.

Most recently, Soarian Clinical Team enabled electronic nurse documentation and eliminated legibility issues, helped ensure complete documentation of care through built-in prompts and reminders.

Recently, the use of Soarian for electronic documentation has expanded to ancillary clinical areas including Food & Nutrition Services and the Medical Rehabilitation Units. Respiratory Therapy departments at all four acute care sites are currently designing the way they will document in Soarian.

Soarian Financials, which recently went live at the St. Joseph Campus of Sisters Hospital, will also have an impact on clinical processes. Admissions and the patient information associated with that process will be captured in Soarian Financials. We expect that improved scheduling features will have a positive impact on the overall patient experience.



Soarian EDM Offers Electronic Signature

Soarian Enterprise Document Management (EDM) and Soarian Health Information Management (HIM) are Catholic Health’s new online solution that will replace traditional paper documents, reports, and folders, moving us ever closer to a more complete Electronic Medical Record. EDM allows Catholic Health Physicians to electronically sign transcribed reports from anywhere they have secure access to Soarian.

The ease of electronic signature is expected to improve chart completion, ensuring that records are accurate, up-to-date, and that claims may be submitted for payment on a timely basis.

Physicians who use EDM will log-into Soarian; click on an icon to determine if they have any transcribed reports to sign; and if they do, they will be able to read and sign them electronically right there and then. The introduction of Soarian EDM has prompted an increase in the use of Soarian, and HIM/EDM associates are working hard to provide training and “refresher” information for physicians who may have not used Soarian much. This exciting new technology is a big plus for both our physicians and our bottom line!

Equinox - What It's All About

In 2004, Catholic Health began a journey to transform healthcare by using cutting edge technology. Our efforts centered not only on state-of-the-art diagnostic imaging equipment, but also on the development of one of the most advanced electronic health records (EHR) in the region.

By moving millions of bits and pieces of clinical information out of paper charts and into the computer, we can provide the right information, to the right provider at the right place at the right time. Time and information are the real currency with which positive healthcare outcomes are purchased. Our EHR, built on technology called Soarian, provides Catholic Health physicians and other clinicians with an abundance of that currency.

Besides its ability to provide up-to-the-minute information on any of our patients at any of our hospitals, Soarian is "hard-wired" with patient safety alerts, reminders, and will include information on clinical best practices compiled from research from across the nation. And because it's not confined to a paper chart, our physicians can access patient information from any location, over our secure network.



There are many elements that make up the patient's health record and thus far we have implemented access to clinical results, nursing orders, electronic nurse documentation, and documentation by ancillary care departments. We are well underway with the development of many others, including an electronic process to safely monitor and track the administration of medication, computerized physician orders, and physician documentation.

Our efforts to make important, possibly life-saving, clinical information more accessible when and where it's needed extends beyond our own system. Catholic Health is a founding member and key contributor to HEALTHeLINK, the Western New York Clinical Information Exchange. Working with the entire healthcare community, Catholic Health has helped establish a secure network through which healthcare professionals can access information from a wide range of sources including every major hospital in the region, not just our own.

Questions?

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