

## Catholic Health's Head Start: Equinox Vision at The Center of ARRA

As the nation grapples with healthcare reform and everything that it means for individuals and institutions, there are already laws on the books that will have a major impact on our healthcare system. Chief among these is the American Recovery and Reinvestment Act (ARRA), often referred to as the "federal stimulus package."

ARRA authorizes the Centers for Medicare and Medicaid Services (CMS) to provide a reimbursement incentive for physician and hospital providers who are successful at becoming "meaningful users" of electronic medical records (EMRs). The theory behind the legislation is that technology will help physicians and hospitals provide care that is faster, better, and safer.

Sound familiar? It should. Five years ago, Catholic Health launched an initiative called Equinox to transform the delivery of care through better processes and innovative technology. Equinox and the significant progress we have made in implementing new technologies like Soarian, MedHost, Midas+, and many others, has put us in a position to take advantage of the resources offered through ARRA and avoid the penalties CMS can

impose on providers who do not use EMRs beginning in 2015. That's right, penalties can be imposed on providers not effectively using EMRs.

Although CMS has the authority to begin imposing penalties in 2015, their "stick," they will also provide a "carrot" in the form of financial incentives begin-



ning as early as 2011. Since both the carrot and the stick hinge on achieving "meaningful use," Catholic Health is working closely with Siemens Medical Solutions to identify the initiatives that must be developed or enhanced to fulfill the meaningful use standards. While these standards have incremental measurements, the long-term vision (by 2015) is to:

- Improve management/prevention of chronic disease - one million fewer heart attacks and strokes
- Reduce Medical Errors by 50 percent
- Reduce racial/ethnic health disparities
- Coordinate care to reduce readmissions by 50 percent
- Provide patients with access to their own health information
- Provide real-time information to public health agencies

With significant advancements in technology already in place, Catholic Health is looking to additional initiatives like, Medication Administration Check (MAK) and Computerized Physician Order Entry (CPOE), to continue the transformation was envisioned five years ago, and affirmed by the provisions in ARRA.

  
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# Big MAK

## Medication Administration Check Requires Team Approach

It's not likely that in 1974, the employees at a small supermarket in Toledo, OH ever envisioned that the first UPC scanner they were using would one day keep patients safe. Thirty-five years later, however, that's exactly where we are.

UPC codes and the scanners that read them, commonly referred to as bar code technology, are playing an important role in improving patient safety at Catholic Health. Although the technology is well established, applying it to this intricate process and tying it to Soarian and other systems is extremely complex. Multiple clinical and non-clinical departments are involved in every step from the procurement of medications, through their packaging, storage, prescribing, dispensing, administering and documentation.

The MAK initiative, which began last year, will see its first pilot program begin on October 27 on two Med/Surg floors of Mercy Hospital of Buffalo. Getting to this point required the dedicated effort of a multidisciplinary team that included representatives from the medical staff, nursing, pharmacy, respiratory therapy, quality assurance/process improvement, information technology, purchasing, finance, human resources, security, and our partners at Siemens Medical solutions.

This team has been meeting bi-weekly to cover every step in the process in order to account for every scenario from regular medication, to IV drugs, and self-administered medication. They also needed to study various patient settings where the type of drugs and manner of administration may be different. The unique perspectives of each team member will allow us to build a robust process to which technology can be applied - this is likely one of the best examples of the *Equinox* methodology (process, culture, technology) to date.



*Members of the MAK interdisciplinary team discuss the documentation of self-administered drugs at a recent meeting.*

In addition to the interdisciplinary committee, there is an IT/Pharmacy group, an Executive MAK Committee, and a dedicated Pharmacy Workgroup.

The many processes reviewed and redesigned in advance of the new MAK technology include the design of associate name badges, the design and production of patient wrist bands, the standardization of medication administration times, and even the packaging of medication. This has been a huge part of the *Equinox* approach and is the difference between "transformation" and a simple change in technology.

The MAK initiative holds tremendous promise for Catholic Health and the patients we serve. Among the potential benefits are a reduction of "never events" to less than two per month and even a more mundane goal of a reduction in paper usage by ten percent when medication administration reports (MARs) are no longer printed.

There are dozens of associates working on this important project within the framework of the various established MAK committees. Their work is critical to our success in improving quality and patient safety.

# Taking AIM at CPOE: New Approach Targets Faster Implementation

**What is CPOE?** Computerized physician order entry (CPOE), is a process of electronic entry of licensed medical practitioner instructions for the treatment of patients under his or her care. These orders are communicated over a computer network (Soarian) to the medical staff or to the departments (pharmacy, laboratory, radiology, etc.) responsible for fulfilling the order. CPOE decreases delay in order completion, reduces errors related to handwriting or transcription, allows order entry at point-of-care or off-site, provides error-checking for duplicate or incorrect doses or tests, and simplifies inventory and posting of charges.

**Why are we implementing CPOE?** In the past, physicians have traditionally hand-written or verbally communicated orders for patient care, which are then transcribed by various individuals such as unit clerks, nurses, and ancillary staff before being carried out. According to a 1999 Institute of Medicine (IOM) report, handwritten reports or notes, non-standard abbreviations and poor legibility can lead to errors and risks patient safety. A follow up IOM report in 2001 recommended the use of electronic medication ordering, with computer- and internet-based information systems to support clinical decisions. Prescribing errors are the largest identified source of preventable hospital medical errors. A 2006 report by the IOM estimated that a hospitalized patient is exposed to a medication error each day of his or her stay. Studies have shown that CPOE reduces the medication error rate by 80%, and by 55% for errors with serious potential patient harm.

**What does AIM mean?** AIM is an acronym that stands for "Agile Implementation Methodology." As part of the many initiatives that make-up Equinox, CPOE was slated to fall within the strategic plan that saw the implementation of other clinical applications



including Soarian Clinical Access, Soarian Common Clinicals, and Soarian Clinical Team precede its development and use. The original timeline for implementation called for a ten-month project. The AIM approach, developed by our partners at Siemens, will cut that time in half to approximately five months.

The American Recovery and Reinvestment Act (ARRA) and the incentives associated with it was a major reason for the move to the "AIM" methodology. The change in the approach to CPOE implementation will mean a greater commitment from our partners at Siemens, who will have more resources on-site.

The groundwork provided by the dozens of physicians and clinical professionals working on Clinical Standardization allows us to confidently move forward with CPOE at a more rapid pace. The pilot group will include hospitalists and residents and they will have access to more than 100 convenient order sets and 20 diagnosis-specific order sets.

There are currently 14 healthcare organizations across the country using Soarian CPOE. As part of the AIM methodology, Catholic Health will be able to draw-upon best practices from those organizations.

Combined with MAK, CPOE will mark one of the most significant improvements in patient safety in the history of Catholic Health and its individual ministries.

# Connecting With Our Community

Imagine for a moment that you are at a bank applying for a mortgage to purchase a new home. After filling out a few forms, the loan officer informs you that he will need to do a credit check and verify your income. This sounds reasonable, right? But then he tells you that you will need to visit each of your creditors to get a copy of your history and any outstanding balances, go to any and all banks where you have accounts to get copies of your statements, and be sure to get a letter from your employer to verify you have a job and enough income!

Doesn't sound so reasonable anymore, does it? After all, what if you miss something, you might not get the loan. What if the bank misses something, they might put themselves at risk. *Isn't this why we have computers?*

Shockingly, this is exactly the process we have right now if our medical information is confined to a physician's office or a paper chart. And it's a bit more dangerous for your physician, rather than your loan officer, to miss some important information. That is why electronic medical records are so important, and why Catholic Health has invested not only in our own systems like Soarian, but also in a community-wide initiative called HEALTHeLINK.

HEALTHeLINK is the Western New York Clinical Information Exchange. It is designed to "link" the WNY healthcare community



together so clinical information can be exchanged between and among providers quickly and efficiently. In a non-emergent situation it's convenient for you and your healthcare providers. In an emergency, access to your medical information could save your life.

Catholic Health along with all the other major hospitals, hundreds of physicians, several labs and pharmacy systems, and health insurers have collaborated to develop the technology to exchange information quickly and safely. The rest is up to you.

When you visit a physician who participates in HEALTHeLINK, you can choose to have your information available to those healthcare professionals across the region that may need it by signing a consent form. Your information is not stored in any "central database," rather it is secure within the organizations

that record it. Consenting to participation allows for the secure electronic retrieval of that information by authorized medical professionals. You can visit [WNYHEALTHeLINK.com](http://WNYHEALTHeLINK.com) for more information or to obtain a consent form.

## Questions?

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