

Performance Strategies



Use CPOE to Lead the Way in Safe, Effective Healthcare

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CPOE Reaches Tipping Point for Adoption and Use



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Achieving the Full Potential of Healthcare

Healthcare is an extraordinarily complex enterprise that's practiced in teams. It's not about one physician, one nurse, one pharmacist or one phlebotomist. It's about making sure every patient gets the highest quality and most cost-effective care possible. And it starts by creating a collaborative and safe environment.

Helping to Ensure Safety

Because errors predominantly occur at hand-offs, the healthcare environment must include tools to help patients safely cross those care interfaces. One such tool is computerized provider order entry (CPOE). It's a process improvement tool that's about minimizing the potential for errors even before the care process begins. When hospitals embed best practices into their CPOE system and make that information actionable for physicians, it becomes a tool for achieving the full potential of healthcare.

While healthcare has been slow to move to CPOE, the industry finally appears to be close to a "tipping point" for adoption and use. In fact, within our customer base, we've seen phenomenal growth in just a few short years, including:

- 5 times growth in terms of hospitals live on CPOE from 2004-2009.
- 200% increase in physician adoption in 2008 alone.

Our customers are also achieving much more than adoption and use. They're seeing tangible return on investment (ROI) — both clinical and financial. For example, with a CPOE system:

- **Decatur Memorial** [improved the blood prescribing habits of its providers](#), reducing risk for patients, while reducing cost for the hospital.
- **Dupont Hospital** [improved patient safety and efficiency in its obstetrical unit](#) by improving medication/order turnaround times, reducing STAT medication overrides, and freeing nurses to spend more time in direct patient care.
- **WellStar Health System** [increased compliance with the national "Surviving Sepsis Campaign"](#) and decreased the risk-adjusted mortality index and cost per case.
- **AnMed Health** [improved the number of community-acquired pneumonia patients receiving antibiotics within recommended guidelines](#), reduced the average length of stay, lowered the cost of care, and reduced the mortality index.
- **Concord Hospital** [achieved 100% prophylaxis compliance to prevent venous thromboembolism](#) by presenting physicians with evidence-based reminders.

These kinds of successes are not isolated to McKesson customers. A Texas study titled Clinical Information Technologies and Inpatient Outcomes was recently published in the Archives of Internal Medicine. The study looked at 41 hospitals and 160,000 patients. The conclusion: hospitals with CPOE and clinical decision support have fewer complications, lower death rates and reduced costs. These hospitals also saved \$538 per patient and saw a 16% reduction in patient complications.

Stimulating Deployment

With a growing body of evidence that validates the numerous quality and safety benefits of CPOE, the question for many healthcare organizations is no longer if they'll deploy CPOE, but how soon can they do so. In addition, the passage of the

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[American Recovery and Reinvestment Act](#) is expected to accelerate the pace of health IT deployment — especially electronic ordering as part of the electronic health record (EHR) in the inpatient setting.

There's still much to be sorted out regarding how physicians and hospitals will qualify for the economic stimulus funds. We do know that just implementing technologies will not be enough. Funding, and success, will require demonstrating what the government terms "meaningful use," which many believe will be tied to clinical quality measures. We believe that in order to qualify for the maximum amount of funds available under the stimulus, hospitals will need to accelerate their implementation and use of CPOE now.

As we've partnered with our customers to successfully implement CPOE, we've learned that it's not easy to travel this journey alone. McKesson is committed to patient safety and helping our customers use technology to make clinical practice better and more consistent with evidence-based care.

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Massachusetts Report: Saving Lives, Saving Money in Practice

The Massachusetts Technology Collaborative (MTC) released reports in 2003 that identified computerized provider order entry (CPOE) as having the potential to improve patient safety and reduce costs. Since then, the Massachusetts Hospital CPOE Initiative has been working with the state's hospitals to implement and optimize the use of CPOE.

A January 2009 study, *Saving Lives, Saving Money in Practice: Strategies for CPOE in Massachusetts*, reports on the operational challenges of six community hospitals in implementing a CPOE. The five areas of focus are: ongoing user support, optimization of CPOE, ongoing management of clinical decision support (CDS), medication reconciliation, and management of IT downtime. The 28-page report is meant to serve as a tool to assist those involved in the effort to implement CPOE in their organization.

Ongoing user support – Study hospitals provide a mix of user support for physicians. All of the hospitals have support teams that include nurses, physician CPOE advocates, and CMIOs. The team is involved in training new physicians, rolling out upgrades and maximizing ease of use and workflow. Most effective training is delivered through coaching during rounds or in dedicated locations like the physician lounge

Optimization of CPOE – Work on CPOE and related applications continues after implementation. All of the hospitals have a defined process for managing program changes and updating the system. The system is continually enhanced in a series of small projects to improve the usability and content (order sets, alerts, etc.) of the system for physicians.

Managing Order Sets and CDS – Managing the content in the system is an ongoing process that requires feedback, discussion and change. The hospitals reported that they underestimated the complexity and resources required, were moving to more formalized management of the order sets, developed their own content (except for one hospital), eliminated or discouraged the use of personal order sets by physician, and introduced additional decision support over time as they became familiar with medication checking.

CPOE and Medication Reconciliation – The challenges of medication reconciliation vary within the hospital setting—admission, transfer, and/or discharge. The hospitals all enter a patient's home medications on admission, document completion of medication reconciliation, and provide patients with medication instructions on discharge.

Management of IT Downtime – The hospitals have developed formal procedures for clinical operations to minimize the impact to clinical care from planned and unplanned downtime. For example, ready access is provided to needed forms and patient data, and clinical support staff is available to assist physicians. Communications alert affected staff of the downtime.

Read the [full report](#) on the e-Health Web site.

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