

# Performance Strategies



Using CPOE to Reduce Variability of Care and Improve Outcomes

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## KLAS: How Do You Stack Up on CPOE?



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### **CPOE Gaining Traction**

To implement or not to implement CPOE. That is the question for health organizations. Many have been observing from the sidelines, wondering whether to make the leap. On one hand, they realize that computerized provider order entry and clinical decision support (CPOE/CDS) have many patient safety benefits. It reduces the risk of medication errors that occur from cryptic handwriting and re-entry of orders in the pharmacy, and improves outcomes through decision support guidelines and pre-built order sets. On the other hand, they worry about gaining physician adoption and the cost of the solution.

Our research at KLAS Enterprises, LLC shows that CPOE is gaining more traction than ever before. Whether you are one of the pioneer organizations already live on CPOE or an aspiring provider, now is the time to see how you stack up amongst your peers.

### **Deployment and Adoption Increasing**

For a market in its infancy, there is good growth. For the second consecutive year, we've seen 20% growth in the sheer number of organizations deploying CPOE. Nearly 10% of U.S. hospitals are now in some stage of CPOE deployment, up from 6.8% last year. And there is more aggressive CPOE use. Today, 6% of those hospitals are using the system for more than 50% of patient orders, compared to 4% in 2007.

There has been notable growth in the number of physicians doing inpatient CPOE: 171,000 nationwide, compared to 141,000 last year. Of those inpatient sites achieving 100% physician adoption, 115 are teaching hospitals and 29 are non-teaching. Keep in mind that teaching hospitals are defined as hospitals that have a relationship with a university. This means that many community hospitals could fall under the heading of teaching hospitals if they have a relationship with a university — which many do.

One of the biggest surprises in our 2003 study was that nearly half (48%) of all medication orders entered with CPOE were being reentered in the pharmacy. Today that number has been reduced by more than half (21%), indicating that pharmacy solutions have become more integrated.

### **What is the Measure of a CPOE Site?**

How do you measure your progress on deploying CPOE? As you read industry reports and claims, it's important to dig deeper to identify if you are truly comparing your organization to your peers. You need to review how each defines a fully live CPOE site. In the past, KLAS included ambulatory-only and ED-only organizations in the ambulatory CPOE count if the organization's intent was to eventually provide CPOE in the inpatient area as well. Now we consider a site to be a fully live CPOE site if there is at least one inpatient facility — only then will we include any ED/ambulatory CPOE at the same organization in the ambulatory count.

Also, to be counted as having achieved deep adoption, an organization must be entering 50% of all orders electronically. Healthcare experts around the world agree that we will probably never see the day when every single patient order is entered electronically since life-threatening conditions and emergencies typically don't allow time for computer use. So when we say a site is fully live on CPOE, you can expect that >85% of all doctors are doing CPOE, and at least 50% of all orders or 100% of all non-urgent orders are submitted electronically.

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## KLAS: How Do You Stack Up on CPOE? (Cont.)

### Learning from Others

Our research reveals several trends among successful CPOE deployments. Organizations that experienced success had the following suggestions for others.

**Mandate CPOE.** Mandating physician CPOE usage – for both employed and not-employed physicians – improves adoption almost two to one. It improves outcomes because it reduces variability of care. It's a tricky subject, but the progress made is indisputable.

**Prepare for Physician Satisfaction.** Organizations rarely cited increased physician satisfaction as an objective. However, organizations that focus on facilitating the CPOE experience for physicians through better training, real-time support, and effective order sets may be pleasantly surprised.

**Set Appropriate Adoption Milestones.** The length of time it took hospitals to achieve the milestone of 50% of orders entered electronically varied greatly — from less than six months to more than two years.

**Plan for Wireless CPOE.** 94% of sites reported either a combination of hardwired/wireless CPOE (67%) or wireless only CPOE (27%). Computers on wheels (COWS), laptops, tablets and PDAs make up 67% of the devices in use.

There are more hospitals, organizations and physicians realizing the patient safety and quality benefits from CPOE than ever before. Yet, our nation still has a long way to go. How do you stack up? And what are you waiting for?

*Kent Gale is founder, managing partner and executive director of [KLAS Enterprises, LLC](#), in Orem, Utah. Gale formed KLAS Enterprises in 1996 to improve the delivery of healthcare information technology (HIT) software and services by measuring the performance of healthcare software suppliers. He teams up with IT executives and healthcare professionals to gather HIT vendor performance data from provider organizations and offers reports and consulting services based upon the research data. Prior to founding KLAS, Gale held various leadership positions within vendor and provider healthcare IT organizations in the United States and abroad. Gale was most recently honored with the 2006 Lifetime Achievement award from CHIME.*

### Decatur Memorial's Tips for a Successful CPOE Implementation

How can you ensure a successful implementation of computerized provider order entry/clinical decision support (CPOE/CDS) at your hospital? [Decatur Memorial Hospital \(DMH\)](#), a 356-bed community hospital in Decatur, Ill., implemented McKesson's [Horizon Expert Orders™](#) solution within nine months, achieved 100% physician adoption — and learned some great lessons along the way. These tips were identified by the hospital's CPOE project manager and clinical analyst, **Jenny Brandenburg, RN, BSN**, also director of the hospital's pediatric unit.

**Get Started Early:** Decatur built awareness early by sharing medical literature on how CPOE improves patient safety. These efforts ultimately laid the groundwork for acceptance.

**Metrics Matter:** Collect before and after data to prove patient care successes. Since implementing CPOE, Decatur has achieved a 94.89% decrease in incomplete medication orders and a 100% decrease in incomplete radiology orders.

**Engage Leadership:** The success of the project relies on support from the executive team. Medical leaders must also be project champions. Decatur recruited the president of the medical staff and gained formal endorsement from the Medical Executive Committee.

**Select the Right Team:** For the implementation team, Decatur included clinical executives, nursing and pharmacy staff, which lent credibility and created confidence that the clinical point of view would be well served.

**Enlist Physician Champions:** The best testimonials come from physician peers. Comfortable with computer technology, the physician champions were also invaluable in developing content.

**Make the Team Accessible:** To avoid frustration, make sure physicians can easily identify and quickly access super-users and champions when they need support. At Decatur, the team – including the CMO and the CNO – wore buttons and/or shirts with the project logo to visibly demonstrate who was available to help. Team members were conveniently located in a high-traffic clinical area and could also be instantly reached by physicians through a hotline number.

