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WHITE PAPER

A PATIENTKEEPER PERSPECTIVE

Improve CPOE Adoption by Using a Phased, Flexible Implementation Process

For 40 years, computerized physician order entry (CPOE) systems have presented challenges to hospitals seeking to automate physician workflows. This has been true for a variety of reasons – workflow impacts, implementation requirements, and change management considerations. In short, CPOE's problems have stemmed from both the product and the process.

Four Keys to a Successful CPOE Implementation

1. Focus first on automating the physician's ordering process.
2. Design the CPOE system to improve physician efficiency.
3. Recognize and minimize impacts to ancillary workflows.
4. Allow for a flexible implementation approach and rollout strategy.

From a process perspective, the traditional "big bang" CPOE implementation is a big bear. CPOE deployments historically have taken a lot of time, staff and financial resources. Much of this has been driven by system requirements for practice standardization, as well as highly complex system builds and configurations, including creation of an order catalog and order sets. In a "big bang", the entire hospital goes live on CPOE all at once (the proverbial "flip of a switch"); it's out with the old, in with the new, and no looking back. The potential for both culture shock and workflow disruption is vast.

Sensible options for community hospitals

Many community hospitals that are now deploying CPOE for the first time, or are expanding or extending their CPOE solutions to meet Stage 2 Meaningful Use and beyond, may benefit from a different, more flexible approach to CPOE that:

- Focuses on automating physician workflows *without* significantly impacting other clinical and ancillary processes; and
- Does not require content standardization or change how physicians practice medicine.

From a timing perspective, this approach can be executed in two ways:

- The "rapid rollout", in which CPOE is brought live in a series of departmental waves over a relatively short period of time; or
- The "incremental implementation", in which a small pilot implementation precedes any further CPOE deployment, which can be paced at whatever rate the organization is comfortable with.

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Enabling physicians to focus on patients... not technology™

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Four keys to a successful CPOE implementation

Key #1: Focus First on Automating the Physician's Ordering Process

CPOE projects often get out of hand because they lose sight of job #1: to improve patient safety by automating the physician's current ordering process. Too many CPOE projects not only try to automate the physician workflows but also workflows of the nursing and ancillary staffs. In some cases, the goal is to eliminate some of the ancillary staff.

A CPOE system should *not* be used to increase the workload of physicians and eliminate other care team members from the process. Organizations should consider which information can be best provided by the physician during ordering and which information is more appropriate to come from other members of the care team. By simply automating the physician's ordering workflow, hospitals can continue to take advantage of the clinical expertise provided by the extended care team in the ordering process. Patient safety improvements will result directly from elimination of order legibility issues and front-end interaction checking.

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Once the CPOE system has been embraced by physicians, organizations can begin to introduce changes or standardization in clinical practice. In this way, the organization can use ordering patterns to focus on changing care delivery in a way that produces the best outcomes. Additionally, hospitals can then begin to introduce automation into other areas such as nursing and ancillary departments.

Key #2: Design the CPOE System to Improve Physician Efficiency

A CPOE system should be designed to save physicians time and improve physician efficiency. For example, time savings can be realized by including a "translator" in the software that enables physicians to order using the language with which they are familiar, while still maintaining the nomenclature that is used by the hospital ancillary departments for that order.

Physician workflow efficiency can also be impacted by ensuring that the most relevant alerts are appropriately presented to physicians at the time of ordering. Alert fatigue has often been cited as a challenge with typical CPOE systems. Too many CPOE implementation approaches try to eliminate the care team in the ordering process and therefore burden physicians with too much data entry and too many alerts. Presenting too many alerts to physicians can either reduce the impact of alerts generally, or potentially impede adoption of the system due to workflow disruption.

Software should be designed to allow an organization to present alerts to physicians in either an "active" or, alternatively, a more "non-invasive" manner, depending on the type of interaction. In this way, all relevant interaction information is available to physicians, but only critical alerts and clinical decision support – information that is most relevant to physicians for patient safety – should be presented during the ordering process.

Key #3: Recognize and Minimize Impacts to Ancillary Workflows

While CPOE is primarily a physician-focused workflow, most (but not all) CPOE systems require redesign of all associated ordering workflows. However, it is possible to implement CPOE so it has little or no impact on most ancillary ordering workflows. By allowing ancillary departments to continue receiving orders as they do in their current workflow, CPOE implementation will be dramatically streamlined and more readily embraced throughout the organization. This does not imply that ancillary departments should have no involvement in a CPOE implementation, however. On the contrary, ancillary departments should be engaged to ensure efficient design of the ordering workflows for physicians, while also ensuring all relevant information is obtained from the most appropriate care team members.

Nursing plays a key role in the ordering process so any potential changes to nursing workflow – likely related to the mechanism by which nurses obtain and/or review orders – should be identified and addressed with nursing staff in all appropriate areas. Benefits of implementing CPOE should also be addressed with this group to provide a full picture of changes associated with the CPOE deployment. Ensuring that nurses have input into and an understanding of potential changes to this workflow is important to the success of the CPOE implementation.

Every hospital has a myriad of existing processes and checks and balances designed to ensure the highest level of patient safety is maintained when placing orders. Any change to the existing process therefore will cause an avalanche of patient safety concerns. These checks and balances have stood the test of time and the new ones are "big unknowns" to those whose job it is to care for patients. Therefore, minimizing ancillary workflow changes allows the care team to keep some of their checks and balances in place during early phases of CPOE adoption. Hospitals can then gradually introduce additional automation to the process, which improves the success rate of change acceptance.

Key #4: Allow for a Flexible Implementation Approach and Rollout Strategy

Goals and objectives for implementing CPOE vary from one hospital to another, as does each organization's tolerance for change. A CPOE solution that enables a flexible implementation approach – one that allows an organization to focus on garnering the most physician adoption initially, and then introduces increasing levels of process change at a later time – has the best chance of sustained success. Given the complexities of a "big bang" type implementation, CPOE that supports "hybrid" (a combination of electronic and paper) workflows allows for an implementation that is more tailored to the needs and goals of the organization. An implementation approach that supports varying levels of integration with hospital ancillary departments, as well as allowing for incremental implementation by physician specialty or department, will cause the least disruption across the institution and accelerate CPOE adoption. Then, as electronic order volume grows, hospitals can begin to redesign associated processes in ancillary departments as necessary, and standardize physicians' practice of medicine.

The value of a more efficient, flexible process

For some hospitals, a "big bang" CPOE implementation may be the preferred course; but for others, a more gradual approach can be the key to CPOE success. Ultimately, getting traction with CPOE – garnering strong physician adoption – has more to do with appropriately determining the acceptable scope of workflow changes across the organization than with any particular rollout timeline. That's why the "rapid rollout" or "incremental implementation" approaches can work equally well, depending on the culture of the institution.

By focusing on making physicians successful right out of the gate – getting them comfortable entering orders electronically, without altering any other aspects of their workflow – a hospital can drive CPOE adoption and generate momentum that carries the project forward into subsequent phases and broader impact.

In other words, when it comes to CPOE implementation, the alternative to a "bang" is not a "whimper"; rather, it is a measured, incremental and rational approach that produces sustained physician adoption and Meaningful Use, improved efficiency, and increased patient safety.

About PatientKeeper®

PatientKeeper Inc. is a leading provider of healthcare applications for physicians, and KLAS® Research's 2012 Category Leader in "Clinical Portals/Aggregation". PatientKeeper's highly intuitive software streamlines physicians' workflow to improve productivity and patient care. PatientKeeper's CPOE, physician documentation, charge capture and other applications run on desktop and laptop computers and popular hand-held devices and tablets. PatientKeeper's software integrates with existing healthcare information systems to create the most effective solution for driving physician adoption of technology, meeting Meaningful Use, and transitioning to ICD-10. PatientKeeper has more than 50,000 active physician users today.

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