

## **EXECUTIVE CONSORTIUM ON CPOE**

### **January, 2009**

#### *Description*

The Leapfrog Group seeks to build consensus on nationwide best practices for effective implementation of computerized physician order entry (CPOE), which evidence suggests reduces medication errors in hospitals by 50-85%. By offering guidance to hospitals, Leapfrog will support hospitals in pursuing CPOE implementation and thus aim to significantly reduce medication errors. This addresses the National Quality Forum's priority area of patient safety and the Foundation's interest in medication safety.

To accomplish this goal, Leapfrog will form the Executive Consortium on CPOE to include employers and other health care purchasers who represent Leapfrog's governing stakeholder group, as well as experts, developers, clinicians and administrators. Within the first six months, the Consortium will issue a consensus white paper outlining the most common pitfalls and best practices in implementing CPOE. The Consortium will then form work groups to reach consensus on detailed guidelines for identified aspects of implementation, including nursing engagement, pharmacy engagement, physician engagement, and management.

#### *About the Leapfrog Group*

The Leapfrog Group was founded in 2000 by senior executives at key Fortune 500 companies including GE, GM, Ford, Boeing, and IBM. These founders were outraged by the 1999 Institute of Medicine Report that concluded that up to 98,000 Americans die each year from medical errors. Today, working with hundreds of health care purchasers through 37 regional partners spread across all 50 states, Leapfrog publishes the results of the annual Leapfrog Hospital Survey comparing hospitals on evidence-based, NQF-endorsed safety and quality measures.

The Leapfrog Survey is developed by a panel of top experts in patient safety and quality, and refined each year to assure compliance with the most up to date peer-reviewed research. The Survey focuses on the four main standards we identify as having the greatest impact on hospital safety--one of which is CPOE adoption. Results of the Leapfrog Survey are used by employers and other purchasers to reward higher performing hospitals. Rewards can include incentives for employees to favor higher performing hospitals, as well as public announcements and other community-based efforts to highlight hospital safety scores. At the national level, Leapfrog works with numerous collaborators such as NQF, NCQA, and others to harmonize quality measures, advocate transparency of quality information, and advocate financing strategies that align provider payment with performance. Over 1200 hospitals voluntarily complete the Leapfrog survey, and over 37 million employees and dependents are covered by companies using Leapfrog data to drive quality improvement.

Leapfrog's influence has been significant despite our short history. For instance, Leapfrog was the first national organization to issue a policy on Never Events, in conjunction with NQF's definition of 28 adverse events that should never happen in a hospital. Leapfrog's policy includes non-payment for the costs associated with the events, as well as an apology to the patient, root cause analysis, and reporting to the Joint Commission or Patient Safety Organization. Leapfrog's policy prompted hundreds of other organizations including hospitals, health plans, state government, and advocacy organizations to follow suit with adapted versions of the Leapfrog policy.

### *The Problem: Implementing CPOE to Best Reduce Medication Errors*

A growing body of evidence supports the effectiveness of the Leapfrog model in driving hospital safety improvements, and in steering consumers toward safer hospitals. Nonetheless, in the area of medication safety progress has lagged. Despite the fact CPOE adoption is one of Leapfrog's most important standards, less than 8% of reporting hospitals fully meet Leapfrog's standard for CPOE. This project aims to address a significant barrier to adoption of CPOE: the implementation process.

The implementation process emerged as a top priority for Leapfrog this year, when we added a new component to the Survey's CPOE section, an evaluation tool. The evaluation tool asks hospitals that have adopted CPOE to run a simulation of the system, entering dummy orders and dummy patients and reporting to Leapfrog on the system response to the orders. Developed by First Consulting Group and the Institute for Safe Medication Practices, with funding from Robert Wood Johnson Foundation and AHRQ, the evaluation tool scores hospitals on how well they avert common prescribing errors, including allergy interactions, dose calculations, and interactions with food or other medications. Review of the 2008 results, which are currently under review for publication in a peer-reviewed medical journal, suggest many hospitals did not score well, and some accepted the fatal order embedded in the order set.

Why are these systems performing inadequately? Since individual vendors had varied results in different hospitals, Leapfrog hypothesized that implementation and maintenance of systems at the individual hospital level may have pitfalls. There appear to be no common standards or best practices for customizing CPOE systems, and until the advent of the Leapfrog evaluation tool there were few avenues for assessing ongoing performance.

Like any innovation designed to improve safety, CPOE requires systemic integration involving myriad elements of the hospital environment and culture, from physicians and nurses to pharmacists and lab techs to administrators and IT leadership. Systems must be customized to each hospital to unify diverse constituencies and smoothly process complex orders. In the absence of shared information about avoiding pitfalls and deploying best practices, hospitals may inadequately implement CPOE or choose to avoid CPOE altogether, which further reinforces the nation's medication error rate.

### *The Consortium*

Leapfrog's CPOE Executive Consortium will assemble CPOE developers, Leapfrog-affiliated experts including the nation's most prominent researchers on medication management, Drs. David Bates and David Classen; purchaser members of Leapfrog, clinicians with experience implementing CPOE, information systems experts, hospital administrators, quality advocates, and others. In a carefully facilitated process, the Consortium will build consensus around an initial white paper identifying common pitfalls and areas for best practice identification and further research. Following the white paper, the Consortium will break into work groups to address designated issues from the perspective of particular stakeholders. Work groups will report to the Consortium, which will begin issuing guidelines on implementing and maintaining CPOE systems.

*Collaborative*

This is a sensitive collaboration involving business competitors, hospitals, and clinicians who are often reluctant to candidly discuss flaws in prescribing systems. Leapfrog’s proven capacity to assemble sensitive collaboratives and get results makes us well positioned to convene the consortium. Moreover, because Leapfrog has one sole governing stakeholder, healthcare purchasers, we bring a level of neutrality to the process. Our sole interest is reducing medication errors.

The Leapfrog Group is the appropriate convener of the Executive Consortium on CPOE Implementation because 1) we have a strong reputation among hospitals for principled, science-based advocacy that leads to results; 2) we are able to quickly bring to the table a cadre of leading experts from diverse stakeholder groups, because we have worked with many stakeholders over the years as the nation’s leading advocates of CPOE adoption; 3) we are governed solely by health care purchasers, and thus have no conflict or bias to call into question our arbitration of this sensitive process.

*Measurable*

We will measure the effectiveness of the Consortium’s efforts to educate hospitals about CPOE implementation by tracking scores on the Leapfrog CPOE evaluation tool, including trends in scores for hospitals that completed the tool in 2008 as well as new scores.

To assure that hospitals are made aware of the information coming out of the Consortium, Leapfrog will publicize the white paper in media outlets of interest to the hospital community in particular. This is a media target Leapfrog excels at reaching. Leapfrog’s announcement in October about the results of the CPOE evaluation yielded over 100 citations in the healthcare press including major publications like Healthcare IT News and Modern Healthcare.

*Leadership Support/Organizational Capacity*

The CEO and Board of the Leapfrog Group have invested in the CPOE evaluation tool and in advocated for proper deployment of CPOE since our inception. In September 2008, the Board vetted the consortium concept and endorsed it unanimously. Leapfrog CEO Leah Binder has named the Consortium as a top priority for 2009. Leapfrog will support the project with staff, consulting, and legal counsel. At least one board member will participate as a member of the Consortium as will the Leapfrog CEO.

This work furthers Leapfrog’s core mission to be transparent and responsive to the community not only releasing information about the quality of CPOE deployment, but also offering information to help improve that performance. It will be sustained by integrating the Consortium and its ongoing work product into the Leapfrog Survey process and support for hospitals.

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