

## CPOE adoption more widespread, but CIOs cautious in predicting 100 percent adoption

More healthcare organizations have begun implementing computerized provider order entry systems than previously believed, but CIOs from those organizations are cautious in expecting widespread use by clinicians and predict that providers seeking to implement the systems are looking at projects that will take several years to complete.

A survey completed by 335 CIO members of the College of Healthcare Information Management Executives in June 2009 found that 199 respondents (59.4 percent) reported that their organizations currently have CPOE “at some level of adoption.” CHIME members typically represent large hospitals and hospital systems with strong interest in implementing healthcare IT systems.

There’s been much interest in the rate at which CPOE can be implemented. The first draft of measures proposed for determining the meaningful use of electronic medical records stipulates that providers use CPOE “for all order types, including medication.” Meeting the targets in the eventual definition of meaningful use of EHRs will be essential for healthcare organizations if they want to qualify for increased reimbursement under the American Recovery Reinvestment Act, beginning in 2011.

### Key Findings

- Of provider organizations that implemented CPOE, many are just beginning the process. A total of 53 respondents (26.7 percent) have had CPOE in place for about a year; 43 (21.6 percent) have had initiatives in place for two years; 36 (18.1 percent) have used CPOE for three years; 28 (14.1 percent) have had order entry applications for four years; and 35 (17.6 percent) have had such systems for five or more years.
- When respondents were asked, “If you had to begin implementing CPOE today, how many years do you think it would take for you to reach 100 percent adoption?” most respondents estimated a timeframe of two to three years for full adoption. Of 316 respondents answering this question, 84 (26.6 percent) estimated it would take two years to achieve 100 percent adoption, while 109 (34.5 percent) estimated a three-year timeframe. Some 54 respondents (17.1 percent) estimated it would take four years to achieve 100 percent adoption, and 42 (13.3 percent) predicted a timeframe of five years or more for full adoption. Only 27 (8.5 percent) said they thought full adoption could be achieved in a year.
- Respondents from organizations that have implemented CPOE predicted longer timeframes for 100 percent adoption of CPOE, compared with predictions of

respondents whose organizations have not yet embarked on CPOE implementations. For example, 15 percent of respondents from organizations that have implemented CPOE predicted that it would take five years or more to achieve 100 percent adoption, compared with only 8.8 percent of respondents from organizations that haven't implemented CPOE predicting it could take more than five years to fully implement CPOE. The skewing of predictions toward longer timelines by those with CPOE in place suggests that they may better understand the difficulties of gaining support for the systems.

- Use of CPOE by clinicians is relatively low, even at systems that have had CPOE in place for as long as three years. Some 89 (44.7 percent) of the 199 organizations with CPOE in place report 20 percent or fewer orders entered by physicians. A total of 29 organizations reported 90 percent of orders are entered by physicians, while 25 respondents reported that physicians currently enter all orders via CPOE.
- In comparing current usage with projected uptake of the system by physicians, most respondents predict gradual adoption by physicians using CPOE for order entry. Of 175 respondents with less than 100 percent adoption by physicians, some 113 predict usage will increase by only 20 percentage points over the next year from the current level at their organization.
- Even so, there is considerable optimism that order entry will increase among physicians. Some 43 organizations (21.6 percent) of the 199 with CPOE in place say they expect to achieve 90 percent order entry in the next 12 months; another 25 (12.6 percent) expect 100 percent compliance in the next 12 months; while 21 (10.6 percent) expect 80 percent of orders to be entered via CPOE systems.