

Initiation of a computerized physician order system in an academic anesthesiology department

Mohamed Elhakim
University of Texas, USA

Introduction: As hospitals move towards electronic health records, anesthesia departments are in various stages of transition towards Computerized Physician Order Entry (CPOE). However, the receptivity of physicians to CPOE has been mixed. Last year, our facility implemented CPOE system in the Post-Anesthesia Care Unit. (PACU) In turn, an online survey of the department was conducted with respect to understanding the initial perceptions of the “usability” of the CPOE process.

Methods: Prior to initiation of CPOE, all department members were offered training sessions using simulated CPOE workstations. As CPOE went live, facilitators were onsite in each PACU to guide providers through the process and troubleshoot problems as they arose. Approximately one month after CPOE initiation, an online survey of department members was conducted, including faculty and residents. The survey consisted on 10 questions that focused on experiences with orientation, training, support, ease of use, effect on efficiency, etc. Survey questions were structured using Likert scales that were amenable to scoring, or as a simple yes/no format.

Results: Of the 128 surveys sent out, 60 responses were received (47% response rate). Sixty two percent of respondents were satisfied with the CPOE process. Although 67% of respondents described the institution’s orientation process as helpful, and 71% rated the onsite technical support as positive, only 42% reported that the CPOE system was user-friendly. In response to the question on impact that CPOE had on the ability to render patient care, 67 % of respondents stated that their efficiency was negatively impacted. The main benefit of CPOE was thought to be enhanced patient safety (55%). However, only 54% of respondents believed that CPOE would actually reduce medication errors. Receptivity to CPOE was mixed; 21% of respondents stated that colleagues were highly resistant to CPOE implementation. The institutional administration was perceived as the main driver for CPOE.

Conclusion: This survey revealed that initiation of CPOE in an academic anesthesiology department is challenging. Despite adequate support and orientation, some providers were negatively impacted in their patient care activities. Campbell et al., describe this as “untended work consequences,” and have identified 9 such items. This survey identified divergent opinion on the utility of CPOE; not all respondents viewed enhanced patient safety/reduced medication errors as a direct corollary of CPOE. Anesthesiology departments should be adequately prepared to deal with this process, since efficiency may be impacted. Faculty and residents were included in this survey; an additional question is whether there are any differences in responses between the two groups, since residents tend to be main users of CPOE. Since familiarity with CPOE usage may improve with time, a follow-up survey after 12 months of CPOE usage would be helpful and elucidate any changes in the aforementioned responses.

myelhakim@hotmail.com