

## **Effects of computerized physician order entry and clinical decision support systems on medication safety: a systematic review.**

May 27, 2011

Kaushal R, Shojania KG, Bates DW. Effects of computerized physician order entry and clinical decision support systems on medication safety: a systematic review. Arch Intern Med. 2003;163(12):1409-16.

<https://psnet.ahrq.gov/issue/effects-computerized-physician-order-entry-and-clinical-decision-support-systems-medication>

---

[Computerized physician order entry](#) (CPOE) systems hold the promise of potentially reducing medication errors, especially when coupled with clinical decision support systems (CDSS) that guide clinicians' medication ordering practices. This systematic review did find substantial reductions in potential medication errors in studies of both CPOE and CDSS systems. However, the few studies found were not adequately powered to determine the effects on [adverse drug events](#) requiring clinical intervention, and chiefly assessed the effects of "home-grown" CPOE systems. The studies also provided only limited information on implementation issues and potential [unintended consequences](#) of CPOE. Such issues will need to be addressed in order to improve the [slow pace of uptake](#) of CPOE in US hospitals.