

## **A systematic review of the effectiveness of interruptive medication prescribing alerts in hospital CPOE systems to change prescriber behavior and improve patient safety.**

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Page N, Baysari MT, Westbrook JI. A systematic review of the effectiveness of interruptive medication prescribing alerts in hospital CPOE systems to change prescriber behavior and improve patient safety. *Int J Med Inform.* 2017;105:22-30. doi:10.1016/j.ijmedinf.2017.05.011.

<https://psnet.ahrq.gov/issue/systematic-review-effectiveness-interruptive-medication-prescribing-alerts-hospital-cpoe>

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[Computerized provider order entry](#) (CPOE) systems improve medication safety by electronically alerting providers to potential prescribing errors and medication safety issues. If a system generates an excessive number of warnings, this can lead to [alert fatigue](#) and providers may unintentionally [override](#) appropriate alerts. This systematic review examined the impact of different types of medication prescribing alerts in CPOE systems on provider behavior. Researchers included 23 studies and found that the most common alert categories included drug–condition interaction alerts, [drug–drug interaction](#) alerts, and corollary order alerts. Although 17 of the studies demonstrated a statistically significant benefit from the intervention alerts, the authors conclude that further research is needed to understand if certain categories of alerts are more effective than others. An [Annual Perspective](#) discussed CPOE as it relates to patient safety.