



Drug Interaction E-Alerts Show Benefit to Patient Safety

Electronic alerts reduce adverse events including death and disability, as well as costs

Sep 14, 2009

MONDAY, Sept. 14 (HealthDay News) -- Drug interaction alerts from electronic prescribing likely improve patient safety and reduce costs in outpatient care, despite the fact that over 90 percent of the alerts are overridden by physicians, according to a study in the Sept. 14 issue of *Archives of Internal Medicine*.

Saul N. Weingart, M.D., from the Dana-Farber Cancer Institute in Boston, and colleagues examined the benefit of electronic prescribing and drug interaction alerts in ambulatory care using data from 279,476 alerted prescriptions in Massachusetts in the first six months of 2006. The impact of the alerts on patient safety and health care utilization was determined by an expert panel. They note that drug interaction alerts occurred in 7.3 percent of prescribing attempts and 91.1 percent of alerts were overridden by clinicians.

The panel estimated that the electronic alerts likely prevented 402 adverse events. Accepted alerts may have prevented three deaths, 14 cases of permanent disability, and 31 cases of temporary disability. The researchers estimated that alerts may have led to 39 fewer hospitalizations, 34 fewer visits to the emergency department and 267 fewer office visits, resulting in a savings of \$402,619. The panel estimated that 331 alerts were required to prevent one adverse drug event, and only 10 percent of alerts may have accounted for 78 percent of the reduced costs.

"Electronic prescribing alerts in ambulatory care may prevent a substantial number of injuries and reduce health care costs in Massachusetts," Weingart and colleagues conclude. "Because a few alerts account for most of the benefit, e-prescribing systems should suppress low-value alerts."

The study was supported by a grant from Blue Cross Blue Shield of Massachusetts.

[Abstract](#)

[Full Text](#)

Copyright © 2009 [ScoutNews, LLC](#). All rights reserved.