PSNet
PATIENT SAFETY NETWORK

An empirical model to estimate the potential impact of medication safety alerts on patient safety, health care utilization, and cost in ambulatory care.

September 1, 2016
Weingart SN, Simchowitz B, Padolsky H, et al. An empirical model to estimate the potential impact of medication safety alerts on patient safety, health care utilization, and cost in ambulatory care. Arch Intern Med. 2009;169(16):1465-73. doi:10.1001/archinternmed.2009.252.
https://psnet.ahrq.gov/issue/empirical-model-estimate-potential-impact-medication-safety-alerts-patient-safety-health-care

The full potential of computerized provider order entry (CPOE) systems to prevent potentially harmful errors may require concomitant use of decision support–alerts or reminders for providers. This analysis of over 270,000 prescriptions from a commercial outpatient prescribing application found that more than 400 adverse drug events (ADEs) were likely prevented by such alerts. More than 300 alerts were required to prevent one ADE, so in order to combat alert fatigue, the authors recommend reducing or eliminating alerts with little clinical value. A related editorial discusses the current state of electronic prescribing systems in the context of recent policy initiatives. The phenomenon of alert fatigue and other unintended consequences of CPOE are discussed in an AHRQ WebM&M commentary.