

Medication Errors Rank Among Most Common EHR-Related Issues

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July 08, 2019 - More than 30 percent of all EHR-related patient harm events cited in malpractice claims involve medication errors, according to a recent study in the [Journal of Patient Safety](#).

A team of researchers studied claims submitted to the CRICO database and coded during 2012 and 2013. Graber *et al.* ultimately analyzed 248 malpractice claims involving EHR technology and identified the most common types of errors associated with health IT-related patient harm.

“The data presented in this study confirms that adverse events related to using electronic medical record systems exist, that they are associated with an appreciable incidence of severe harm and death, and that they are encountered across the continuum of healthcare settings and all 15 of the sociotechnical contributing factors that were used to characterize these cases,” researchers wrote.

Thirty-one percent of EHR-related claims involved medication errors, while

an equal number of EHR-related claims involved complications with treatment. About 28 percent of claims involved diagnostic errors.

Most cases involving EHR-related patient harm occurred in ambulatory care settings. Specifically, 146 claims came from ambulatory care cases, compared to 102 inpatient cases.

“Ambulatory errors outnumbered errors from inpatient care and the ED for every major service except for Nursing, where inpatient errors predominated,” noted researchers. “The service with the most claims was Medicine, followed by Surgery, Nursing, and Obstetrics\Gynecology, and Radiology.”

Researchers also found most EHR-related claims were caused by user-related errors rather than system-related errors. Sixty-three percent of cases involved user errors, while 58 percent arose from problems with the technology itself.

System-related issues generally included problems with EHR design, which adversely affected patient health outcomes. In one instance, a primary care provider was unable to access a patient’s radiology studies during a patient visit. As a result, the patient’s lung cancer diagnosis was delayed.

User-related issues included instances in which clinicians lacked proper EHR training and credentials, ignored crucial EHR alerts, and failed to notice test results included in patient charts.

Over 80 percent of all EHR-related claims lead to severe patient harm.

“Cases deriving from ambulatory care were less likely to be lethal than cases arising in inpatient or emergency settings,” wrote researchers.

We hypothesize that this may reflect the fact that most ambulatory patients have medical problems of lower acuity, making them less susceptible to harm, or that errors in this setting are more easily detected and rectified or mitigated,” the team added.

Meanwhile, the severity of user-related errors and system-related errors were comparable.

“We interpret this to indicate that the specific category of EHR-related factors is less important than the clinical circumstances in which it is encountered,” the team wrote.

Ultimately, researchers cautioned that EHR-related patient harm can occur in any healthcare setting and during any clinical service.

“Healthcare professionals, their organizations, and health IT vendors can decrease the risk of harm related to using electronic medical records by appreciating and addressing the lessons that these cases provide,” researchers concluded.

Limiting the use of copy-paste functionality, using simple EHR interfaces, improving EHR training, and promoting health IT standardization can help to [reduce the likelihood](#) of EHR-related patient safety threats.

Implementing these and other strategies at hospitals and healthcare organizations has become increasingly important as malpractice claims involving EHR use grow more common.

A [2017 study](#) found malpractice claims in which EHR use is listed as a contributing factor to patient injury have increased steadily over the past decade.

Technology and design issues, lack of EHR integration, and failure or lack of alarms and alerts increased by eight percent over the past decade. User errors including copy-and-paste errors, data entry errors, and alert fatigue have jumped by six percent.