

Emergency Medicine Resident Identification of Medication Safety Issues

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Emergency Medicine Resident Identification of Medication Safety Issues

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Background

The Accreditation Council for Graduate Medical Education (ACGME) has directed use of Milestones for evaluation of resident performance. The objectives of Patient Care Milestone 5: Pharmacotherapy (M5) include “possible adverse effects” and “allergies, potential drug-food and drug-drug interactions” where a resident ultimately “monitors and intervenes in the advent of adverse effects in the ED”. The ACGME also has patient safety as a focus of its interim Clinical Learning Environment Review (CLER) visits. We present a method for resident documentation of M5, with a focus on resident-observed medication safety themes.

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RESIDENT-OBSERVED MEDICATION SAFETY REPORTS ANALYZED

Methods

After Clinical Competency Committee approval, a PGY 1-4 EM program required 1 log per 4-week EM rotation. The electronic form was designed with input from core faculty and medical toxicologists. The form included multiple-response questions analyzed descriptively and free-text fields. A single reviewer qualitatively categorized residents’ free-text descriptions into discrete categories for analysis.

Results

From June 2017 to July 2019, 738 reports were submitted by 71 EM residents. Upon review, 26 were noted as duplicate, incomplete, or inappropriately submitted, leaving 712 for analysis. Overall, 663 (93%) of the encounters occurred in the ED. In 93% (N=665), the reporting resident was on an EM rotation at the time of the encounter. Overall, 79% (N=560) of the reports involved prescription medications. Residents determined that 67% (N=478) of the safety events were

caused by an adverse reaction to a medication with the most common reason for encounter being an adverse response to a patient administered medication (N=308, 43%). In 51% (N=362) of cases, treatment was administered as a result of the medication error. The most common method of prevention that residents identified was prescribing provider education (N=229, 32%), followed closely by patient education (N=219, 31%).

Conclusions

In this single site convenience sample, EM residents appear able to identify medication safety events. Data collected through resident submissions can not only provide data to evaluate M5 but may reveal local patient safety themes for future process improvement projects. Of note, this process led to EM residents identifying pharmacologic issues outside of the ED, when submission was not required suggesting that it contributed to a more general culture of patient safety.