

COPIC Tip:

Specialty Focus: Medication Errors

Case Studies

A verbal order for epinephrine is given by the EM physician to the oncoming nurse for a patient with angioedema and chest tightness. She administers the more concentrated 1:1000 dosage IV, resulting in a rapid increase in vasoconstriction, hypertension, and alleged brain damage from an intracranial bleed.

A family physician increases the long-acting fentanyl patch for his patient and adds breakthrough short-acting oxycodone. He has only been managing the patient for four weeks and did not calculate the MED or assess the patient for aberrant medication behavior. The patient is found dead two nights later by the spouse and toxic levels of opioids are present on the postmortem toxicology screen.

A rheumatologist orders methotrexate on his new patient, but is distracted filling out forms and orders it as the weekly dose, given daily. The patient dies after fulminant bone marrow failure from the toxicity.

A long-term patient, shared by many providers within the primary care practice, complains of increasing back pain and drowsiness. After asking the patient if “she was on any other anti-inflammatory drugs,” the physician stops the Flexeril, and adds Celebrex. The patient takes the Celebrex, in addition to the Indocin he takes when his toe swells and hurts, and the OTC Aleve he takes for headaches. He has acute renal failure, from which he does not recover.

Medication Errors in the Liability World








Medication errors are not as prevalent as diagnostic or procedural errors, yet they still account for 10 to 15% of liability claims costs for all physicians. Furthermore, medication error claims are more likely to be settled, result in higher damages, and are associated with serious harm or death to the patient.

Several factors will continue to make these types of errors an ongoing concern: an aging population, medical regimens are becoming more complex, poly pharmacy is increasing, and new medications continue to emerge—some with higher risk, lower safety profiles, and more unknown effects. The medication process can be divided into three phases:

1. Selection and ordering
2. Dispensing and administration
3. Monitoring and management

The next page is a summary that provides practical advice on key risk issues. Safe medication management through all phases requires a team approach, therefore, the importance of communication strategies, just culture, and system-based thinking appears in all phases.

Medication Errors

|  KEY AREAS for errors and litigation |  STRATEGIES to reduce errors |
|--|---|
| <p>Medication Selection and Ordering</p> <ul style="list-style-type: none"> ! Appropriate indications for medication ! Avoiding drug-drug interactions ! Allergies ! Concomitant medical conditions ! Common dosing errors: look alike-sound alike, unusual regimens, mathematical errors ! Black box warnings ! Delegating prescriptive authority to less trained staff <hr/> <p>Delivery: Dispensing and Administration</p> <ul style="list-style-type: none"> ! Communication failures ! Entrusting an electronic system and never questioning items that don't seem appropriate ! Alarm fatigue ! Failures in The 5Rs—right drug, right dose, right patient, right route, and right time ! Look alike, sound alike medications and labels <hr/> <p>Monitoring and Management</p> <ul style="list-style-type: none"> ! Failure to consider or perform follow up or monitoring of medications ! Systems failures of necessary monitoring labs ! Failure to reconcile long-term medications ! Incomplete medical histories ! Failure to consider adverse drug reactions as diagnosis changes in the patient's condition | <ul style="list-style-type: none"> ✓ Document thought processes with high-risk or narrow therapeutic index medications ✓ Don't be "first to try a new medication, or the last to abandon an old" ✓ Formalized medication reconciliation—enlist the patient, use one pharmacy when possible, and update at all transitions in care ✓ Single allergy registries ✓ Recognize the common look alikes/sound alike ✓ Avoid math errors—mg/kg/day, factor of 10 issues, etc. ✓ Know the black box warnings; look up common medications periodically ✓ Set your EHR alert properly: too high=alarm fatigue; too low=complacency ✓ If you delegate any prescriptive authority, train, educate and clarify protocols <hr/> <ul style="list-style-type: none"> ✓ Training in standardized communication techniques: SBAR, readbacks, TeamSTEPPS ✓ Reconcile medications at every transition ✓ Avoid distractions during dispensing/administration ✓ Just Culture—all are open to question an order, and disciplinary action only when willful disregard <hr/> <ul style="list-style-type: none"> ✓ Know the riskiest medications: anticoagulants, opioids, and narrow therapeutic index medications ✓ Have a system that works for follow up/monitoring ✓ Shared decision making with patients ✓ Always consider medications as the cause of a change or a new medical condition ✓ Use and document formal patient education |
| <p> COPIC RESOURCES to help you succeed</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="248 1717 310 1772">  <p>Online Library of Medical Tools and Guidelines—Clinical guidelines, consent forms, practice management resources and more</p> </div> <div data-bbox="846 1591 904 1646">  <p>Education—A wide selection of activities, in particular, the "Medication Errors in the Electronic Age—They're Still Here!" seminar</p> </div> <div data-bbox="846 1682 904 1736">  <p>24/7 Risk Management Hotline—Physician risk managers available for guidance</p> </div> <div data-bbox="846 1751 904 1806">  <p>Copiscope—Quarterly newsletter on current topics in risk management and patient safety</p> </div> </div> | |