THE BOTTOM LINE

April 20, 2017

SGIM Society of General Internal Medicine

ADVERSE EFFECTS IN US HOSPITALS: 1 IN 3 ADMISSIONS HAS AT LEAST ONE ADVERSE EVENT

QUALITY OF EVIDENCE: HIGH ⊕⊕⊕⊕

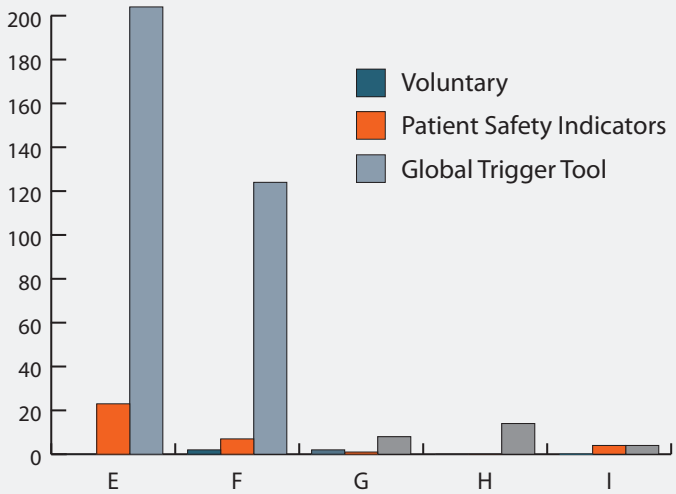
Why is this important?

There is a gap between clinical practice and patient safety. Current adverse event detection methods have failed to effectively identify adverse events[1] and, as a result, clinician and institutional awareness of these events has been lacking. The Global Trigger Tool[2], developed by the Institute of Healthcare Improvement and now widely adopted,[3-9] is an improved detection method that has been shown to effectively identify adverse events that occur during a hospitalization. Given our increased knowledge of the frequency and severity of adverse events, both clinicians and patients must be aware of the need for constant vigilance in the delivery and receipt of clinical care.

Facts

- Historically, there have been two main methods for detecting adverse events. Voluntary reporting, where an adverse event is observed and reported, and the AHRQ Patient Safety Indicators, which uses administrative data to detect adverse events. Unfortunately, they detect few adverse events.
- The Global Trigger Tool[2] involves reviewing 10 charts every two weeks. The reviews look for triggers, for events associated with adverse events, in 53 domains. The presence of a trigger prompts those reviewing the chart to look for an adverse event. The Global Trigger Tool is currently being automated so that it can be used to assess more patients[9].
- Classen[1], using the Global Trigger Tool, found that 33% of hospital admissions had at least one adverse event and there were 49 adverse events for every 100 admissions. Furthermore, the other detection methods missed 90% of the adverse events detected by the Global Trigger Tool. Finally, patients who experienced adverse events were older, had a higher mortality rate, had longer hospital length-of-stay and a higher case-mix index than patients without an adverse event. These results have been widely replicated[3-9].
- Rafter et al.[10] recently conducted the first national Global Trigger Tool study. They found that 72.5% of the adverse events were preventable. They also found that patients with at least one adverse event stayed in the hospital longer than those without an adverse event, 7 days vs. 4 days, respectively.

Adverse events identified by three detection methods (Classen, 2011)



Adverse event categories: E, Temporary harm to the patient and required intervention; F, Temporary harm to the patient and required initial or prolonged hospitalization; G, Permanent patient harm; H, Intervention required to sustain life; I, Patient death. (Categories A-D do not involve harm.)

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Patients and physicians should be aware of, and respond to, the risk of adverse events during a hospital admission.

Quality of Evidence

(Adapted from Guyatt G BMJ, 26 April 2008)
This refers to the degree to which the findings of this study are likely to be free of bias.

⊕⊕⊕⊕	High
⊕⊕⊕◯	Moderate
⊕⊕◯◯	Low
⊕◯◯◯	Very low

Tips for Discussion of Results with Patients

- All patients admitted to the hospital should ask questions and actively engage in their care, especially with regard to medications and procedures[11]. If they are unable to do so, they should enlist the aid of a family member, friend, or other trusted person.
- Patients and physicians should be aware of common adverse events: medication-related adverse events, pressure ulcers, and falls.[1]
- Physicians should be aware of common adverse advents: nosocomial infection, procedure-related and pulmonary and ventilator-related adverse events.[1]

References

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