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False Bed Alarms: A Teachable Moment

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False Bed Alarms
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Story From the Front Lines

A 67-year-old woman presented to outpatient interventional radiology for computed tomography (CT)-guided biopsy of a suspicious lung nodule found on screening CT. The procedure was complicated by a pneumothorax requiring chest tube placement, and she was admitted to the hospital. Prior to admission, the patient was independent in all daily activities, lived in an apartment alone, and had no history of falls. As part of the admission process, the nursing staff assessed the patient's risk for falling with the Morse Fall Scale, scoring her at 35. With this level, she qualified as "at risk" for falls, and a bed alarm was instituted. The medicine team entered the room the next day on rounds and found the patient unhappy and frustrated with her hospital stay. She stated "I feel like I'm in jail," referring to the bed alarm. "I can't sit up or go to the bathroom without them coming after me." The patient was soon discharged—no fall or adverse event occurred during hospitalization.

Teachable Moment

Falls are a major source of hospital-related injury that can prolong and complicate a hospital stay. In 2008, the Centers for Medicare and Medicaid Services eliminated payment to hospitals for costs related to falls that occurred during hospitalization. The nonpayment disincentive has spurred the implementation of several strategies within hospitals to reduce falls, by the reasoning that a reduction of the number of falls will reduce the incidence of fall-related injury.

As part of a comprehensive fall reduction effort recommended by the Agency for Healthcare Research and Quality (AHRQ),¹ our hospital has instituted a multifaceted effort to prevent in-hospital falls. One strategy is the use of the Morse Fall Scale to assess risk for falls to guide further intervention. Unfortunately, the Morse scale is notorious for poor sensitivity and specificity and performs similarly to nurses' judgment, which has less variation.²

Bed alarms are a common strategy to alleviate fall risk. For many, the idea of an alarm makes logical sense and is relatively easy to implement in a health care facility. However, bed alarms have not shown significant benefit in the reduction of falls or injury.³ The AHRQ states in its fall toolkit that "there is an overreliance on bed alarms as a fall prevention strategy."¹ Alarms give the illusion of safety; but unfortunately, many patients are able to get out bed and fall within several seconds, which is frequently not enough

time to intervene. Alarming, the AHRQ toolkit has a post-fall checklist that questions whether a bed alarm was used, which insidiously implicates the lack of a bed alarm as a causative factor in the fall. Furthermore, bed alarms often detect many types of movement, including sitting up in bed, reaching for items, and other routine activities of the patient. Therefore alarms are activated several times per patient per hour, leading to hundreds of false alarms that do not represent a patient getting out of bed. This creates a significant nuisance to staff and contributes to alarm fatigue and patient frustration.

There is a distinct difference between the process of preventing falls and avoiding the outcome of injury. Bed alarms are frequently used for patients with altered mental status, sometimes as an alternative to restraints, contrary to recommendations from the AHRQ.³ Strategies such as hourly or more frequent checks, scheduled toileting, and close observation are recommended instead. Alternatively, strategies to mitigate the harm from falls such as padded flooring could be used. There is limited evidence on what interventions prevent falls.¹ Those that may help are often not implemented appropriately.⁴ Ultimately, the best approach to reducing falls and injury from falls is likely multifaceted.⁵ Staffing ratios and extensive documentation requirements likely prevent implementation of many of these interventions, and therefore bed alarms are frequently used instead.

Although falls in the hospital can lead to harm, treating them as a "never event" leads to overimplementation of measures with a poor evidence base and lacks patient centeredness, particularly for those patients with low to moderate fall risk. Evidence suggests that a better approach would be to focus more attention on risk factors for falls—delirium, hypnotic or sedative medication use, indwelling catheters—which are likely to be more patient centered and beneficial to the patient than unproven measures. As this case demonstrates, current policies and procedures create conflict and medical dilemmas for patients and physicians on the wards. While falls can be dangerous and sometimes can be prevented, they are not completely avoidable. Imperfect assessments and monitoring systems are no better than placebo, are expensive, and have unintended consequences that interfere with patient autonomy. Having a patient leave the hospital feeling that she just escaped from prison is not the ideal way to discharge a patient.

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