The Joint Commission Update

In this column, experts from The Joint Commission provide an update for readers.

A New Approach to Preventing Falls With Injuries

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ALTHOUGH RESEARCH has suggested that approximately one-third of the 700 000 to 1 million patient falls that occur annually in US hospitals could be prevented,[1,2] reducing falls with injuries is a persistent patient safety challenge. Falls can result in patient injury and death and place an increased economic burden on patients and the health care system.[1,3,4] Longer hospital stays and additional treatment necessary after falls contribute to a 61% increase in patient care costs,[5] although the Centers for Medicare & Medicaid Services limits reimbursement for falls that result in injuries such as fractures, dislocations, and intracranial injuries.[6]

AN ONGOING PROBLEM

Falls have been identified by the Centers for Medicare & Medicaid Services as a healthcare-acquired condition —an event that is preventable and should not occur.[6] To reduce the risk of falls, hospitals have traditionally engaged in efforts focused on creating safe environments and educating nursing and other staff about falls and injury prevention. Hospitals have also relied on measurement of rates of falls to identify opportunities for improvement.[7] Despite these widespread and long-term efforts, there are 2.3 to 7 falls per 1000 patient days, and many hospitals continue to struggle with finding reliable methods for reducing the risk of patient falls.[3]

A COLLABORATIVE APPROACH

To prevent falls that occur in health care facilities and result in injury to patients, 7 US hospitals teamed with The Joint Commission Center for Transforming Healthcare during an 18-month project. Hospitals that participated in the project were Barnes-Jewish Hospital, Missouri; Baylor Health System, Texas; Fairview Health Services, Minnesota; Kaiser Permanente, California; Memorial Hermann Healthcare System, Texas; Wake Forest Baptist Health, North Carolina; and Wentworth-Douglass Hospital, New Hampshire. Participating hospitals chose 1 or 2 inpatient units as pilot sites for the project including cardiology, medical/oncology, medical/surgical, and medical/surgical stroke/telemetry units. The primary goal for the project was to decrease falls with injury by 50%. The aggregate baseline fall with injury rate was 1.31 per 1000

patient days. The secondary goal was to decrease fall rate by 25%. The aggregate baseline overall fall rate was 4.00 per 1000 patient days.

Although the hospitals ranged in size from a 187-bed community hospital to a 1700-bed academic medical center, all of the organizations used the same Robust Process Improvement methods and tools to identify causes and develop solutions to prevent patient falls. Robust Process Improvement is a fact-based, systematic, and data-driven problem-solving methodology. It incorporates tools and concepts from Lean Six Sigma and changes management methodologies.

Fall event process data were collected from the hospitals' risk management reporting systems, individual patient chart review, and patient/staff interviews to gather specific contributing factor information and analyze the effect on fall outcomes. A contributing factor was identified as a variable that increases the risk or likelihood of a patient fall. Processes examined by the hospitals in their quest to understand the factors within their organizations that contributed to falls with injury included patient characteristics, fall risk assessment, unassisted ambulation, medication, bathroom-related/toileting, bed and chair alarms, call light, environment and equipment, handoff communication, education, and change management.

Targeted solutions

Working together with the Center, the hospitals developed and validated a list of contributing factors and corresponding targeted solutions. Targeted solutions, which were thoroughly tested and validated during the project, are strategies developed to mitigate contributing factors. As solutions were developed that were targeted to specific contributing factors within each organization, participants recognized that fall prevention was not a set of disparate and unrelated activities. Instead, preventing falls requires a comprehensive strategy that incorporates many specific, targeted solutions to reach the goal of minimizing and preventing patient harm.

Methods to reduce falls with injury and overall falls included adopting an organization culture of commitment to fall safety, engaging patients and families in the fall safety process, utilizing a validated falls assessment tool, hourly rounding, patient partnering, and strengthening the caregiver-patient relationship. Examples of targeted solutions related to the fall risk assessment tool include implementation and integration of a standardized cognitive assessment tool to better understand and rate this critical fall risk. To address fall risks associated with unassisted ambulation, a targeted solution is to institute video monitoring of patients who cannot or will not agree to use a call light. In all, the hospitals and the Center developed a total of 83 targeted solutions during the course of the project.

AGGREGATE PROJECTS RESULTS

Following implementation of targeted solutions, the primary and secondary goals of the project were achieved. An estimated 38 injurious falls were avoided during the 8-month postintervention phase of this project for the participating hospitals. There were no patient deaths as a result of a fall throughout the course of the project. Specifically, the following goals were met:

- Primary project metric to reduce falls with injury by 50%: At preintervention, there were 1.31 falls with injury per 1000 patient days (January 2011 to December 2011). The collaborative met this goal: postintervention, there were 0.503 falls with injury per 1000 patient days, a 62% reduction in falls with injury from pre- to postintervention (Figure 1).
- Secondary project metric to reduce overall falls by 25%: At preintervention, there were 4.001 falls per 1000 patient days (January 2011 to December 2011). The collaborative met this goal as demonstrated by a postintervention fall rate of 2.613 falls per 1000 patient days. This represented a 35% reduction in overall falls from pre- to postintervention (Figure 2).
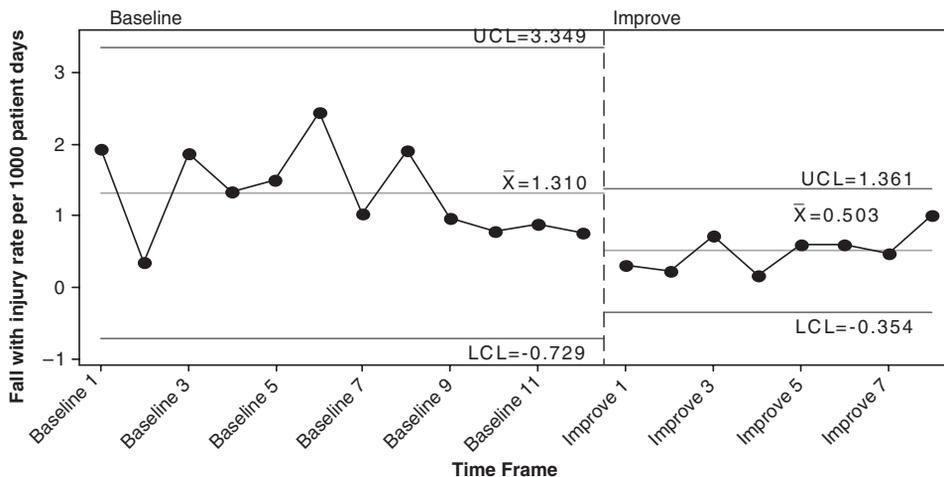
Figure 1. Fall with injury rate. LCL indicates the lower control limit; UCL, upper control limit.

LESSONS LEARNED

The project demonstrated the need for a comprehensive approach to preventing falls injuries that encompasses leadership and clinical and nonclinical staff. There are specific lessons learned from the project that have particular relevance for nurses. Nurses play a key role in all patient safety efforts and should be involved in efforts to preventing falls with injury. The bedside nurse is the gatekeeper for the patient and the family and, therefore, must be responsible for ensuring safe care.

Four lessons learned that are particularly relevant to nursing include the following:

- Significant and sustained reduction in injury to patients was achieved by adopting an organization awareness of fall safety that was communicated at every level of the health care organization and incorporated into the full continuum of patient care and education. Nurses are a key part of the required fall safety awareness at any institution.
- Empowering patients to take an active role in their own safety in health care
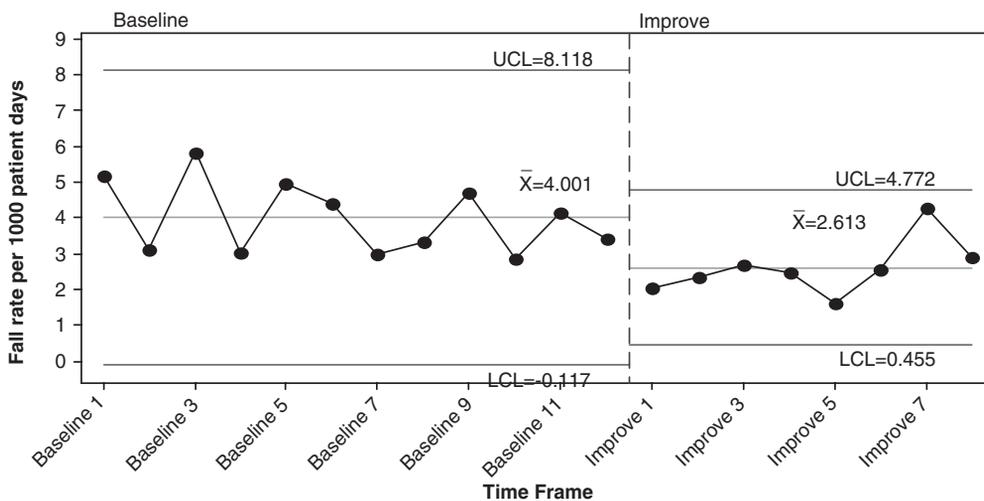
Figure 2. Fall rate. LCL indicates the lower control limit; UCL, upper control limit.

organizations created a partnership to prevent falls. Patients and their families were engaged in the fall safety process at admission and were encouraged to always ask for help when ambulating. Nurses facilitate patient and family empowerment through communication and education.

- Using an externally validated fall assessment tool that is fully integrated into the electronic medical record was important in identifying patients at high risk for falling and maintaining awareness. Nurses regularly use fall risk tools as part of their patient assessment process.

- Hourly rounding and patient partnering programs that bring caregivers to the bedside are important factors in reducing patient falls and strengthening the caregiver-patient relationship. These programs achieve even greater results when individual patient fall risks are incorporated into the conversation and toileting is a proactive or scheduled activity. Nurses are responsible for ensuring that rounding and partnering programs are effectively implemented to meet the safety needs of their patients.

The rigorous approach, measurement system, determination of contributing factors, and targeted solutions for preventing falls with injury will be added to the Center's Targeted Solutions Tool after the learning, and tools from this project are pilot tested in other health care organizations. The Targeted Solutions Tool is a Web-based application that provides a step-by-step process to assist health care organizations in measuring performance, identifying barriers to excellent performance, and implementing the Center's proven solutions that are customized to address specific barriers. The Targeted Solutions Tool currently contains modules for improving hand hygiene, handoff communications, and decreasing the risk of wrong site surgery.

CONCLUSION

Honest, transparent reporting of falls must be encouraged to analyze conditions associated with falls, identify patterns of risk, and develop improved care processes. By employing robust process improvement tools, nurses and other health care professionals can examine why processes fail to achieve desired results and implement targeted, long-lasting solutions to prevent patient falls with injury.

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