Reduction of Falls in the Inpatient Setting Via Evidence-Based Decisions: An Interprofessional, Quality Improvement and Patient Safety Initiative

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Purpose/Hypothesis: Falls in the inpatient setting are known safety concerns and are considered “never events” by the Agency for Healthcare Research and Quality and the National Quality Forum.¹ They contribute to significant financial costs due to expenses to rule out potential injury, treatment of injuries, and litigious action.²,³ Studies have shown that patient fallers cost hospitals $4233 more on average than non-fallers, and have increased lengths of stay regardless of harm.⁴,⁵ Reducing the incidence of falls is a priority in medical facilities due to patient morbidity, financial ramifications of injury, including lack of reimbursement by payers due to hospital-acquired conditions.²,⁶,⁷,⁸ Identifying risk and implementing protocols to prevent falls have been shown to decrease falls. This study aims to identify interactions between environmental, pharmaceutical, and demographic contributors to falls in a large, urban, academic medical center in order to develop strategies to improve fall prevention protocol compliance and reduce falls.

Number of Subjects: 217 fall-related incidents at UCSF Medical Centers from February to November 2013.

Materials/Methods: Using the incident reporting (IR) system and electronic medical records (EMR), an interprofessional team of second-year physical therapy and fourth-year doctor of pharmacy trainees, with faculty oversight, collaboratively created a comprehensive aggregate database through IRs, huddles, and EMRs to explore the various factors potentially contributing to falls at UCSF Medical Center. Variables include: level of assistance, fall risk designation, fall precaution implementation, mental status, substance use, insurance type, and drug type, dose,
and route. Results were calculated as a percentage of the total of 217 patients, except for fall precautions followed, which was out of the 176 patients classified as at risk.

**Results:** Preliminary results: Of 217 fall-related incidents, 81.11% were in individuals previously identified as having high fall-risk status. No staff were present in 60.40% of incidents. 28.6% of individuals had altered mental status, 53.0% were on patient-controlled analgesics, and 15.70% were current substance users. Of the patients identified as being high fall-risk, 67.07% had no prevention protocol in place during the incident. High risk units were also identified. Final results will examine the relationships between multiple variables to determine how factors interact in these fall incidents.

**Conclusions:** While UCSF’s fall risk assessments accurately detected risk in 81.11% of its fallers, falls still occur. The results of this study contribute to the knowledge of cause-analysis in falls and the ability to predict contributing factors to fall incidents.

**Clinical Relevance:** This study offers direction for developing a fall prevention protocol for high-risk fallers at UCSF Medical Centers. This will protect patients from harm, prevent morbidity and mortality due to falls and their sequelae, and save the hospital system and patients significant resources.