**Introduction/Objective:**

While analyzing data routinely collected for monthly quality assurance meetings, it appeared that most residents fall in their individual rooms. We undertook a quality improvement project to determine which areas and what factors were most closely associated with resident’s fall(s) in each of the facilities.

We combined the falls data from six skilled nursing facilities with similar facility characteristics for a total of 48 facility-months to determine which physical-plant areas and what other factors were most closely associated with resident's falls in each of the facilities.

Using a Quality Improvement (QI) statistical package we analyzed this information. The data points we look at include: number of falls per resident, time of day (Graph 1), day of week, the location (Graph 2), and activity at time of fall. In addition, we were able to analyze injuries and hospitalizations (Table 1). We then combined those data points to determine which factors had the highest correlation with falls.

**Method**

We combined the falls data from six skilled nursing facilities with similar facility characteristics for a total of 48 facility-months to determine which physical-plant areas and what other factors were most closely associated with resident’s falls in each of the facilities.

Using a Quality Improvement (QI) statistical package we analyzed this information. The data points we look at include: number of falls per resident, time of day (Graph 1), day of week, the location (Graph 2), and activity at time of fall. In addition, we were able to analyze injuries and hospitalizations (Table 1). We then combined those data points to determine which factors had the highest correlation with falls.

**Results**

Our results reveal that for the 1246 falls analyzed, residents fall most frequently in their rooms and that they fall during awake hours.

- **Location:**
  - 75% occurred in the resident’s individual room
  - Fewest falls occurred between midnight and 6 am

- **Time:**
  - Fall occurred between midnight and 6 am

- **Injury:**
  - No Injury: 64% (range between 58% and 77%)
  - Injury Sustained: 36% (range 23% to 42%)
  - Fractures: 1.9% of falls and 4% of injuries
  - Hip Fracture: 0.0% of falls and 1.6% of injuries
  - Head Injuries: 4% of falls and 1% of injuries
  - Hospital: 3.7% of falls and 7% of injuries

**Conclusion:**

The implication of these important findings is that facilities will likely benefit by concentrating on providing the safest bedroom design possible. Programs designed to address falls in resident bedrooms should be emphasized. We presume that many residents fall while rising or lowering themselves to bed, so improving systems to anticipate when this simple event occurs would be most fruitful in decreasing falls and therefore injuries to the residents. No other factors that we looked at had as significant of a correlation, despite the fact that at times facilities postulate on all sorts of various causes with no statistical backing for many such assumptions. Empowering all facility staff to be alert to risk factors that can lead to injuries from falls, and then responding to that input may be the most effective deterrent to fall injuries and/or repeat falls. Providing activities and encouraging residents to be out of their rooms may be an additional factor in decreasing falls/injuries in the bedroom. Although we can make every effort to make the resident bedrooms as safe as possible, we will not eliminate falls or injuries, but may minimize the number of and the morbidity of these events.