# Background

Patient falls are clinically significant as they result in extended lengths of stay and increased hospital costs. Because patients are typically not admitted to the ICU directly because of falls, attention is naturally directed elsewhere. Preventing falls among patients in the hospital may require a multifaceted approach (Butcher, 2013).

Since moving to a new location in April 2012, the CVSICU has experienced an increase in fall rates. Prior to moving, 75% of falls were witnessed compared to only 11% witnessed after moving into the new JHH Zayed Tower (Figure 2). The fall rate was below the NDNQI benchmark prior to moving and above benchmark after moving. Patient census, nurse staffing, and bed alarm technology have not changed.

Some changes include: The unit now uses clinical technicians. Room/Unit layout has changed to all private rooms and square footage has increased which has impacted staff workflow. New alarm/alert technology introduced. Baseline data shows fall rates exceeding the NDNQI benchmark (1.04 patient falls/1,000 hospital days) in FY13 Q1,2,4 and FY14 Q1 (Figure 1). Among 11 patient falls occurring between 7/1/12 and 9/30/13, only 50% of nurses completed a fall event note, 9.1% completed a post reassessment note 8

## Process Map/Value Stream Map (VSM)

### Purpose:
Short-term Goals: Decrease the quarterly fall rate in the CVSICU by 20%. Increase the percentage of "witnessed" falls to >75% of quarterly falls.

Long-range goal: Attain and maintain fall rates below National Benchmark

### Control:
- RASS/CAM ICU Audit – beginning June 2014
- Round up meetings for fall prevention – June 2014
- Post Fall Review – beginning Mar 2014 and on-going
- Fall Documentation – Quarterly perform 5 Random POE check (Oct 2014)

## Results

### Monthly Fall and Fall with Injury: CVSICU

**Falls with Injury:**
- Number of falls per quarter: 0
- Reduction in Patient Falls (Witnessed and Unwitnessed)
- A unit experiencing high patient falls, with a similar patient population, may benefit by implementing this same bundled-set of interventions.

### Conclusions

- A multidisciplinary EBP project team reached its’ goal to reduce falls in an ICU setting. Implementation of a bundled-set of interventions, derived from a thorough literature search of best practice, resulted in a significant decrease in the number of patient falls (with and without injury) on a cardiovascular surgical ICU.
- A unit experiencing high patient falls, with a similar patient population, may benefit by implementing this same bundled-set of interventions.

## Future Directions

After implementing the bundled-set of interventions, no falls have occurred. Plan is to share results with staff, provide ongoing staff education on fall prevention, continue to benchmark best practice, continue intermittent audits of nurse documentation related to falls, and RASS-CAM ICU scoring to sustain:
- Reduction in Patient Falls (Witnessed and Unwitnessed)
- Compliance with Nurse Fall Documentation
- Compliance with Nurse RASS/CAM-ICU Delirium Assessment
- Study the relationship between patient falls and nurse documentation

## References