Improving Patient Safety by Preventing Falls
Green Belt Project Reduces Falls by 48%

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The Objective

Every year in the United States, hundreds of thousands of patients fall in hospitals.

Falls with serious injury are consistently among the Top 10 sentinel events reported to The Joint Commission's Sentinel Event database.

Injured patients require additional treatment and sometimes prolonged hospital stays. CMS estimates a fall with injury **adds 6.3 days** to hospital stays for an average cost of **$14,000 per fall** with injury.

Our Experience

In 2015, two units in our acute care facility had a dramatic increase in falls.

- Total Falls 2014 = 44
- Total Falls 2015 = 64

A review of the latest evidence - based practice in fall prevention did not identify any missing components of industry - accepted techniques in fall prevention.

Our Method

Joint Commission Center for Transforming Healthcare
Creating Solutions for High Reliability Health Care

In 2014 CVHP made a commitment to become a high reliability organization. To do so, it engaged The Joint Commission's Center for Transforming Healthcare and started applying the Center's Robust Process Improvement® (**RPI**)® methods such as **Lean Six Sigma** to solve specific problems in the system. The process is data driven and success is only achieved when the outcome is statistically validated.

In April 2016, a Green Belt Lean Six Sigma team was formed to improve the fall prevention program.

Improvements were instituted in July 2016. At the end of the improvement phase of the project, the two units achieved a reduction in falls of 48%. As of August 2017, the data demonstrates that the improvements have been sustained. The project is being spread to other units in the multi-hospital system.

Improvements Made

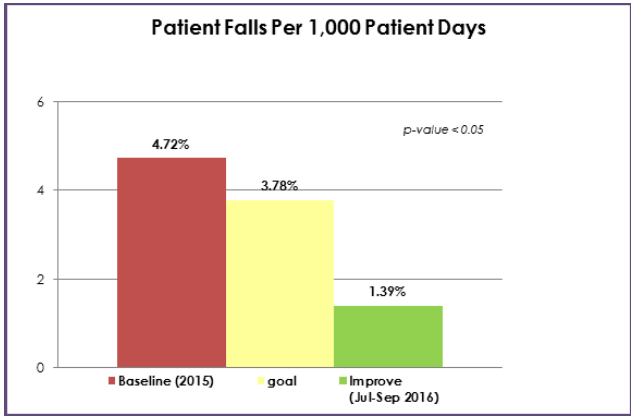
1. Technology - bed alarm safety devices instituted
   WHY: Bed alarms were used but not consistently. The data also showed that most patients fall within the first 24 hours of admission and that we often were not applying the bed alarm this rapidly.

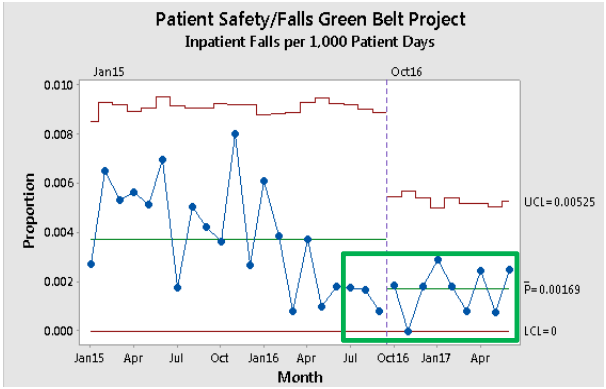
2. Patient and Family Education
   WHY: Patients have a strong desire to get out of bed without assistance. In doing a LSS Gemba walk, we discovered just how much of a dignity issue this was for our patient population. We changed our patient and family education to take into consideration the voice of the customer and their dignity concerns. The changes in our education improved compliance with patients calling for assistance when they wanted to get out of bed.

3. Staff Engagement and Culture
   WHY: Staff needed to see that falls can be prevented and understand why. The data analysis showed when and why patients fall. The success of the improvements showed that staff can impact the results. The units now celebrate number of days without falls. When a fall does occur, the entire unit responds to identify where the process failed.

The process did more than reduce falls, it changed the Culture of Safety.

The Results

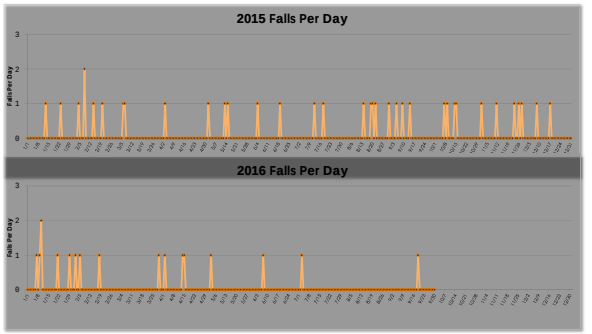




This graph shows how unstable the process was.

The green box highlights the improvement period and current sustainability.

This graph helps show the number of days between falls. See how the gaps widen. ☺



The Conclusion – Results Matter