The Effectiveness of Continuous Video Monitoring in Reducing Inpatient Fall Rates

Date: July 6, 2022
Time: 8:45 a.m. to 9:30 a.m.
Place: 219B SCCB

Abstract

**Problem:** Falls are one of the most frequently occurring safety events in hospitalized patients, resulting injuries that can be devastating and burdensome. Patients in neuro-telemetry unit are at greater risks for falls due to their conditions. The continuous video monitoring (CVM) program was implemented to reduce fall rates in the neuro-telemetry unit. This project was to examine the effectiveness of CVM program in reducing fall rates.

**Method:** A pre- and post-implementation observational evaluation was conducted. By reviewing retrospective data from January 1, 2020 to January 31, 2021 for pre-implementation period and from March 1, 2021 to October 31, 2021 for post-implementation period, fall rates were compared and common risk factors of falls were identified.

**Results:** A one tailed t-test was performed to determine the effectiveness of CVM. The result was not significant ($t(14)=0.59, p=0.33$), but there was 12.7% reduction of fall rates during the post-implementation period. No injury from falls occurred in patients who were on monitor and injury rates of both pre-and post-implementation periods were much lower than the national average. Confusion was the most common risk factor of falls and having 2 or more risk factors was a good indicator of falls.

**Conclusion:** Despite the statistical insignificance, CVM is safe and effective in preventing falls as evidenced by clinically significant reduction of falls by 12.7%. CVM may be useful in reducing costs and preventing other safety events. Hospital needs to refine of CVM protocol and provide education, and training on an ongoing basis.