

## Preventing Falls Utilizing Remote Patient Observation

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**Background & Significance:** Patient falls are a dangerous, costly and preventable event, complicating and prolonging hospital stays. Successful fall prevention strategies begin with identifying patients who are at highest risk for falls.

**Clinical Question:** Will adult patients at the University of Vermont Medical Center Inpatient Rehabilitation Unit be less likely to experience a repeat fall following an unwitnessed fall if utilizing Remote Patient Observation (RPO) video monitoring, as compared to patients in the year prior to implementation of this intervention?

**Evidence:** Because fall rates are an important quality metric in rehabilitation facilities, and given the competing pressures to improve patient safety while simultaneously reducing cost of care, video monitoring has emerged as a technology-based application that improves patient safety while driving down costs.

**Intervention Implementation:** This presentation describes a Quality Improvement project that was initiated after a patient experienced an unwitnessed fall, followed by a subsequent fall with injury. Consequently, the Falls Reduction Team at the University of Vermont Medical Center Inpatient Rehabilitation 20-bed unit developed a plan to integrate best practices for patients who experienced an unwitnessed fall. As a result of Root Cause Analysis, we instituted a process that any patient with an unwitnessed fall be put on Remote Patient Observation (RPO) for at least 24 hours. RPO is an effective video monitoring tool with evidence that it helps prevent falls. We instituted this RPO intervention on September 15, 2022. Overall falls and repeat falls were compiled for this study from January 2022 through June 30, 2023.

**Evaluation:** The goals were to enable closer assessment of the patient's ability to call appropriately, create opportunities to promote patient education, determine whether the patient had behaviors that put them at greater risk for fall, and produce safer patient outcomes. Compiled fall records were used for analysis.

**Results:** From 9/15/22-6/30/23, a total of 29 falls occurred. Of these, 14 were unwitnessed, and thus candidates for RPO. No repeat falls occurred among these patients receiving RPO intervention. This is a significant reduction compared to the 9.5 months leading up to the intervention (1/1/22-9/14/22), during which rates of repeat falls following an unwitnessed initial fall were 6 out of 19 (31.6%). During this pre-intervention time frame, the falls averaged 9.036/1,000 occupied bed days, compared with 5.260 falls/1,000 occupied bed days post-intervention.

**Significance/Conclusion:** The overall rate of falls decreased significantly in our unit, suggesting that repeat falls may have been prevented with this intervention. While our total data set is still small, the trend is encouraging, and our nursing-led Falls Reduction Team will continue tracking the outcome of RPO on monthly fall rates, using this data to both inform and improve patient safety outcomes.