

Emerging Evidence of Fall Reductions Post Implementation of a Remote Video Monitoring System on a Med-Surg/Telemetry Unit in a Community Hospital



Bissoondaye Ragoonanan DNP, MBA, MS, RN, RGN, Olena Nosaryeva, MSN, RN, & Lilly Mathew PhD RN NPD-BC

Background/Significance

- Each year, around 1 million people in the United States fall in a hospital setting which may result in injuries leading to increased health care utilization (AHRQ 2021).
- Each year, 3 million older adults are treated in emergency departments for fall injuries and over 800,000 patients are hospitalized.
- In 2015, medical costs for falls totaled more than \$50 billion.
- Research shows that close to one-third of falls can be prevented.

PICO (T)

 Do in-patients on a Med-Surg/Tele Unit who are on a remote video monitoring system have lower fall rates when compared to those without remote video monitoring?

Evidence

- Location & Appraisal: Library Databases One Search, Level III
- Strength & Quality: High & Strong
- Synthesis: Literature supports the use of remote video monitoring as a safe tool for fall prevention, decreasing the use of 1:1 sitter and decreasing fall rates, and promoting patient safety.





Implementation & Outcome

- Pilot project on using a remote video monitoring system on 8 beds of a Med-Surg/Tele unit.
- A comparison of number of falls on the unit with monitored versus non-monitored beds were obtained 6 months post-implementation.
- Initial evidence is trending toward a 20% decline of falls in monitored beds versus non-monitored beds in the ongoing pilot project on the unit.

Recommendations & Implications for Practice

- Implementation of a remote video monitoring system with high-risk fall patients may prevent fall occurrences on the unit and reduce staffing costs.
- Using innovative technologies like remote video monitoring systems may directly impact patient outcomes related to falls and reduce costs of care.

References

Preventing Falls in Hospitals. Content last reviewed March 2021. Agency for Healthcare Research and Quality, Rockville, MD. https://www.ahrq.gov/patient-safety/settings/hospital/fallprevention/toolkit/index.html Davis, J. E., & Carter-Templeton, H. (2021). Augmenting an inpatient fall program with video observation. Journal of Nursing Care Quality, 36(1), 62-66. Dašić, P., Dašić, J., & Crvenković, B. (2017). Improving patient safety in hospitals through usage of cloud supported video surveillance. Open access Macedonian journal of medical sciences, 5(2), 101. Kramer, J. B., Sabalka, L., Rush, B., Jones, K., & Nolte, T. (2020). Automated depth video monitoring for fall reduction: A case study. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops (pp. 294-295). Sand-Jecklin, Kari EdD, RN, AHN-BC; Johnson, Jennifer Ray BSN, RN, CNRN; Tylka, Sharon BSN, RN Protecting Patient Safety, Journal of Nursing Care Quality: April/June 2016 - Volume 31 - Issue 2 - p 131-138 doi: 10.1097/NCQ.000000000000163 Votruba, L., Graham, B., Wisinski, J., & Syed, A. (2016). Video monitoring to reduce falls and patient companion costs for adult inpatients. Nursing economics, 34(4), 185.

• hellocare