Reducing Fall Rates in Rehab Units: A Success Story From VA North Texas Health Care System

In October 2019, the VA North Texas Health Care System faced a significant challenge: an average fall rate of 4.13 falls per 1,000 patient days, compared to the National Database of Nursing Quality Indicators (NDNQI) average of 2.5. This high fall rate posed a serious risk to patient safety, leading to potential injuries, increased length of stay and higher medical costs.

Key Factors Contributing to High Fall Rates Identified by Hospital Leadership:

- **Incapacity for patients to call for assistance** due to confusion and forgetfulness.
- **Limited ability to maintain privacy** for patients while using the restroom while also monitoring them without being in the restroom with the patient.
- **Inconsistent use of purposeful hourly rounding** using the 5P's (Pain, Potty, Position, Possessions and Plan).

Objectives:

In May 2020, the facility implemented the Parasol Wireless Fall Prevention system in a 30-bed rehab unit with the aim of enhancing patient safety and reducing fall-related injuries. The primary goal was to lower the fall rate from 4.13 to the national average of 2.5. To achieve this, the facility used the Parasol wireless chair sensor, commode/toilet sensor and seatbelt exit alarm sensor. Additionally, leadership aimed to improve the nurse call light response time, which averaged 1 minute and 20 seconds before the intervention.

Improving Patient Safety While Also Improving Patient Privacy:

VA management recognized that their existing practice of having staff present in the restroom with patients was not being adhered to, as patients were uncomfortable with staff watching them. Consequently, staff would leave patients alone to maintain their privacy. However, without direct visual monitoring or another method to ensure patient safety, patients often attempted to get off the toilet to dress themselves, leading to falls. To overcome both the privacy and patient monitoring challenges, the Parasol wireless commode/toilet sensor was implemented.

Engaging Staff by Driving a Culture of Safety:

To develop a sustainable hospital fall prevention program, leadership identified the importance of not only using the right products but also fostering a culture that prioritizes staff-driven fall prevention.

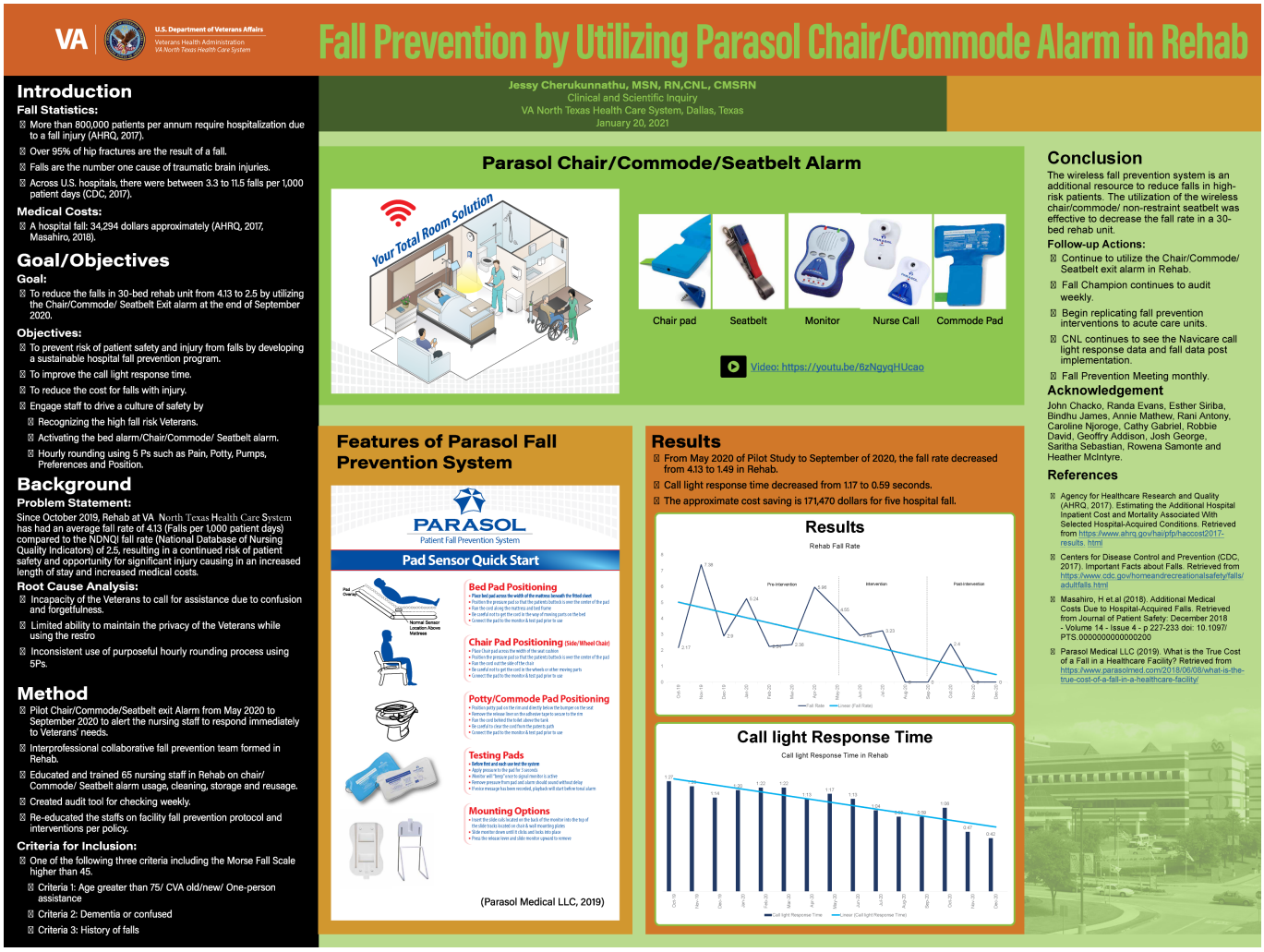
Education and Data-Driven Decision Making:

To enhance the success of the fall prevention initiative, the team implemented several education and training measures:

- Formed an interprofessional collaborative fall prevention team, headed by a fall champion within the Rehab unit.
- Educated and trained 65 nursing staff on the Parasol Wireless Fall Prevention System.
- Developed audit tools to monitor weekly progress and drive success.
- Re-educated staff on the facility's fall prevention protocols and appropriate interventions.

Trial Data Summary: Proven Success in Fall Prevention:

- **Reduced Falls:** During the three-month study, the total fall rate decreased from 4.13 to 1.49 in the Rehab unit, a 64% reduction.
- **Faster Staff Response Time:** The staff call light response time decreased from 1 minute and 17 seconds to 59 seconds, a 23.5% reduction. This means staff were alerted and addressed the patient almost 20 seconds faster.
- **Reduced Injuries and Cost Savings:** The facility reported approximate cost savings of over $170,000 by preventing just five falls during the study period.



Continued Improvement:

Following the three-month study, leadership continued to track fall metrics and call light response time. Both metrics saw significant improvement as staff became more familiar with the system. From September 2020 to December 2020, the Rehab unit saw a fall rate of zero in three of the four months. Staff call light response time continued to drop, reaching 42 seconds in December 2020, an improvement of 35 seconds from the pre-study time of 1 minute and 17 seconds.

Impact on the Hospital:

The implementation of the Parasol wireless fall system at the VA North Texas Health Care System's rehab unit not only significantly reduced fall rates but also improved response times and generated substantial cost savings. This study highlights the importance of innovative solutions and consistent monitoring in enhancing patient safety and care quality. The success of this initiative has had a profound impact on the hospital, demonstrating the value of investing in advanced technology and fostering a culture of safety. The reduction in fall rates and improved response times have led to better patient outcomes, decreased length of stay and lower medical costs, ultimately contributing to the overall efficiency and effectiveness of the healthcare system.

To learn more about our patient-safety innovations, please contact us.