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Project #70: Use of Virtual Monitoring to Prevent Inpatient Hospital Falls

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AIM

- Problem Statement: Limited in-person patient safety assistants (PSA) for fall risk patients contributing to our high fall rates
  - Fall rates higher than NDNQI target of 2.70 x 2 years
  - Fall with injury rates below NDNQI target of 0.58 and 0.60, but trending up
  - Staffing challenges with PSAs and nursing staff
  - Higher acuity patients
  - Nursing assistants (NA) removed from patient care to fulfill PSA duties when not available
- Improvement Statement: Implement virtual monitoring platform throughout our progressive and general practice units to allow for 24/7 monitoring of high fall risk patients to reduce total fall and fall with injury rates by 33% within 1 year

The purpose of this project was to determine if the use of virtual monitoring of qualified high fall risk patients will reduce fall rates. Since 2020, Henry Ford Wyandotte Hospital's fall rates have not been below our target goal of 2.70 set by NDNQI. Since that time, we have developed a fall committee, and implemented interventions based on evidence. However, we recognize the staffing challenges plaguing our hospital system as a detriment to preventing falls. With the introduction of ceiling mounted cameras in each patient room, we now have the capability to virtually monitor specific patients 24/7. The virtual patient safety assistants (vPSAs) monitoring these patients are able to talk to the patient, sound an alarm, and/or call the unit directly to discuss the patient's movements with the unit staff. By having a person virtually monitor select high fall risk patients we expected to see a reduction in falls by thirty percent after six months of implementation.

PLAN: CURRENT STATE

- Since 2020, Henry Ford Wyandotte Hospital's fall rates have not been below the 2.70 target set by NDNQI (add 0.60 for falls with injury)
- Developed local Fall Committee in Spring 2020
- Re-educated on Hester Davis scoring and interventions
- Posey alarms, fall mats, and gait belts placed in all patient rooms
- Standardized the Hester Davis fall signage outside patient rooms
- Developed specialty bed policy including low boy bed use for high fall risk patients and other populations at risk of fall with injury
- Improved compliance with Hester Davis weekly audits by placing in Verge platform
- All RNs had Hester Davis sidebar wrenched in Epic
- All NAs add Hester Davis scoring column to their patient list in Epic

DO: CORRECTIVE ACTION/INTERVENTIONS

Epic Monitor vPSA Timeline

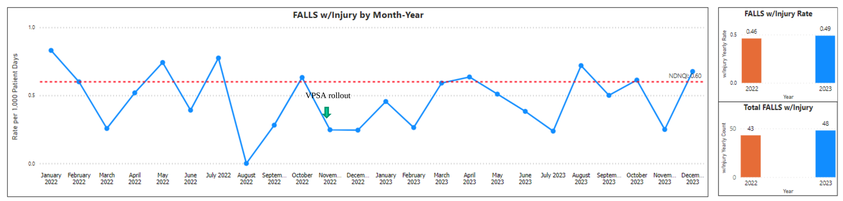
	2021						2022											
	Q3			Q4			Q1			Q2			Q3			Q4		
	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
PHASE																		
INITIATE (Project Kickoff)																		
PLAN																		
DESIGN																		
BUILD																		
TEST																		
TRAIN																		
GO LIVE																	GO LIVE	
CLOSURE																		

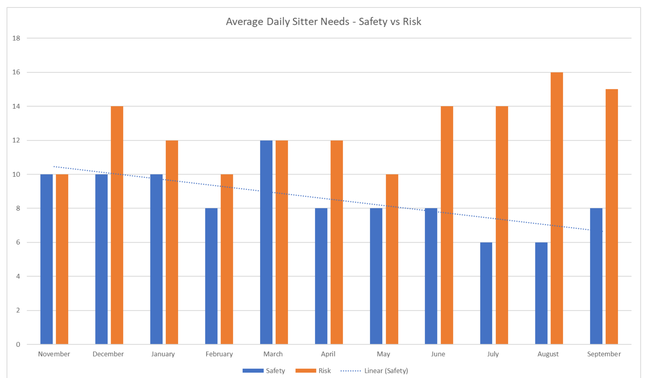
- This was a multidisciplinary and multi hospital group with leaders, CNS', nurses, Epic liaisons, Clin Doc specialists, facilities and more!
- Cornerstone module was developed for nursing staff on process
- Tip sheets made for the units with vPSA phone numbers
- Discussed in shift huddles, at staff meetings, RLs placed to assist with learnings

CHECK (EVALUATION OF CHANGES)

- For the first 10 months after go-live 1127 patients were virtually monitored
- 17 suffered a fall while being virtually monitored equating to 1.5% of all monitored patients
- The need for in-person PSAs reduced from Nov 22-Sept 23

MEASURES





ACT: SUSTAIN AND SPREAD

- Collaboration with Virtual Patient Safety Assistant leadership on Discontinuation Process.
- To improve nursing staff confidence in the use of virtual monitoring we communicated out good catch stories which included tourniquet left on patient's arm, oxygen tubing removed from patient, and family stories of those who were thankful their loved one was safe in our care, as well as others.
- Underutilization monitored and discussed at daily Safety Huddle to improve use
- We saw an increase in number of patients and/or families refusing the use of virtual monitor. We revised scripting for nurses which led to reduced number of patients and families who declined use of a virtual monitor.
- We presented our data at the Wyandotte Michigan Organization for Nursing Leaders (MONL) roadshow in November 2023. This forum allowed us to share with other health systems across Michigan. In the future, we will share this data with the System Fall Committee. We are also looking into publishing our work in a journal and utilizing our partnership with Michigan State University to assist with publishing.

KEYS TO SUCCESS/LESSONS LEARNED

- Recognized early on we needed to adjust our speaker volume to make it easier to hear when patient doors were closed. Some speakers were added outside of the ante room which also made it less disruptive to the patient because we didn't have to turn up the volume in those rooms.
- Recognizing communication barriers between vPSA and nursing staff led to need for reeducation on policy and process
- Re-education on patients who qualify and the process
- Standing agenda item to discuss number of patients on virtual monitor during Safety Huddle to keep awareness of use and availability