Implementing a Virtual Sitter Monitoring Program: Outcomes Six Months Post Go-Live

Teresa Niblett, DNP, MS, RN-BC; **Lori Somers,** MSN, RN, ONC, CNML; **Melissa Van Sant**, BSN, CPHQ, RN-BC; **Kelly Wilson**, MSM, RN, PCCN, NEA-BC
TidalHealth Peninsula Regional; TidalHealth Nanticoke

Problem

- Patient companion program for a 2-hospital health system was inefficient and ineffective
- $1.1 million/year spent for in-person patient companions
- Other patients could benefit from continuous monitoring to prevent falls, elopement, and removing lines tubes and drains
- Thousands of hours per patient day (HPPD) short to cover in-person 1:1 if a non-clinical patient companion was unavailable
- Falls and falls w/injury exceed NDNQI mean

Background

- Staffing & cost constraints challenging hospitals
- Quality/safety/satisfaction correlates with staffing
- New models of care are emerging using technology
- Literature review and assessment of baseline data led to development of a business case to implement the virtual monitoring program
- Forecasted $2.1 million net savings over 3 years

Methods

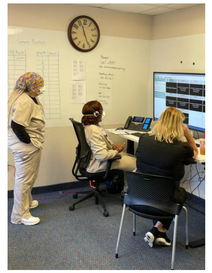
- Steering committee established and vendor selected
- Existing FTEs converted to new FTEs with 60% filled internally
- 2 staff/shift with 24/7/365 observing. Staff to patient ratio = 1:12 Reviewed & refined algorithms
- Mapped and modified workflows
- Developed & implemented marketing & training
- Created a "scorecard" with targets for each facility with baseline KPIs and quarterly targets
- Biweekly steering committee meetings to monitor, control, address barriers, maximize benefits

Results

Six Months Post Go-Live

Hospital One - 99 Beds w/ADC 65

Baseline Data	FY 2022	Target %	Target
Falls/1000 Pt Days	1.6	Decrease by **10%**	1.4
Falls w/injury/ 1000 Pt Days	0.5	Decrease by **10%**	0.45
Safety Sitter Hours	3298/mo	Decrease by **60%**	1,319
Safety Sitter Cost	$54,463/mo	Decrease by **60%**	$21,785
# 4 hr shifts worked short d/t pulling a sitter	121/mo	Decrease by **50%**	61



Hospital One KPI	Baseline Data (per quarter)	Target	FY23 Q1	FY23 Q2	YTD Change %	YTD Change
Reduce of 1:1 Sitter (FTE/HRS or $$)	9,894	3,957	4165.25	4323	Decreased 58%	-5650
Reduce labor cost	$ 163,389.00	$65,355.00	$66,566.20	$69,157.60	Decreased 58%	$(191,054.00)
Reduce Rate of Falls /1000 patient days	1.6	1.4	2.3	2.8	Increased 40%	0.95
Reduce Rate of Falls with injury / 1000 patient days	0.5	0.45	0.8	0.8	Increased 60%	0.8

Hospital Two - 287 Beds w/ADC 250

Baseline Data	FY 2022	Target	Target
Falls/1000 Pt Days	3.3	Decrease by 10%	3
Falls w/injury/ 1000 Pt Days	0.7	Decrease by 10%	0.6
Safety Sitter Hours	2,015/mo	Decrease by 60%	806
Safety Sitter Cost	$50,633/mo	Decrease by 60%	$20,253
# 4 hr shifts worked short d/t pulling a sitter	172/mo	Decrease by 50%	86

Hospital Two KPI	Baseline Data (per quarter)	Target	FY23 Q1	FY23 Q2	YTD Change %	YTD Change
Reduce of 1:1 Sitter (FTE/HRS or $$)	6,045	2,418	1688	2016	Decreased 70%	-4193
Reduce labor cost	$151,899	$60,253	$31,565.00	$37,659.20	Decreased 70%	$(234,574.00)
Reduce Rate of Falls / 1000 patient days	3.3	3	2.7	3.2	Decreased 10%	-0.35
Reduce Rate of Falls with injury/1000 patient days	0.7	0.6	0.9	0.6	Increased 7%	0.75

Discussion & Lessons Learned

Hospital One

- Reduced in person sitter hours by **58%** in the first 6 months with a gross cost savings of **$191,054**
- *Increase* in falls and falls with injury over 6 months, though not distinguished monitored vs. unmonitored patients
- Leadership process established to confirm in-person sitter avoided & discontinued timely
- Unable to measure a change in shifts worked "short" due to in-person sitters

Hospital Two

- Reduced in person sitter hours by **70%** resulting in a gross cost savings of **$234,574**
- Overall reduction in overall falls
- **72%** reduction in shifts worked "short" due to in-person sitters
- Patients with cognitive issues more effectively monitored to avoid disruptions. Staff and patient families are grateful

Both Hospitals

- Monitoring staff detected and prevented elopement, removal of lines and drains, and alerted staff to help patients urgently
- Monitoring staff reduced staff disruptions
- Ongoing efforts to improve education, communication, and collaboration with post acute partners to understand virtual monitoring and prevent discharge delays

References

https://mytidalhealth.sharepoint.com/:w:/s/NS-ClinicalInformatics-Telesitterprogramforacutecare/ERFT0mkeb0FCn_dsZxK-GM8B8ZQ00KunFh1h-XFQ9jrpIw?e=lpALzW

Contact

Dr. Teresa Niblett – Chief Nursing Informatics Officer
teresa.niblett@tidalhealth.org