Centralized Video Monitoring: Its Impact on Patient Safety, Staff Satisfaction, and Labor Expense

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Presentation Objectives

- Objective 1: Demonstrate the cost savings of replacing 1:1 sitters with camera surveillance and monitoring from a central location.
- Objective 2: Define the benefits of staff satisfaction and safety.
- Objective 3: Define the benefits of increased patient quality and safety.

Reason for Action

- Labor expenses escalating and 1:1 sitters were commonly used for fall prevention
  - Range of 20-30 sitter patients daily
  - 50% require 1:1 of CNAs (FTE) and agency CNAs
- Above NDNQI National Benchmarks for falls
  - Projected costs for falls in 2020 more than $43.8 billion nationally (Quigley)
- Lean Black Belt project opportunity – cost avoidance for CNA sitter staffing

Target State

Build a Centralized Video Monitoring (CVM) Program that would...
- Decrease 1:1 sitter observation by a minimum of 50% per day
- Reduce personnel expenses associated with 1:1 sitter utilization
- Decrease hospital fall rates to under NDNQI National Benchmarks
- Provide monitoring capabilities in all Acute Care nursing units

Program Discovery

- Literature search of camera surveillance technology
  - Off site visits
  - Telephone conversations with hospitals
  - Webinars
- Technology selection
  - Equipment trial to support purchase decision
  - Integration with Nurse Call system
  - Supportable operations structure
- Staffing Decisions
  - Video monitoring technicians from Float Pool
  - Staff concerns (Big Brother!)
Implementation Planning

- Construction of CVM room
  - Limited space, small footprint
  - Ergonomics – chairs, monitor placement
  - Equipment to support video display
  - Call system communication with patients and nursing staff
- Initial Camera installations
  - 168 patient rooms
  - No impact to census/patient flow
- Interdisciplinary committee meetings
  - CVM signage
  - Staff and Patient education

Communication Planning

- Increase program awareness throughout the organization
  - House-wide education
    - Open house (CVM room)
    - Huddle sheets
  - Video Monitoring Tech (VMT) education
    - VMT Resource Guide and Log
    - VMT competencies
    - Escalation criteria/improved communications between VMTs and clinical staff

CVM Program Today!

- 176 cameras placed above acute care beds
- Live stream monitoring – no recording
- Central monitoring room with two 24/7 VMTs
- No need for a physician order or separate consent
  - Administrative Procedure developed with Legal
  - Patient’s Nurse and Charge Nurse make decision
  - Patient is informed and has right of refusal
  - Separate consent not required

CVM Room

Standard Work and Documentation - Nursing

- Calls report to VMTs twice daily
  - Indicates the reason for CVM
  - Confirms patient is being monitored
- VMTs are informed when patient is leaving the room and when patient returns
- Nursing reports monitoring status during report
- Document and include in PSN if patient fell

Standard Work and Documentation - VMTs

- Handoff to oncoming VMT shift
- Provides interventions directly to patient using Nurse Call system
- For escalations/patients that are not redirectable, use overhead page
  - “Monitor alert to Room XXX”
  - All Hands respond
- Use VMT Log to record near misses and interventions
- Documents in the electronic record, general interventions and if an incidence occurs
Prior to implementing program – estimate of 1:1 sitter use ranged to 30 sitter patients per day average of 11- 1:1 sitter rooms /day

The number of sitters decreased from an average of 11 to approximately 7- 1:1 sitter rooms /day

Within first quarter of operation the $392,000 cumulative video monitoring technician deferred staff savings exceeded the original estimate of $305,000 passing the breakeven point.

As of December 2011, the CVM program has affected more than $3.0 million in deferred cost savings

Within first 3 months, 57 falls were prevented with a potential minimum savings of $24,225

75% of the acute care units met or exceeded the NDNQI fall benchmark mean in the second quarter of 2011- the best performance in two years

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Monitoring Utilization
Weekly Summary

VMT Great Saves!

Implications for Practice

“Patient about to get out of bed, monitor alert called and staff ran to the rescue. They were in the room within 3 seconds. Patient saved from falling.”

“Patient was leaving out of side of bed trying to get food tray, staff called and responded in seconds stopping patient from falling out of bed”.

“Patient took tape from rail and taped the soft wrist restraint to feet like a Greek sandal. He proceeded to start skating around room. We called nurse/front desk/ patient. Patient redirected before he could fall”.

Staff must be reassured their practice is not being evaluated

Legal Department must be included in program planning

Increased need for more monitors

Determine threshold for maximum patients on CVM

Determine staffing models to support CVM expansion

Look for additional program benefits

Staff safety

Elopement reduction - camera view is static

Communication challenges
It Takes a Village!

A Special Thank You

Questions?

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