

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

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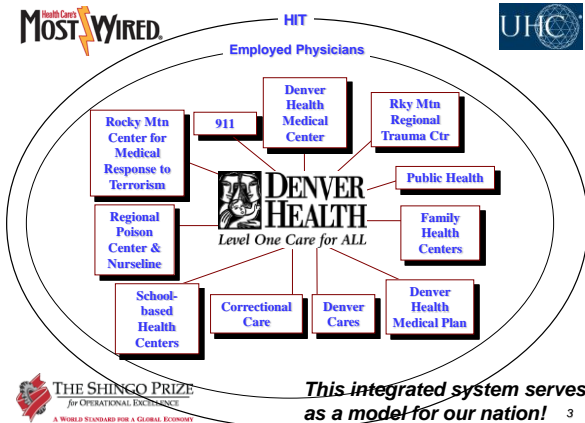


Presentation Objectives



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

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Reason for Action



- n 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
- n Above NDNQI National Benchmarks for falls
 - > Projected costs for falls in 2020 more than \$43.8 billion nationally (Quigley)
- n Lean Black Belt project opportunity – cost avoidance for CNA sitter staffing

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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

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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!)

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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

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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 VMT's and clinical staff

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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

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CVM Room



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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

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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

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CVM Program Outcomes



- 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.

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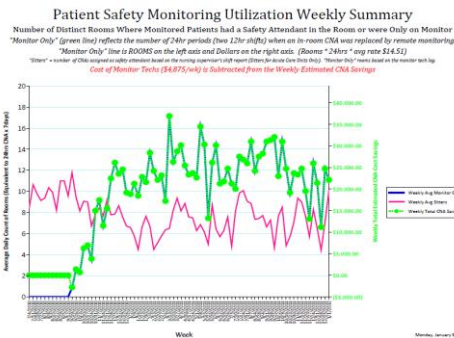
Outcomes continued...



- 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



2 year Program Survey



- Top Reason - Fall prevention 50.5%
- Results moving in the right direction...

Reasons for Requesting Camera Surveillance	
Prevention of Fall & Patient Falling in Lines	1.0%
Fall Prevention	50.5%
Fall and Safety	1.0%
Fall / OOB / Forgetful	2.0%
Other and Specialty tubing Tubes / Drains	1.0%
Patient Safety	1.0%
Prevention of Elopement	1.5%
Staff Safety	2.9%
All of the Above	7.8%

Falls / 1000 Patient Days:
% of units that meet or exceed the benchmark



Injury Falls / 1000 Patient Days: % of units that meet or exceed the benchmark



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VMT Great Saves!



- "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".

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Implications for Practice



- 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

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It Takes a Village!



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A Special Thank You



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Questions?



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