

The Value of Nursing: Implementation of Video Monitoring to Decrease 1:1 Sitter Cost

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Tampa General Hospital Acute Care Services



- 988 – bed teaching facility
 - 150 Adult and Pediatric ICU beds
 - 59 Rehabilitation beds
 - 39 Operating Rooms and 4 C-Section Rooms
 - Variety of medical-surgical units: Ortho, Neuro, Joint, Oncology, Medicine, Surgery, Cardiac Surgery, Cardiac Medicine, ACE, Trauma, Rehabilitation, Burn Unit, Medical Tele, Surgical Tele, Transplant and Pediatrics
- Magnet designation
- 12 Joint Commission Disease Specific Certifications
- Level One Trauma Center
- Verified Burn Center



Presentation Objectives

- Identify an alternative method of continuous observation care with the use of video monitoring technology.
- Discuss implementation steps and challenges with video monitoring
- Identify methods to evaluate the effectiveness of video monitoring implementation.



Alternative Methods: Reasons for Sitters

- Confusion / Fall Risk / Agitated 43%
- Pulling out tubes 25%
- Psychiatric Diagnosis 10%
- Self Harm 8%
- Limited mental ability 5%
- Acuity 3%



Alternatives Methods: 1:1 Sitters

- One sitter for 2-4 patients in one room
- Sitter between 2 rooms
- Every 5 minute checks (Covering 3 rooms)
- Family as sitters (Private Room)
- Sitters require a physician order
- Equipment: Bed Alarms, Restraints, Distraction Tools



Alternative Methods: Review of Evidence

- “Using sitters has not been found to be cost-effective in decreasing patient falls because the gains do not offset the direct expense.” *HM Tzeng 2008*
- “Patient falls increased marginally, 0.0019 for each sitter shift.” “The findings indicate that sitters have a marginal impact on the variables we selected for the model. We are encouraged by the changes in patient satisfaction but are nonplussed by the negative impact on patient falls”. *D.J. Boswell 2001*



Alternative Methods: Goals and Objective

- Decrease expense of sitters (FTEs)
 - Averaged 38 pts per shift with 21 sitters
 - 88 FTEs / Annual expense 2 .1 million
- Increase CNAs for patient care
- Increase availability close observation
- Improve patient outcomes:
 - Falls with injury
 - Self harm



IMPLEMENTATION: EQUIPMENT OPTIONS

Video Monitoring:	Use of equipment similar to Security Operations to monitor patients, without being physically present in the room.
View:	Bed or Entire Room
Confidentiality:	Security screens, Recording
Night Views:	Infrared lights
Additional Options:	Motion detectors; Audible
Cost:	Variable



Implementation: Policy, Education, Communication

- Policy
 - Defines use when ordered for:
 - One to one
 - Close observation
 - Sitter
 - Describes responsibilities, handoff, documentation, competency
 - Addresses equipment management



Implementation: Policy, Education, Communication

- Education
 - Program:
 - In-service
 - Demonstrated competency
 - Who:
 - 100% competency RNs, LPNs, PCTs, UCs
 - Core and pool
- Communication
 - Security, Risk Management, Therapies (PT, OT)
 - Senior Management and Medical Executives



Implementation: Small Test of Change

- Neuroscience Med-Surg Unit
- Identify location of a monitor tech
 - Nurse's Station
 - Next to call lights
 - Next to phone
 - Close to Unit Coordinator
- Identify beds
 - Easy access for Monitor Tech
 - Private and semi-private



Implementation: Small Test of Change

- Staff Education
- Address and evaluate concerns and apprehensions
 - Privacy and HIPPA concerns
 - Response time to room
 - Number of patients monitoring at one time
- Documentation requirements
- Report / Handoff
- Maximum time at the monitor
- Coverage when immediate response is necessary



CONSOLE



Equipment : 9 or 16 Channel Multiplexer, power supply, cabling and monitor. *Integrated Systems of Florida Inc.*



PATIENT ROOM CAMERA



Implementation: Challenges

- Monitor tech
 - Response time
 - Focus / Distractions
 - Patient report
 - Length of time at the console
- Evaluation of patient outcomes
- Room response responsibility
- Documentation
- Bathroom observation
- Suicide risk patients
- Consistent accountability (texting, phone use, reading)
- Patient privacy questions



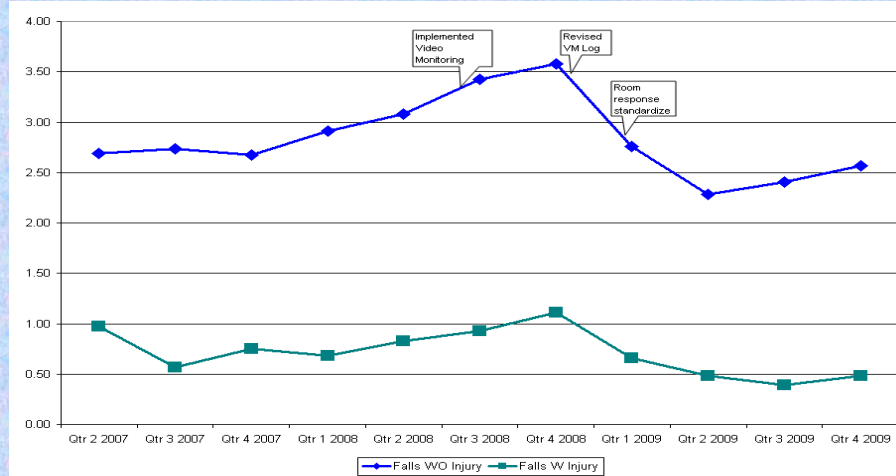
Evaluation: Cost & FTEs

	Before	After
Ave # Pts	38	50
Ave # Sitters	21	16
Exp per Pt	\$152	\$84

- Equipment costs: \$160, 000
 - (86 beds @12 stations)
- First year savings: \$470,000
- FTE Savings: 21



Evaluation: Falls per 1000 Patient Days

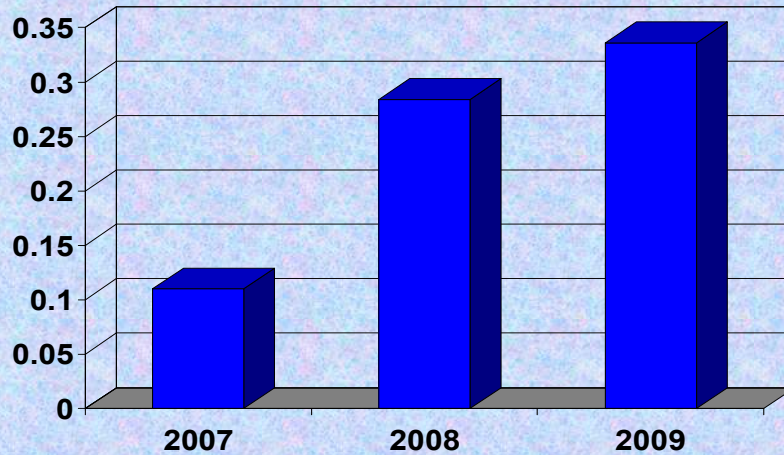


Evaluation: Preventing Harm

- Continue with 1:1 for suicidal patients
- Unable to impact “removal of tubes”
- Self medicating
- Early intervention – quick response
 - Falls
 - Patient needs
- Staff alert to occurrences in room



Evaluation Perception: Change in Quality for Past Year



■ TGH Med-Surg

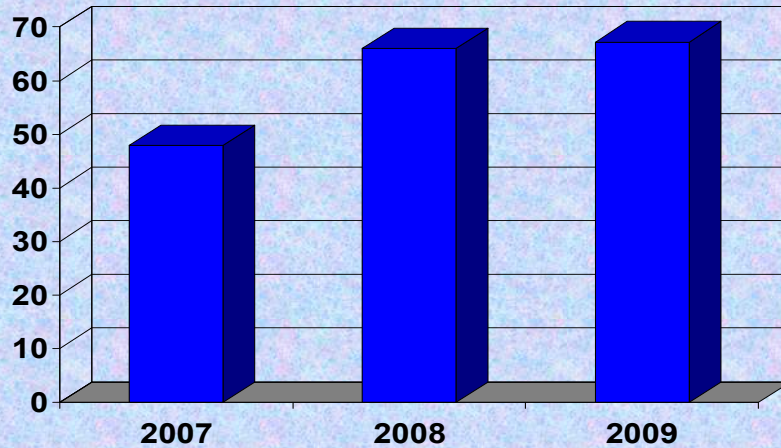


Evaluation: Perception Patient/Family, Physician & Staff

- Patient / Family
 - Positive and appreciative
 - Improved privacy during family visits
 - Not an option
- Physicians and Staff
 - More CNAs available for all patients
 - Increased availability for observation
 - Less “off service” placement
 - Allegation of inappropriate contact



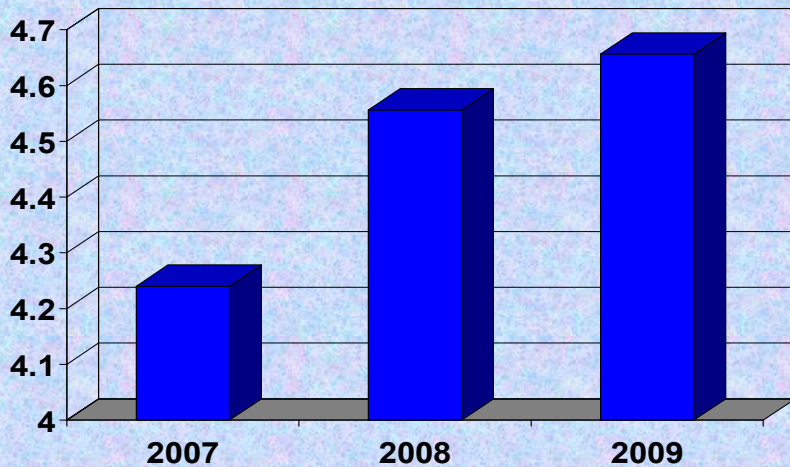
Evaluation: Perception Had Enough Time for Patients



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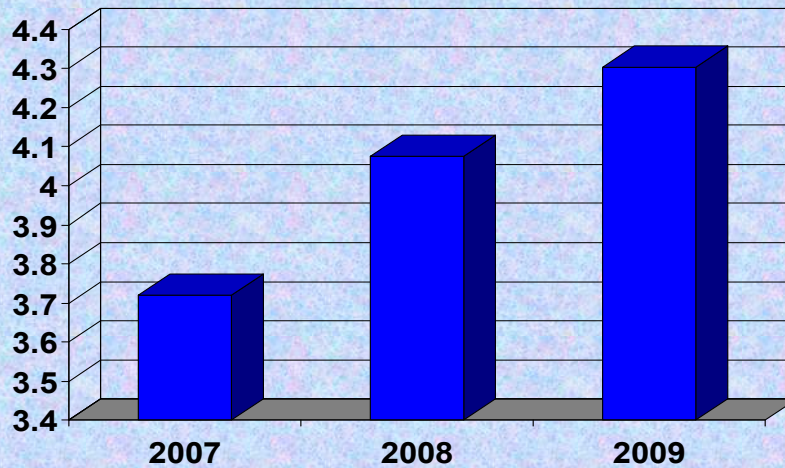
Evaluation: Patient Assignment was Appropriate



■ TGH Med-Surg



Evaluation: Overall Had a Good Day



■ TGH Med-Surg



Things to Consider

- Overall
 - Unable to measure a change in patient outcomes.
 - Substantial financial measure
- Lose financial gain if expand too far
- Camera in hallway
- Placement of VMT
 - Quick response to room
 - Quick coverage
 - Low traffic with limited distractions



Questions

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