



Abstract

NURSE DRIVEN MOBILITY PROTOCOL IMPLEMENTATION ON A MEDICAL TELEMETRY UNIT

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The risks of immobility among elderly hospitalized patients in the acute care setting are well known to health care providers. Despite this fact, studies show that decreased mobility and bed rest commonly occur during hospitalization. The Medical Telemetry Practice Council recognized this problem and conducted a review of the literature. Based upon this review of the literature the Practice Council, along with Physical Therapists, developed a Nurse Driven Mobility Protocol. The overall purpose of this project is to decrease the risks associated with immobility, including maintaining functional status. The Mobility Protocol includes an assessment of the patient's mobility each shift using the Quick 3 Bedside Assessment Tool. Based upon the assessment, the RN develops an individualized mobility plan of care that is documented on the Problem List in the electronic medical record. The mobility score is communicated to all caregivers via the white board in each patient room. It is also communicated during handoff between shifts. Ideally the plan of care includes the patient eating all meals in his or her chair and ambulating three times per day in the hall. All Medical Telemetry staff members received education on the new process. Initially outcome measurements were only related to compliance with the process. As compliance with the process has improved, outcome measurements now additionally include fall rates, hospital acquired pressure ulcer rates, and length of stay. Future measurements may include patient satisfaction and maintenance of functional status upon discharge.

Mobility Protocol

Based upon the literature and staff input, the following Mobility Protocol was developed:

Assessment

- Check Activity Orders
 - If bed rest is ordered, consult attending physician to clarify necessity of order
 - If bed rest is appropriate at admission, readdress with physician daily
- Identify essentials for activity
 - Eye glasses, hearing aides
 - Appropriate footwear (have family bring in shoes if necessary)
 - Prosthesis
 - Cane, walker, crutches
 - Gait belt
- Evaluate the necessity of obstacles to mobility
 - Foley, IV, Oxygen
- Perform baseline mobility assessment within 24 hours of admission and every shift using the:



Quick 3 Bedside Assessment Tool For Nurses and Therapists

Complete Assessment Level 1. If they do not pass, stop. If they pass, continue to the next assessment.

Test	Function	Functional Competence	Fail	Pass
Assessment Level 1 Assessment of: Cognition Trunk Strength Dynamic Balance	Sit and Shake – From a semi-reclined position, ask the patient to sit upright and rotate "to a seated position at the side of the bed." Note the patient's ability to maintain bedside position. Ask patient to reach out and grab your hand, then pull forward toward your hand, making sure patient reaches across his/her midline. *Determine if equipment is needed (e.g., small slider sheet or tube sheet/friction-reducing device) to make it easier for patient to rotate to side of bed, and then complete assessment level 1.	Sit: Patient is able to follow commands, has some dynamic trunk strength and caregivers may be able to try weight bearing if patient is able to maintain seated balance greater than 2 minutes (without caregiver assistance). Shake: Patient has significant upper body strength, proprioceptive control and grasp strength.	• Use total lift that has appropriate weight capacity with appropriate type and size sling • Use total lift that has appropriate weight capacity with appropriate repositioning sheet • Use a total lift with limb holding or turning straps • Use a lateral transfer aid (e.g., roll board, air assisted mat) • Use friction-reducing device (e.g., a set of slider sheets or a tube sheet) **Refer to safe patient handling algorithms and lift manufacturer guidelines for further assistance in choosing which type of lift or other patient handling equipment to use. If needed, consult with SPHM Coordinator or Specialist. Per NIOSH guideline for use in patient-handling tasks, when weight to be lifted exceeds 35-pound limit, assistive devices should be used.	Proceed with assessment level 2
Assessment Level 2 Assessment of: Lower extremity strength Stability	Kick and Point – With patient in seated position at the side of the bed, have patient place both feet on the floor (or stool) with knees no higher than hips. Ask patient to extend knee, then dorsiflex/plantarflex the ankle. Repeat on the opposite side.	Patient exhibits lower extremity stability and strength	• For patient unable to "weight-bear" on one leg, use total lift that has appropriate weight capacity with appropriate type and size sling • To use a sit-to-stand lift (versus a total lift), the patient must be able to bear at least >20% and preferably 50% of their body weight on one or both legs, have some upper body strength, be able to follow simple commands, cooperate and participate in the lifting process. • Use powered sit-to-stand lift that has appropriate weight capacity with appropriate type and size sling/vest for patient who can weight-bear on at least one leg, needs assistance with rising, and greater assistance than needed to use a non-powered stand aid. • Use non-powered stand aid for patient who can weight-bear on at least one leg and has the ability to pull up to an upright position (Note: The stand aid is for use with patients who have the ability to pull themselves up into the stand aid from a seated position, can bear some weight, and have upper body torso control). ** See above box above please.	Proceed with assessment level 3
Assessment Level 3 Assessment of: Lower extremity strength standing	Stand – Ask the patient to elevate off the bed or chair (seated to standing) using an assistive device (cane, railing). Patient should be able to raise their buttocks off bed and hold for a count of five. May repeat once.	Patient exhibits upper and lower extremity stability and strength	• If needed (based on gait assessment and/or other assessments), use sit-to-stand lift, or total lift with walking vest or lift pants for safe ambulation. ** See above box please.	Walking vest or lift pants with lift, or gait belt/assistive device

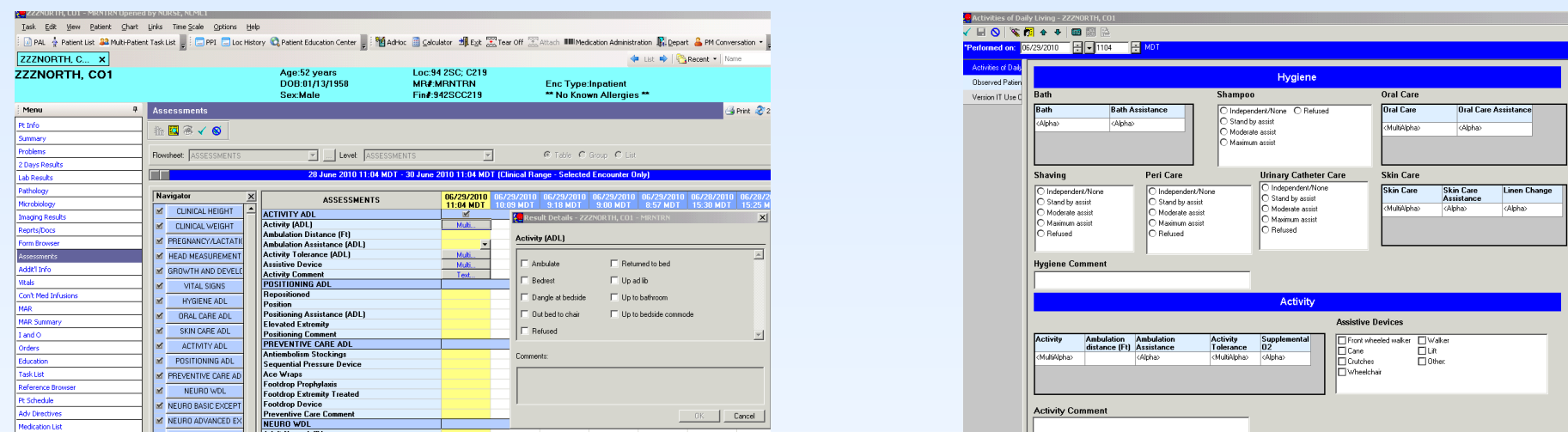
Mobility Protocol

Plan

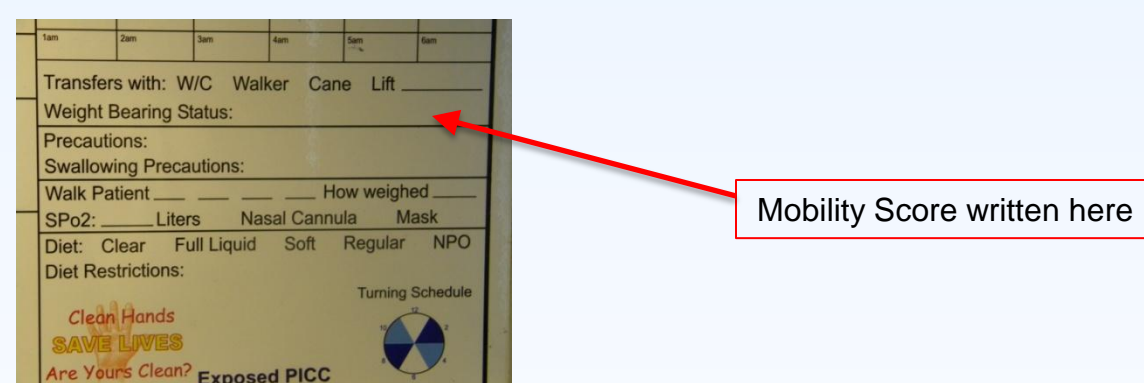
- Promote optimal level of activity. Begin with the maximum level patient is able to perform and advance as tolerated up to patient's baseline level of functioning. Advancement past patient's baseline should only be done with physical therapy's assistance and guidance.
 - Assess for pain and medicate prior to mobilization (if necessary)
 - Activity
 - Ambulate in halls 3 x per 24 hours
 - Ambulate to bathroom for ALL ADLs
 - Out of bed to chair for ADLs and meals – OR –
 - Sit on side of bed for ADLs and meals (based on mobility assessment)
 - Shower instead of bed bath if possible
- Toileting (AVOID USE OF BEDPAN)
 - Out of bed to bathroom, assess need for raised toilet seat – OR –
 - Out of bed to commode (based on mobility assessment)
- Consider referral to PT/OT if:
 - Significant decline from baseline
 - Training and/or education is indicated
 - Anticipate transfer to rehab or skilled nursing facility
 - Any mobility precautions are identified
 - Identify that patient may be capable to advance past his or her baseline level of functioning
- If patient is being seen by therapy, communication regarding their plan for the day is needed
 - If they will be ambulating patient, this can be considered one of the daily ambulations

Documentation and Communication

- Documentation of initial mobility assessment and plan should be done on the Problem List under Mobility in the electronic medical record
 - PL-Mobility Management
Goal: Mobility assessment will remain at _____ or better during the entire hospital stay.
Interventions: Ambulate three times each day. All meals in chair. Uses walker.
Update: Mobility assessment at level _____.
 - Document baseline level of functioning on the Problem List under Mobility within 24 hours of admission
- All activity should be documented in the ADL section in the electronic medical record.



Mobility score should be written on the white board



Welcome to the Medical/Telemetry Unit at NCMC!
We are here to provide you with excellent patient care. Below are some of the practices we perform on this unit to ensure you receive excellent care.

Mobility Protocol
Did you know that approximately 3% of your muscle mass is lost each day you stay in bed? The Mobility Protocol has been developed to help you maintain your strength and functional ability while you are hospitalized here on the Medical/Telemetry Unit. As your condition allows, you will be assisted to the chair for meals, and we may take you for a walk three times each day.

Being active during your hospital stay may help to:

- Maintain muscle strength
- Improve balance
- Increase appetite
- Prevent a fall
- Prevent skin breakdown
- Prevent constipation

What you may need:

- Consider having someone bring in non-skid shoes
- Eyeglasses, hearing aids
- Assistive devices: cane, walker, brace

Mobility Protocol

Evaluate

- Complete mobility assessment every 12 hours
 - Compare results to baseline
 - Document current mobility score as an UPDATE in the Mobility Problem
 - If deteriorating, consider obtaining order for PT consult

Staff Education

Education Plan

- Presented education at staff meeting in July 2010
- Gait belt use instruction by physical therapy, included at staff meeting
- Letters in mailboxes outlining the plan were distributed
- Reference card given to staff members as a resource (Quick Three Bedside Assessment Tool and Problem example on back of card):

Med Tele Mobility Protocol

- Check activity orders**
 - If bed rest ordered, consult with attending physician to clarify necessity. If appropriate at admission, readdress with physician daily
- Identify essentials for activity**
 - Eye glasses, hearing aides, footwear, prosthesis, cane, walker, gait belt
- Evaluate the necessity of obstacles to mobility**
 - Foley, IV, oxygen
- Perform mobility assessment upon admission and every shift using Quick 3**
- Activity**
 - Ambulate three times per day in hall, ambulate to bathroom for all ADL's, in chair for all meals, use shower instead of bed bath, avoid use of bedpan
- Consider PT/OT evaluation if needed. If patient being seen by therapy, communicate plan**
- Document initial mobility assessment and plan under a Mobility Problem. Perform and record the current Mobility score every shift, as an Update to the Problem**
- Include patient and family in all planning using the education sheet in the Patient Education Folder**

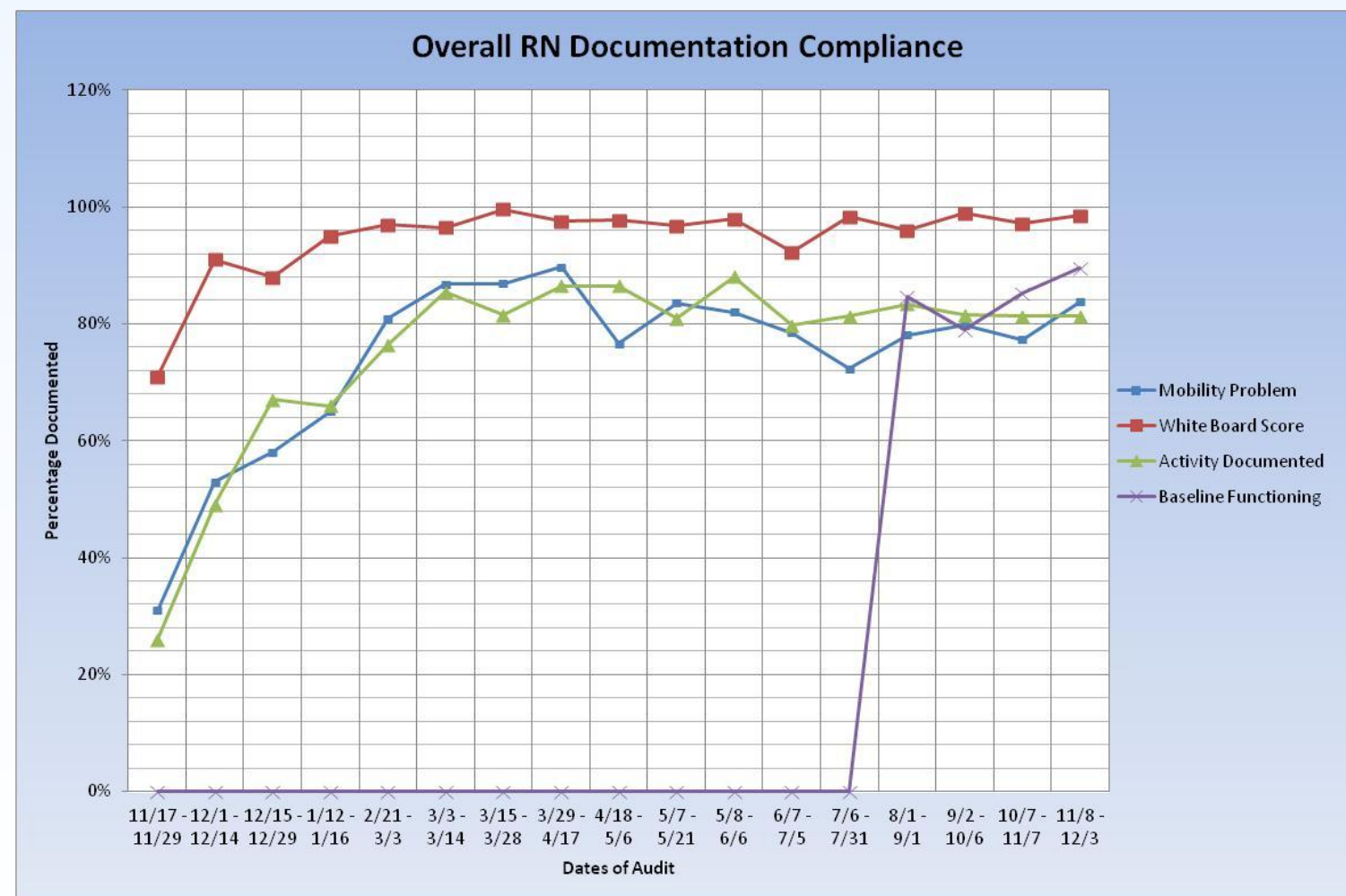
- After implementation, updates, clarifications, and re-education information was provided at select staff meetings. Peer audit results, outcome measurements, and updated information about the Mobility Protocol are posted on a bulletin board in the staff lounge.

Outcomes

Implementation of the Mobility Protocol occurred on July 12, 2010. While the Mobility Protocol appeared to initially be quite successful, adherence declined significantly. Audits were focused on hardwiring the process. Staff received mailbox notes entailing their individual compliance scores. Rates improved but were not significantly better.

Compliance with the Mobility Protocol

Therefore, peer audits began on February 21, 2011. Each RN and CNA completes two peer audits per shift. RNs audit the three main components of the Mobility Protocol: completion of the Mobility Problem, if the Mobility Score is written on the white board in the patient's room, and documentation of activity. CNAs audit only documentation of activity. Beginning July 6, 2011, RNs additionally began auditing a fourth component. This fourth component is documentation of the patient's baseline level of functioning in the Mobility Problem within 24 hours of admission. Goals are to have staff compliance at 85% for each of the four categories.



Since compliance scores are nearing at least 85%, we have begun to look at more significant outcomes. Additional outcomes we are now measuring are fall rates, hospital acquired pressure ulcers, and length of stay.

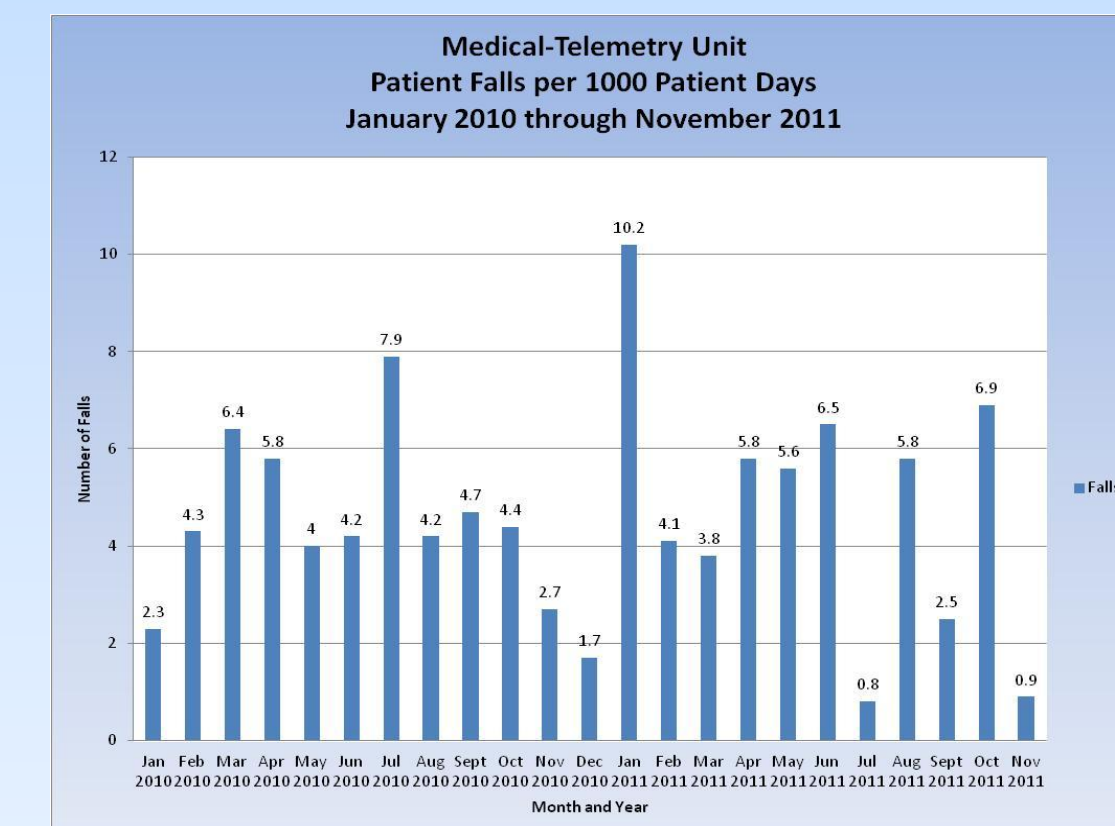
Outcomes

Fall Rates

Fall rates initially decreased after implementation of the Mobility Protocol. However, a spike in fall rates occurred in January 2011. Reasons for this increase are not entirely clear. However, peer audits of the Mobility Protocol began in February 2011. In addition, a new report process was implemented in February 2011 where the CNAs receive report from the RNs. Both of these processes may have contributed to the decreased fall rates seen in February 2011.

Fall rates since then have been inconsistent. Reasons for the inconsistency are unclear. However, several practice changes have occurred to help decrease fall rates. In the summer of 2011 a Root Cause Analysis occurred following a fall with a poor outcome. Medical Telemetry staff and leadership personnel, Quality Management, and Physical Therapy were involved in the discussions. Several practice changes evolved from the analysis. Staff are now required to use a gait belt to ambulate all patients who are not completely independent. Gait belt education occurred at the August 2011 staff meeting, and all staff were checked off by the leadership team to ensure proper use and understanding. Any staff who float to the unit are educated about gait belt use as well. The leadership team also audits gait belt use to ensure compliance and proper use. There is now a gait belt in every patient room. In addition, RNs are to document patient baseline level of functioning on the Mobility Problem within 24 hours of admission. PT also documents on the Mobility Problem, which allows the interdisciplinary team to be consistent with patient activity. Patients are not supposed to ambulate past their baseline level of functioning. If staff feel patients are able to progress past their baseline, PT must be consulted for assistance. Re-education of the Mobility Protocol and its components was provided at the August 2011 staff meeting as well.

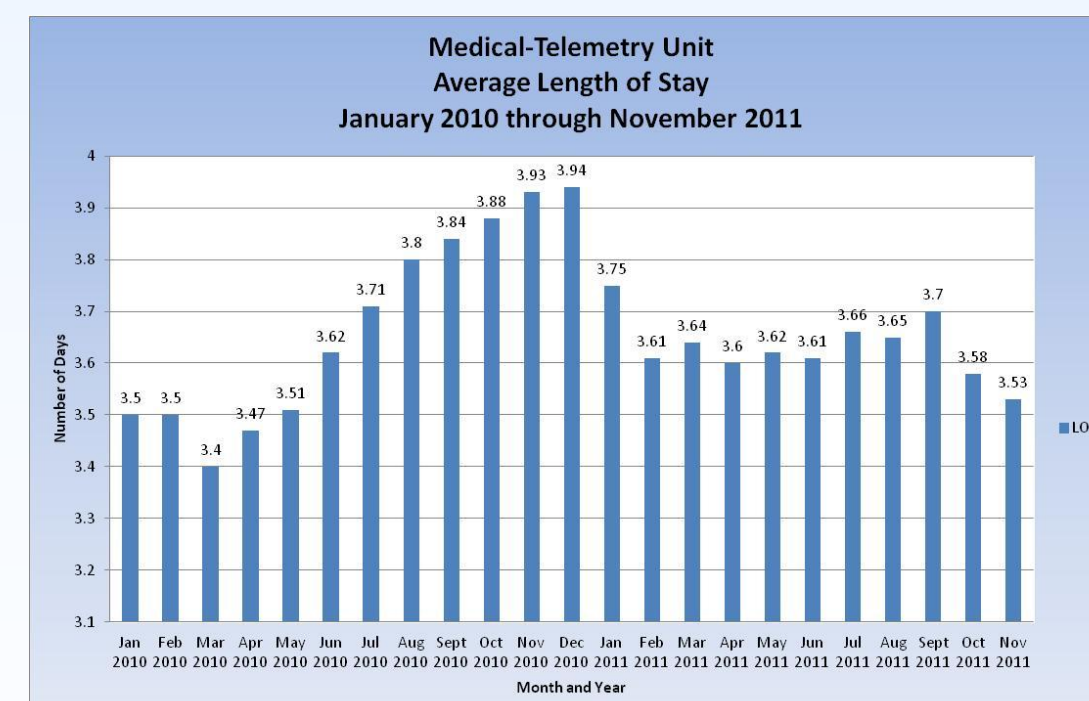
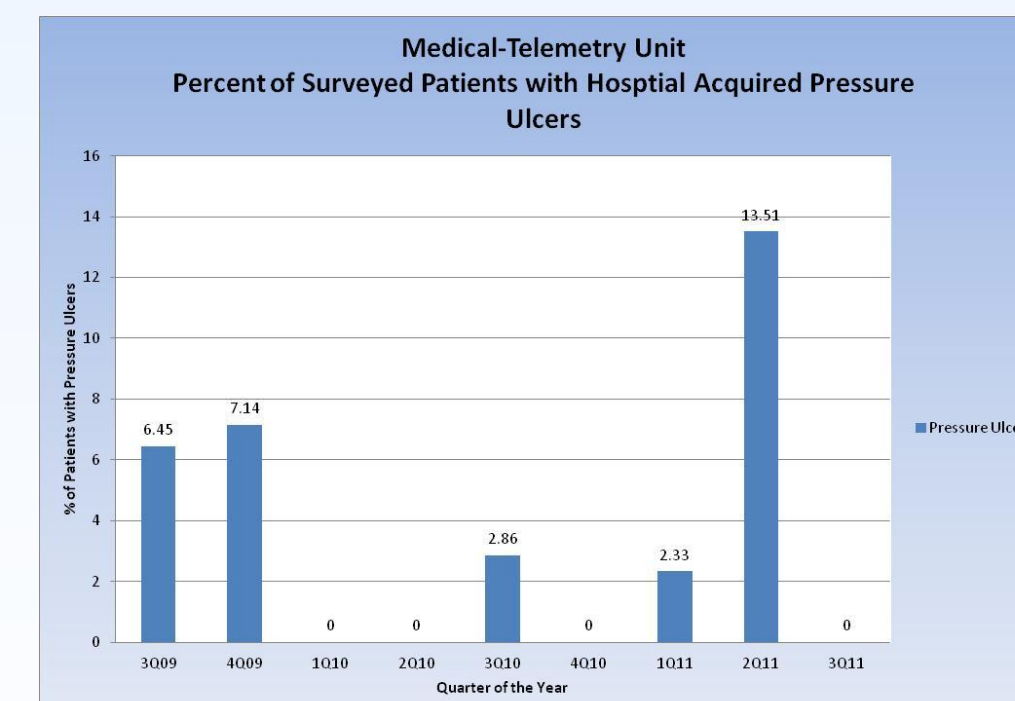
A subgroup has been formed on the unit, and their goal is to work to decrease fall rates. The subgroup has been analyzing the fall data to determine any trends in patient falls that have occurred. A DMAIC bulletin board has been created in the staff lounge, and this board contains unit specific data about fall rates and interventions suggested to help decrease falls. The subgroup has set the goal for patient falls at 3.89 falls/1000 patient days. One practice change this subgroup devised is that two staff members must respond to every bed alarm until the patient is deemed to be safe. RNs are also able to contact pharmacy following a fall for a patient medication review. The subgroup is beginning to work on the development of safety checks for patient rooms. This would encompass a list of items that need to be checked in the patient room to ensure ultimate safety for the patient. The hospital fall team is looking at equipment that may be useful. This may include red socks for patients deemed to be an extremely high fall risk (admitted for a fall or fell in the hospital).



Pressure Ulcers and Length of Stay

Rates for patients with hospital acquired pressure ulcers have been relatively consistent since implementation of the Mobility Protocol, with the exception of second quarter 2011. Reasons for this marked increase in pressure ulcers are unclear. However, this increase sparked the unit leadership team to increase awareness amongst the staff. Education was provided about the need to turn patients while they are in bed and to thoroughly document any wounds present on admission.

Length of stay has remained relatively consistent since implementation of the Mobility Protocol. The increase seen in the winter of 2010 could be related to common patient diagnoses seen that time of year, such as pneumonia and influenza. Changes in the Hospitalist program occurred in 2011, which may have helped lead to the decrease seen in length of stay.



As compliance with the Mobility Protocol is sustained, we hope to continue to measure these outcomes and begin to look at future outcome measurements, which may include patient satisfaction and maintenance of functional status upon discharge.

References

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