Clinical Safety & Effectiveness
Cohort # 21   Team 2

Fall Prevention on 5 ACU
The Team

• Division
  – Allison Pratt, PTA
  – Annierose Abogadie, MSN, RN, NE-BC, CCRN, RN-BC
  – Christopher Force, MD
  – Mariamma Shaju, RN, MSN, CCRN
  – Yvonne B Davila BSN, RN, CHCQM, ALHC, CLNC

• Sponsoring Departments
  – Luci Leykum, MBA, MD
    » Chief of the Division of Hospital and General Medicine
  – Ronald Estrella, Executive Director for 5ACU
OUR AIM STATEMENT

Reduce the number of falls and fall-related injury by 25% on 5ACU from June 2017 to January 2018.
Project Milestones

• Team Created August 2017
• AIM statement created August 2017
• Weekly Team Meetings 08/25/17 - 01/19/17
• Background Data, Brainstorm Sessions, Workflow and Fishbone Analyses 08/25/17 – 09/12/17
• Interventions Implemented July 2017
• Data Analysis July 2017 – Jan 2017
• CS&E Presentation January 19th 2017
A fall is an unplanned descent to the floor (or extension of the floor, e.g., trash can or other equipment) with or without injury to the patient.

The Joint Commission issued an event alert in 2015: Every year in the United States, hundreds of thousands of patients fall in hospitals, with 30-50 percent resulting in injury.

– Injured patients require additional treatment and sometimes prolonged hospital stays. In one study, a fall with injury added 6.3 days to the hospital stay.

– The average cost for a fall with injury is about $14,000.
Number of Falls across University Hospital in 2017
Current Process Flowchart

Start & End

MD admit

Delirious? Trying to get out of bed?

Yes

Arrives to floor

Nurse performs Morse Scale

No

Risk score 0-34

Yes

Process

Decision

Process

Redirect

VMT

1:1

No further action

Patient Falls

No

Post Fall Debriefing

Yes

No further action
Fishbone Diagram
-Reasons for Falls-

Cognitive Impairment
- Pt. denies fall
- Impulsive
- Anxiety
- Post op Sedation
- Developmental Delay
- Alcoholic Withdrawal
- Not Following Instructions

Physical Impairment
- Impaired Mobility
- Dizziness
- Lost Balance
- Medication Hypoxia
- Slid off chair
- Light Headed
- Blackout
- Headache
- On Commode too Long

Equipment
- Wheel chair unlocked
- Long gown
- Rollator Malfunction
- No Yellow Socks
- Gait Belt not used
- No Bed Alarm
- Tripped on own feet
- Post Procedure

Personnel
- Tech unable to assist
- Tech unable to handle
- Left Pt with family/PRIVACY
- Dizzy not assistance
- No bed alarm, No assistance
- VMT Tech failed to inform

Environment
- IV Tubing
- Possessions out of reach
- Improperly locked Rollator
- Slippery Floor - Wet with Soap & Water
- Slippery Transfer Board
- Uneven Floor
- Wet Floor
- Slippery Shower Chair

Effects
- Increasing number of Falls
Pre-Intervention (January to June) Pareto

Number of Falls

- Anticipated Physiological Changes: 12 (30.8%)
- Developmental Changes: 7 (18.9%)
- Accidental: 7 (18.9%)
- Environmental: 6 (16.7%)
- Unanticipated Physiological Changes: 5 (13.9%)
- Other: 2 (5.7%)

Reason

- Anticipated Physiological Changes
- Developmental Changes
- Accidental
- Environmental
- Unanticipated Physiological Changes
- Other
Process Control Chart Prior to Intervention

Number of Falls per 1000 Patient Days

Falls Per 1000 Patient Days

January: 7.78  
February: 3.56  
March: 3.37  
April: 3.59  
May: 2.81  
June: 5.5

Month of 2017
Interventional Plan

• To reduce fall rates through a multidisciplinary team including Nursing, Physicians, and Physical Therapy we added the following interventions:
  – Institution of a safety care plan by nursing
  – Automatic generation of a physical therapy consult after 3 failed nursing attempt to get the patient to a stage 4 mobility
  – Physician education and communication through improved mobility flow sheet visibility
  – Monitoring compliance report data on our interventions
  – Gain leadership support to adopt the above bundle for use in other units of the hospital
# Action Plan

**Aim Statement:** Reduce the number of falls and fall related injury by 25% on 5ACU from June 2017 to January 2018

<table>
<thead>
<tr>
<th>Action Strength</th>
<th>Action Driver</th>
<th>Action</th>
<th>Who?</th>
<th>Why?</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Mobility Checklist</strong>&lt;br&gt;Intermediate</td>
<td>Reduce # of falls with injury Dizziness, impaired mobility, impaired mental status</td>
<td>Standardization of early mobility Physical Therapy consult (after 3 failed trials - automatic P/T consult) Early Mobility note Education/Training</td>
<td>Jennifer Ramos, RN Christopher Force, MD Allison Pratt, PTA Annie Rose Abogadie, RN Mariamma Shaju, RN</td>
<td>Standardize Reduce wasted time</td>
<td>10/1/17</td>
</tr>
<tr>
<td><strong>Fall Safety Care Plan</strong>&lt;br&gt;Intermediate</td>
<td>Decreased awareness of patient current status, lack of family involvement, needed Physical Therapy consults/assessments</td>
<td>Involve all Patient Care Coordinators Standardize form Select 1 location for form placement Add to Rounding each tour</td>
<td>Jennifer Ramos, RN</td>
<td>Standardize Reduce wasted time</td>
<td>8/1/17</td>
</tr>
<tr>
<td><strong>Multidisciplinary Action Plan</strong>&lt;br&gt;Strong</td>
<td>Miscommunication of patient status, equipment (IV, tubing, walkers, long gowns, etc.) Environment (wet floors, etc.)</td>
<td>Improve Fall bundle Establish multidisciplinary team Select champions via Leadership Add additional 'roles'</td>
<td>Leadership Christopher Force, MD Allison Pratt, PTA Annie Rose Abogadie, RN Mariamma Shaju, RN Transportation Mgr. STARRS Mgr.</td>
<td>Standardize process Improve collaboration Standardize designed process</td>
<td>10/1/17</td>
</tr>
<tr>
<td><strong>Rounding</strong>&lt;br&gt;&lt;em&gt;Intermediate (Future Project)&lt;/em&gt;</td>
<td>Intermediate</td>
<td>Sunrise Update</td>
<td>Ron Estrella &amp; PCC</td>
<td>Monitor to ensure continuity and improvement of design process</td>
<td>11/1/17</td>
</tr>
</tbody>
</table>
Safety Care Plan

My Fall Safety Plan

I am a **Fall Risk** because:

- [ ] I have fallen in the past 6 months
- [ ] I have a difficult time walking steady and safely/with assisted device
- [ ] I have taken medication that can make me dizzy or unsteady
- [ ] I am weak/confuse because of my medical condition
- [ ] I have IV lines, tubes and drains that I can trip on
- [ ] Fall is the reason for my hospital stay

To **stay safe** I will do these things:

- Stay sitting in bed, chair, or Commode
- Call for assistance early
- Press the call light for help in bed and Pull call light in bathroom for help
- Wait for help to arrive
- I will ask the staff to help me when they round on me.
- My family members will ask for help to assist me to ambulate or go to the bathroom
- I will write down my toileting times (water pill, diarrhea etc)

**My Care Team** will:

- Respond to my call light for help
- Round on me every hour during the day and every 2 hours at night
- Assist me to get out of bed with meals, bathroom and bathing
- Stay with me at door while I am in the bathroom
- Set an alarm to remind me to stay in bed or remain seated
- Provide me with equipment to assist me out of bed/bathroom
- Provide me with continuous Fall Prevention reminders.

**Education** Provided to me and my family:
Safety Care Plan (continued)

Patient’s Current **Mobility Level** is:
- Bedrest active or passive ROM only
- Cardiac chair with maximum assist only
- Stage 1 - sit edge of bed
- Stage 2 - Bed to chair/Commode
- Stage 3 - Standing
- Stage 4 - Ambulates

Patient’s Current **assistance needed** is:
- Independent
- Minimum assist (1 person or stand by assist)
- Moderate assist (2 person/assistive device)
- Maximum assist (2-3+ person full patient transfer)
- Bed bound (transfer in bed recommended)

**Equipment needed:**
- Bedside commode
- Gait belt
- Walker
- wheelchair
- Sara Steady
- Lift
- Transfer Board

J.Ravens revised 6/27/17
Implementing the Change

• Implementation Dates:
  – Nursing safety care plan: June 2017
  – Automatic generation of PT consult: June 2017
  – Physician Education through mobility flow sheet: Sept 2017
  – Compliance report data generation: July 2017 - current
Results/Impact

• Impact and results will be monitored through process control charts
  – July will serve as our start month as most interventions occurred in this month
Post Intervention Process Control Chart

Falls per 1000 Patient Days on 5ACU during 2017

- UCL: 8.74
- CL: 4.44
- LCL: 0.13

Interventions

Falls

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Interventions
Return On Investment

• The Joint Commission issued a Sentinel Event Alert stating that falls with injury each account for:
  – An average of $14,000 per fall injury
    • 1 fall WITH INJURY prevented on 5 ACU in 6 months
    • Estimated $28,000 per year saved on 5 ACU from prevented injury

• Our interventions can:
  – Decrease the need for 1:1 sitters
    • Based on sitter hours used before and after interventions: $20,958 saved on 5 ACU
  – Improve patient satisfaction
  – Increase CMS star rating
Expansion of our Program and Maintaining the Gains

• If successful:
  – We will offer our interventions as a bundle to other acute care units of this hospital
  – Further tracking of fall rates on a larger population size will help determine validity to our study

• To maintain our gains:
  – Monthly compliance reports are generated and sent to Patient Care Coordinators on 5 ACU
  – Results will be reported to the 5 ACU director
Sources

• “Sentinel Event Alert” Joint Commission, 15 Nov 2017.
  Https://www.jointcommission.org/assets/1/18/SEA_55.pdf
Thank you!

Educating for Quality Improvement & Patient Safety