Case Study: Implementing A Fall Risk Reduction Program
AGENDA

• Housekeeping

• Case study: Methodist Health System Fall Risk Reduction Program

• Event Reports
  • Malfunctioning chair alarm
  • Consider the whole patient when assessing fall risk

• Lessons to share with the community
  • Barriers and Successes in Implementation
Housekeeping

Collecting employee names for Perceptions of Support for Fall Risk Reduction Survey

1. Personnel who provide direct patient care (nursing, therapists, imaging)
2. Personnel who regularly provide services in patient rooms (e.g. housekeeping, phlebotomy)
3. Members of the Fall Risk Reduction Team
4. Senior leaders/managers/supervisors

Combining CAPTURE Falls Lessons Learned with CAH Quality Conference September 2013
Case Study: Methodist Health System

The Fall Risk Assessment includes four components and a critical care option:

1. The Morse Fall Scale (MFS)
2. Medication Predisposing Risk Factors for Falls
3. Known Faller assessment: fallen in the past 30 days; admitted because of a fall or fracture; and/or have they fallen while in the hospital?
4. Number of Falls in past 24 hours
5. Critical Care when patients are on continuous sedation or comatose and the MFS can not be administered.
2012 Fall Committee!!
Sensitivity and Specificity of the MFS

- Comprehensive literature review in 2002
- Morse Fall Scale Selected
- Determining Level of Risk—specificity & sensitivity (cut off score)
- 2003 conducted a *Specificity and Sensitivity of the Morse Fall Scale on Three Medical / Surgical Units* study.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>436</td>
<td>44%</td>
</tr>
<tr>
<td>Female</td>
<td>564</td>
<td>56%</td>
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<tr>
<td><strong>Age</strong></td>
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<td>16-25</td>
<td>30</td>
<td>4%</td>
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<td>26-35</td>
<td>50</td>
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<tr>
<td>36-45</td>
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<tr>
<td>46-55</td>
<td>123</td>
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<tr>
<td>56-65</td>
<td>112</td>
<td>13%</td>
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<td>66-75</td>
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<td>84</td>
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</tr>
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<td>96-100</td>
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<td><strong>Medications Ordered</strong></td>
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<td>0-5</td>
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<td>6-10</td>
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<td>31%</td>
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<tr>
<td>11-15</td>
<td>133</td>
<td>16%</td>
</tr>
<tr>
<td>16-20</td>
<td>49</td>
<td>6%</td>
</tr>
<tr>
<td>21-25</td>
<td>14</td>
<td>2%</td>
</tr>
<tr>
<td>26-30</td>
<td>5</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Variable</td>
<td>Median Score</td>
<td>Number</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td>Fall</td>
<td>60</td>
<td>21</td>
</tr>
<tr>
<td>No Fall</td>
<td>35</td>
<td>979</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>No Fall</th>
<th>Fall</th>
<th>Total**</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>433</td>
<td>3</td>
<td>436</td>
</tr>
<tr>
<td>Female</td>
<td>546</td>
<td>18</td>
<td>564</td>
</tr>
<tr>
<td>Total</td>
<td>979</td>
<td>21</td>
<td>1000</td>
</tr>
</tbody>
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Pearson Chi Square = 7.496, df=1, p=0.006
Severe Risk or Targeted Interventions

When a patient is identified as **Severe Risk** for Fall (**Morse Fall Scale of ≥ 60**) the following interventions are initiated as a “bundle”:

- Communicate fall risk at bedside report and to interdisciplinary staff involved with patient at various handoffs.
- Place yellow fall risk wristband and socks on patient.
- Use a bed exit and chair alarm.
- Check that alarms are working through-out shift on bed and in the chair.
- Do not leave patient unattended in the bathroom or on bedside commode.
Severe Risk or Targeted Interventions (con’t)

- Patient education review with patient and family/significant other.
- Noted on the unit assignment sheet (room numbers listed for all staff to note).
- Relocate patient bed to be near an observational area and or keep patient door and curtain open.
- Ask family members to be present when possible for confused patients (those with delirium and or dementia). Identify and treat underlying cause of delirium.
- Behavioral interventions for patients who are confused can be developed by occupational or recreation therapy to maximize orientation, awareness and function and determine whether gait aids are needed and used correctly.
Known Faller

• Falling LEAF signs are placed on the door and are only for known fallers (within the last 30 days, admitted for a fall/fx or falls in hospital).

• LEAF stands for Lets Evaluate All Falls.
Annual Total Nursing Unit Number of Falls excluding Rehab

- 2007: 262
- 2008: 241
- 2009: 225
- 2010: 213
- 2011: 189
- 2012 thru Aug: 145

Legend:
- # of Falls
- # of Injury Falls
Annual Nursing Unit Fall Rate per 1000 Patient Days excluding Rehab

- 2007: 3.83 falls per 1000 patient days (262 falls)
- 2008: 3.50 falls per 1000 patient days (241 falls)
- 2009: 3.38 falls per 1000 patient days (225 falls)
- 2010: 3.30 falls per 1000 patient days (213 falls)
- 2011: 2.76 falls per 1000 patient days (189 falls)
- 2012 thru Aug: 3.27 falls per 1000 patient days (145 falls)

- Green bars represent Injury Rate per 1000 patient days:
  - 2007: 0.73
  - 2008: 0.6
  - 2009: 0.62
  - 2010: 0.64
  - 2011: 0.62
  - 2012 thru Aug: 1.08

- Blue columns represent Rate per 1000 patient days.
Engaging Staff in the Process and Understanding the Data
To determine the number of falls to meet the fall rate we take the:

Budgeted Patient Days/1000 x NDNQI
Mean = # of falls

**Example:** General Medical Unit 10654 divided by 1000 x 3.64 = 38.78 falls
or <39 falls
Engaging Staff in the Process and Understanding the Data
National Fall Awareness Day
Methodist Case Study References


Contact Deborah.Conley@nmhs.or or 402-354-4661 with questions.
Event Report

Unassisted fall in bathroom reveals judgment and system errors

• 79 y/o male; primary dx influenza A; hx of ischemic stroke with (R) sided weakness

• Initial fall risk assessment results—At high risk due to hx of previous stroke

• Patient rising from toilet at 1550; fell while pulling up pants and sustained mild harm
  • Judgment error—nurse stood outside bathroom to provide privacy
  • System error—is “Do not leave patient unattended in bathroom” a targeted intervention for high risk patients? Need for education regarding common comorbidities for falls?
Common comorbidities that increase fall risk

• 1/3 – ¾ of patients with Parkinson’s disease reported having fallen in the past year.

• 44% of older adults with diabetes reported having fallen in the past year.

• 73% of stroke survivors fell within 6 months after discharge from the hospital and the risk of fracture in the paretic limb was four times greater for stroke survivors than for fallers who were not stroke survivors.

• 55% of persons with peripheral neuropathy reported having fallen within a 6 month time-frame.

• 47% of persons with dementia fell within a 6 month time-frame.
References for Common Comorbidities


Lessons to Share…

• Something important/surprising that you learned during site visit
• A change you have made that is working well
• A change you made that didn’t work well
• Organizational factors that make it easy/hard to implement changes in fall risk reduction
• What can we improve on?
REMINDERS

Monthly Call: March 26, 2013 at 2:00 p.m. CST

Webinar #4: March 13, 2013 at 10:00 a.m. CST
Jane Potter, MD
Integrating Management of Geriatric Syndromes and Frailty into Fall Risk Reduction
CAPTURE Falls
Collaboration and Proactive Teamwork Used to Reduce