Adapting TeamSTEPPS Tools for New Uses: Post-Fall Huddle

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CAPTURE
Collaboration and Proactive Teamwork Used to Reduce

Falls

http://unmc.edu/patient-safety/capturefalls/
Learning Objectives

• Describe the role of teamwork in organizational learning to support fall risk reduction
• Explain how to use a multi-team system to implement inpatient post-fall huddles
• Identify post-fall huddles as a new TeamSTEPPS tool that supports organizational learning about fall risk reduction
• Describe how to conduct an interprofessional post-fall huddle to identify errors in four learning domains: task error, judgment error, coordination error, and system error.
The knowledge, skills, attitudes, language, and coordinating mechanisms inherent in teamwork\(^1\) create the flexibility team members need to manage complexity\(^2\) and learn from experience.\(^3-5\)
• Balance multiple objectives with minimal oversight
• Quickly transition from one situation to another and maintain communication and coordination (shared mental models)
• Integrate perspectives from multiple disciplines
• Collaborate across multiple locations
• Quickly adapt without a pre-existing plan
• Quickly process complex information
The etiology of falls is multifactorial, thus fall risk reduction requires an interprofessional approach. Fall risk has been reduced in studies where interprofessional team members actively engaged in fall risk reduction efforts. An interprofessional team (vs. nursing only) strategy and use of benchmarks have been associated with sustained decreases in fall rates.
Does your fall risk reduction team integrate evidence from multiple disciplines to continually improve fall risk reduction efforts?

- Sometimes/Rarely/Never Integrate Multidisciplinary Evidence (n = 32):
  - Total Falls per 1000 Patient Days: 6.8, p = .030*
  - Injurious Falls per 1000 Patient Days: 4.8

- Always/Frequently Integrate Multidisciplinary Evidence (n = 27):
  - Total Falls per 1000 Patient Days: 2.2, p = .006*
  - Injurious Falls per 1000 Patient Days: 1.0

*Negative binomial model
**Team Reflexivity**

Does your fall risk reduction team…

1. Collect and analyze data regarding fall risk reduction program outcomes?
2. Modify fall risk reduction policies and procedures based on outcome data?
3. Conduct root cause analyses of injurious falls?

*Negative binomial model p=.056*  
*Negative binomial model p=.002*

<table>
<thead>
<tr>
<th></th>
<th>No, Team Does Not Reflect (n = 37)</th>
<th>Yes, Team Reflects (n = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Falls per 1000 Patient Days</td>
<td>6.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Injurious Falls per 1000 Patient Days</td>
<td>2.1</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Negative binomial model
• Teams are more likely to learn from errors and mistakes and adapt their actions to minimize future risks when they reflect on outcome data, and the policies and procedures that produced those outcomes.

• Paradigm shift: Interprofessional fall risk reduction teams should coordinate and facilitate organizational learning and innovation as they implement and evaluate a hospital’s fall risk reduction program.
Fall Risk Reduction Multi-Team System

Coordinating Team = Fall Risk Reduction Team
Holds core team accountable for reliability of processes

Core Team
- Physician
- Nurse performs FRA
- PT consults re mobility
- Pharmacist reviews medications
- All educate patient & family

Ancillary & Support Services
- Radiology is informed of fall risk and transfer strategy during handoff
- Housekeeper can turn on alarms

administration

Patient & Family
Teach back

Contingency Team = Post Fall Huddle

Asks about fall rates
Provides time for coordinating team to meet
Holds coordinating team accountable for auditing reliability of fall risk interventions
Shared Mental Model?

Center of Mass
Old Way vs. New Way Using Post-Fall Huddle

- Forget to mention fall at shift change
- Incient report sent to risk manager
- Complete incident report
- Remind patient to use call light when finished in bathroom
- Patient with cognitive impairment falls in bathroom

Patient with cognitive impairment falls in bathroom.

Complete incident report

Incident report sent to risk manager

Forget to mention fall at shift change

Remind patient to use call light when finished in bathroom

Old Way

RN

PT

Patient

Pharmacist

Caregiver
Role of Coordinating Team

Coordinating Team: Designated leaders who are responsible for managing the operational environment and resources that support the Core Team

- Integrate evidence to support use of post-fall huddle
- Create policy/procedure for use of post-fall huddles
- Train staff to conduct post-fall huddles
- Audit reliability of conducting post-fall huddles
- Collect, analyze, disseminate learning from post-fall huddles
Contingency Team: A time-limited team formed for emergent or specific events and composed of members from various teams.

- Remind cognitively impaired patient to use call light when finished in bathroom
- Implement Mini-Cog to assess cognition
- Patient with cognitive impairment falls in bathroom
- Conduct post-fall huddle; develop shared mental model re: cognitive and mobility impairments
- Obtain bed-side commode, identify need for standard assessment of cognition
- Pharmacists
- PT
- RN
- Caregiver
- Patient
Post-Fall Huddles Overcome Barriers to Learning

• Organizational learning--activities that create shared understanding of causes of errors and what can be done to prevent similar errors in the future

• Barriers to organizational learning
  – Psychological, social, technical, practical

• Different types of work create different contexts for error and learning
# Learning Domains

<table>
<thead>
<tr>
<th>Process Uncertainty</th>
<th>Actor Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low</strong></td>
<td><strong>Low</strong></td>
</tr>
</tbody>
</table>
| *Task Execution*: Individuals perform well understood, routine tasks  
*Task Error*: Individual forgets to turn on bed alarm |
| **High**            | **High**            |
| *Coordination*: Process knowledge high within groups; low between groups  
*Coordination Errors*: Transfer technique not handed off between shifts and/or disciplines; diuretics given at 10:00 p.m. |
| **Low**             | **Low**             |
| *Judgment*: Individuals perform unfamiliar processes that require decision making  
*Judgment Errors*: Individual leaves patient alone in bathroom; do not use gait belt for transfers |
| **High**            | **High**            |
| *System Interaction*: Multiple people involved in new activity  
*System Error*: No policy/procedure to regularly replace batteries in newly acquired chair alarms |
• Of 117 fall events reported 8/12 – 4/13, 47 (40%) included a post-fall huddle

• 13 of 19 project hospitals reported at least 1 huddle
  – Range of huddles per hospital is 1 – 7
  – Median number of huddles = 3

• Presence/absence of injury not significantly related to conducting huddle
  – 43% (18/42) of injurious falls had a post-fall huddle
  – 39% (29/75) of noninjurious falls had a post-fall huddle
Implementation is the hard part...

Not as interprofessional as we would like...

Participation in Post-Fall Huddles by Discipline (n=47)

- Nursing and Patient/Family: 51%
- Nursing + Other Discipline(s): 15%
- Only Nursing: 13%
- Nurse and Therapist: 11%
- Pharmacy: 6%
# Learning Domains of Reported Fall Events

<table>
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<tbody>
<tr>
<td><strong>Low</strong></td>
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</tr>
<tr>
<td><strong>Low</strong></td>
<td><strong>High</strong></td>
</tr>
<tr>
<td><strong>25 Task Execution</strong></td>
<td><strong>Coordination:</strong> Process knowledge high within groups; low between groups</td>
</tr>
<tr>
<td><strong>Task Errors:</strong> bed alarm not on, TABS alarm not in place, Bed-alarm function not checked, CNA did not lock w/c brakes, chair pad not plugged into wall</td>
<td><strong>Coordination Errors:</strong> Transfer technique not handed off between shifts and/or disciplines; diuretics given at 10:00 p.m.</td>
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<td></td>
</tr>
</tbody>
</table>
• 25 task errors reported
  – Bed alarm not on
  – TABS alarm not in place
  – Bed-alarm function not checked
  – CNA did not lock w/c brakes
  – Chair pad not plugged into wall

• Suggested actions to take to prevent future task errors:
  – Include safety device checks with hourly rounding to ensure they are all in working order
  – Emphasize situation monitoring for all personnel who enter the room
Learning Domains of Fall Events

• 11 judgment errors reported
  – Patient with COPD fainted while walking from BR to bed after shower
  – Nurse believed patient understood instructions to call for help
  – Did not take into account sensory deficits
  – Consider use of sitter sooner

• Suggested actions to take
  – Staff education re: sensory deficits, inter-rate reliability of initial fall risk assessment, management of cognitive deficits
  – Change policy: patients at risk of falls cannot be left alone in BR
Learning Domains of Fall Events

• 9 coordination errors reported
  – Fall risk and previous fall not communicated to family
  – Staff unsure of patient’s ability to transfer

• Suggested actions to take
  – Include family’s in education regarding fall risk; especially if family offers to sit with patient
  – Physical therapy conducted transfer training for all nursing personnel

• Suggested consults with PT x 1, pharmacist x 2
Summary

- Conducting post-fall huddles supports immediate learning of front-line staff to address task, judgment, & coordination errors.
- Identification of the situational context in which the error occurs increases the likelihood that suggested solutions address the nature of the initial error.
- Implementation of post-fall huddles consistent with Rogers’ Organizational Innovation Process.

Figure 3. Theoretical Rationale for Approach: Rogers’ Organization Innovation Process
References


References


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