Best Practices in Using Data to Reduce Fall Risk

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http://unmc.edu/patient-safety/capture_falls.htm
Learning Objectives

1. Identify the characteristics of effective event reporting systems
2. Explain how CAPTURE Falls project addresses weaknesses in CAH fall event reporting identified in results from 2011 baseline survey
3. Identify multiple sources of data that may lead to information and knowledge about your fall risk reduction program
4. Explain how to transform data and information about fall events into wisdom that enables you to continuously decrease the risk of falls
Lesson Learned: “Our goal is to decrease injurious falls, but first we had to define and communicate to our staff what an injurious fall is.”
Effective Voluntary Reporting Systems

• Purpose—improve patient safety by sharing information

• Require standardized definitions and data elements that support
  – Internal data collection, aggregation, and learning
  – External benchmarking

• Definition of fall: For the purposes of patient safety, a fall is a sudden, unintended, uncontrolled downward displacement of a patient’s body to the ground or other object.¹ This definition includes unassisted falls and assisted falls (i.e., when a patient begins to fall and is assisted to the ground by another person).
Do you use a specific definition of a fall?

- Non-CAH (47-689 beds, n=14)
- CAHs (12-25 beds, n=56)

*Chi-Square Test With Continuity Correction

*p = .002
### 2011 Baseline Survey: Structure²

<table>
<thead>
<tr>
<th>Elements Consistent with AHRQ Common Format</th>
<th>Fall Event Form</th>
<th>% Non-CAH (n=9)</th>
<th>% CAH (n=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of fall on form</td>
<td></td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Was the fall unassisted or assisted?</td>
<td></td>
<td>44</td>
<td>14</td>
</tr>
<tr>
<td>Fall observed?</td>
<td></td>
<td>100</td>
<td>81</td>
</tr>
<tr>
<td>Observed by whom?</td>
<td></td>
<td>78</td>
<td>76</td>
</tr>
<tr>
<td>Patient sustain injury?</td>
<td></td>
<td>89</td>
<td>78</td>
</tr>
<tr>
<td>Type of injury?</td>
<td></td>
<td>67</td>
<td>70</td>
</tr>
<tr>
<td>Patient activity prior to fall?</td>
<td></td>
<td>44</td>
<td>97</td>
</tr>
<tr>
<td>Risk assessment performed prior to fall?</td>
<td></td>
<td>56</td>
<td>27</td>
</tr>
<tr>
<td>Patient determined to be at risk for a fall?</td>
<td></td>
<td>67</td>
<td>51</td>
</tr>
<tr>
<td>Identify protocols interventions being used</td>
<td></td>
<td>89</td>
<td>73</td>
</tr>
<tr>
<td>On medication(s) known to increase risk for a fall?</td>
<td></td>
<td>56</td>
<td>68</td>
</tr>
<tr>
<td>Did medication contribute to fall?</td>
<td></td>
<td>11</td>
<td>14</td>
</tr>
</tbody>
</table>
Risk of falls may be greater in CAHs than non-CAHs

1. CAHs care for a higher proportion of older adults
2. CAHs provide skilled nursing care with goal of rehabilitation to a higher functional status
3. CAHS have limited resources to devote to quality improvement
4. CAHs are less likely to externally benchmark fall rates
5. CAHs continue to receive payment for healthcare acquired conditions including falls with injury
Effective Reporting Systems

• General characteristics of effective event reporting systems

1. Nonpunitive...reporters do not fear retaliation
2. Confidential...identities of patient, reporter, organization protected and never revealed to 3rd party
3. Independent...those receiving reports have no power to discipline
4. Expert Analysis...those evaluating reports have expert systems and clinical knowledge
5. Timely...evaluation of reports is timely
6. Systems oriented...focus on processes not people
7. Responsive...those receiving reports provide feedback to those reporting...closed loop communication
2011 Baseline Survey: Reflection/Sensemaking

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?

<table>
<thead>
<tr>
<th></th>
<th>Total Falls per 1000 Patient Days</th>
<th>Injurious Falls per 1000 Patient Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, Team Does Not Reflect (n = 37)</td>
<td>6.5 p=.056*</td>
<td>4.7</td>
</tr>
<tr>
<td>Yes, Team Reflects (n = 23)</td>
<td>2.1 p=.002*</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Negative binomial model*
Have we supported your sensemaking?

**CAPTURE Falls Event Report Summary**

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Falls</th>
<th>Assisted</th>
<th>Non-Assisted</th>
<th>Injurious</th>
<th>Non-Injurious</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 2012</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Sep 2012</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Oct 2012</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Nov 2012</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Dec 2012</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Jan 2013</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Feb 2013</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Apr 2013</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>May 2013</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Jun 2013</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Aug 2013</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sep 2013</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Oct 2013</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>19</strong></td>
<td><strong>12</strong></td>
<td><strong>5</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

**Aggregate Data Summaries**

- **March 26, 2013 - Initial Lessons Learned from Event Reports**
- **May 28, 2013 - Update on Post-Fall Huddles**
- **June 25, 2013 - More Lessons Learned from Event Reports**
- **October 22, 2013 - Second Update on Post-Fall Huddles**

**Error Type**

- **Task**
- **Judgment**
  - Patient left unattended on bedside commode. Is a policy in place to not leave patients at risk of falling unattended while toileting?
- **Care Coordination**
Feedback During Upcoming Call

• Progress report prior to final quarterly call
  – Compare priorities from initial action plan to changes made in your fall risk reduction program
  – Summarize information from your reported fall event data
  – Discuss your ideas for continued improvement and sustainment during the call
Multiple Sources of Data

http://www.unmc.edu/patient-safety/cf_tool_inventory.htm

Lesson Learned: “It’s more than just the numbers of falls.”
<table>
<thead>
<tr>
<th>Source</th>
<th>Purpose</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capture Falls Gap Analysis Score Card</td>
<td>Identify gap between your current structures and processes and best evidence to develop an action plan</td>
<td>Fall Risk Reduction Team (FRRT)</td>
<td>Annually</td>
</tr>
<tr>
<td>Fall Event Report</td>
<td>Data Collection</td>
<td>Core Team</td>
<td>After each fall</td>
</tr>
<tr>
<td>Post-Fall Huddle</td>
<td>Immediate learning and action planning</td>
<td>Core Team</td>
<td>After each fall</td>
</tr>
<tr>
<td>Prospective Audit of Interventions</td>
<td>Determine reliability of interventions... close the loop with core team</td>
<td>FRRT</td>
<td>Regularly (2x/week; weekly, monthly)</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose</td>
<td>Who</td>
<td>When</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------</td>
<td>--------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>TPQ</td>
<td>Does teamwork support fall risk reduction</td>
<td>FRRT</td>
<td>Every 18 – 24 mos.</td>
</tr>
<tr>
<td>Conversations about data and processes</td>
<td>Ongoing learning and improvement</td>
<td>FRRT</td>
<td>Monthly</td>
</tr>
<tr>
<td>Individual RCA</td>
<td>Learn from an injurious fall</td>
<td>Those involved in the fall</td>
<td>Each fall &gt; minimal physical injury</td>
</tr>
<tr>
<td>Aggregate RCA</td>
<td>Learn from multiple non-injurious falls (minimum of 5, maximum of 20)</td>
<td>FRRT &amp; Core Team</td>
<td>Regularly depending upon volume</td>
</tr>
<tr>
<td>Benchmarking</td>
<td>Reveal scope of risk and supports prioritization of resources.</td>
<td>FRRT</td>
<td>Annually</td>
</tr>
</tbody>
</table>
Context of Fall Risk Reduction

Structure of Fall Risk Reduction
- Accountability structure
- Risk and performance assessment tools

Process of fall risk reduction
- Frequency of risk assessment
- Fall risk reduction team processes
- Core team processes: Universal and Targeted Interventions

Outcomes of Fall Risk Reduction
Fall Event Reporting Form

- Patient demographics, dates, location, description
- Impact of event on patient
- Context of event
  - Activity at time of fall
  - Interventions in place
- Cause of event including contributing factors
  - Patient level
  - Organizational level
- Methods to prevent and/or mitigate a future occurrence
Post-Fall Huddle

• Purpose: Immediate learning by core team
• How could the fall have been prevented?
• Who was in the huddle?
• What was discussed?
  – Task errors... “Bed alarm was not turned on.”
  – Judgment errors... “Patient was not deemed a fall risk although he was a 2-assist to get to the bathroom. A bedside commode likely would have been safer.”
  – Care coordination errors... “Need to communicate fall risk across shifts.”
  – Need for consults? (PT/OT, pharmacy?)
• Actions to be taken
Prospective Process Audit

- **Purpose:** Determine reliability of interventions...closed loop communication with core team
- **Conducted by members of fall risk reduction team...**customize to your context
  - Risk assessment completed
  - Interventions documented
  - Patient/family education documented
  - Signage...signs, wrist band
  - If high risk...bed and chair alarm in place
  - Environment
  - Gait belt
Part III: The DIKW Hierarchy

Collecting, interpreting, and learning from data is the foundation of quality improvement and patient safety

Lesson learned: “...Our processes cannot just be reacting to a fall. It has to begin with data from audits so we know if we are creating an environment that decreases task errors, reports assisted falls and decreases injury.”
Access Data Entry Form
## Access Data Table

<table>
<thead>
<tr>
<th>Event_ID</th>
<th>Report_Date</th>
<th>Report_indv</th>
<th>Pt_MRn</th>
<th>Pt_Admdt</th>
<th>Pt_Age</th>
<th>Pt_Age_gt90</th>
<th>Pt_Gen</th>
<th>Princ_Diag</th>
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<tbody>
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<td>23162</td>
<td>2/13/2013</td>
<td>62826</td>
<td>1/7/2013</td>
<td>99</td>
<td>0</td>
<td>1 Congestive heart failure</td>
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<td></td>
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<tr>
<td>31130</td>
<td>1/18/2013 SM</td>
<td>31130</td>
<td>1/7/2013</td>
<td>79</td>
<td>0</td>
<td>1 Fall, dehydration</td>
<td></td>
<td></td>
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<tr>
<td>73193</td>
<td>3/26/2013 AB</td>
<td>2876</td>
<td>3/26/2013</td>
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<td>0</td>
<td>2 Chest pain</td>
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<td>8/21/2012</td>
<td>1000028</td>
<td>8/19/2012</td>
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<td>0</td>
<td>2 Temp OB- vaginal</td>
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<td></td>
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<tr>
<td>21194</td>
<td>3/13/2013 KB</td>
<td>000066168</td>
<td>3/8/2013</td>
<td>79</td>
<td>0</td>
<td>2 Rehab status post left shoulder arthropathy</td>
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<td></td>
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<tr>
<td>31213</td>
<td>3/13/2013 SM</td>
<td>908445</td>
<td>3/8/2013</td>
<td>65</td>
<td>0</td>
<td>2 Accidental falls, recurrent</td>
<td></td>
<td></td>
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<tr>
<td>68211</td>
<td>2/15/2013</td>
<td>17276</td>
<td>2/13/2013</td>
<td>65</td>
<td>0</td>
<td>2 R CVA with left hemiparesis</td>
<td></td>
<td></td>
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<tr>
<td>68210</td>
<td>3/20/2013</td>
<td>342168</td>
<td>3/19/2013</td>
<td>84</td>
<td>0</td>
<td>2 Mastectomy</td>
<td></td>
<td></td>
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<tr>
<td>68208</td>
<td>9/29/2012</td>
<td>7186</td>
<td>8/30/2012</td>
<td>99</td>
<td>0</td>
<td>2 Cerebrovascular accident</td>
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<tr>
<td>68209</td>
<td>1/12/2013</td>
<td>5488</td>
<td>1/4/2013</td>
<td>83</td>
<td>0</td>
<td>2 Right hip</td>
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<tr>
<td>37133</td>
<td>1/30/2013 K Christian</td>
<td>20535</td>
<td>38</td>
<td>0</td>
<td>1 Cellulitis bilat, feet, IV antibiotics, Paraplegia</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>37190</td>
<td>3/13/2013 S Banks</td>
<td>22128</td>
<td>90</td>
<td>0</td>
<td>2 CHF, Hyponatremia</td>
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<td></td>
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<tr>
<td>23214</td>
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<td>62918</td>
<td>3/27/2013</td>
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<td>0</td>
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<tr>
<td>78163</td>
<td>3/4/2013 D Soffin</td>
<td>004068522</td>
<td>6/19/2012</td>
<td>99</td>
<td>0</td>
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<td></td>
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<td>78166</td>
<td>3/4/2013 DS</td>
<td>004073149</td>
<td>8/24/2012</td>
<td>24</td>
<td>0</td>
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<td>30072</td>
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<td>90</td>
<td>0</td>
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<td>66574</td>
<td>70</td>
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<tr>
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<td>2/13/2013</td>
<td>66574</td>
<td>70</td>
<td>0</td>
<td>2</td>
<td></td>
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<td>18148</td>
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<td>42888-520417</td>
<td>2/16/2013</td>
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<td>3476</td>
<td>1/8/2013</td>
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<td>0</td>
<td>2 Pneumonia, congestive heart failure</td>
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<td></td>
</tr>
<tr>
<td>64128</td>
<td>11/20/2012 KP</td>
<td>17600</td>
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<td>0</td>
<td>1 Hypertension, diabetes, congestive heart failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64127</td>
<td>11/22/2012 KP</td>
<td>753754</td>
<td>11/20/2012</td>
<td>67</td>
<td>0</td>
<td>2 Hospice respite-breast cancer</td>
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<td>64126</td>
<td>11/20/2012 KP</td>
<td>14051</td>
<td>10/19/2012</td>
<td>66</td>
<td>0</td>
<td>1 Metastatic renal cell cancer, anemia, fever</td>
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<tr>
<td>43134</td>
<td>2/4/2013 ES</td>
<td>34469</td>
<td>1/21/2013</td>
<td>79</td>
<td>0</td>
<td>1 Fever, influenza A, right sided weakness</td>
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<tr>
<td>19100</td>
<td>12/18/2012 AH</td>
<td>27604</td>
<td>12/14/2012</td>
<td>64</td>
<td>0</td>
<td>1 Head injury</td>
<td></td>
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</tr>
</tbody>
</table>
DIKW Knowledge Hierarchy

DIKW Model

Fall Event Reporting System

Data Analysis

Sense Making

Change Fall Risk Reduction Practices

Wisdom

Knowledge

Information

Data

Reflect/ make sense “Know Why and Take Action”

Place patterns into context “Know How”

Aggregate data “Know Who, What, When, Where, How Many”

Record observations in database “Know Nothing”

Past Experience

Future

Actions

Fall Event Reporting System

Data

Fall Reports

Patient Falls

Sent Making

Reflect/ make sense “Know Why and Take Action”

Place patterns into context “Know How”

Aggregate data “Know Who, What, When, Where, How Many”

Record observations in database “Know Nothing”

Past Experience

Future

Actions
• Data-Symbols that represent objects, events, and their environment; what we observe
• Information-Data that are connected and reduced into patterns to answer questions...who, what, when, where, how many
• Knowledge-How a system works; the ability to control a system and give instructions in its use
• Wisdom-Answers “WHY?” The ability to use judgment to implement the most appropriate behaviors and systems to prevent problems
Puzzle Analogy

- Each piece of information can be thought of as one puzzle piece
- The pieces have to be brought together to create the whole...knowledge
It’s a System

Systems dynamics model for fall risk reduction

- Effective Fall Risk Reduction Practices
- Patient Falls
- Report Fall Event
- Aggregate Data and Make Sense of Events
- Implement Changes Based on Analysis

Feedback Loop
What is the Opposite of Wisdom?

Data vs. Missing Data

Information vs. Mis-information

Knowledge vs. Ignorance

Wisdom vs. Learned Helplessness/Apathy

Successful fall risk reduction programs change the attitude that little can be done to prevent falls.
One Hospital’s Gap Analysis 2011

- Context of fall risk reduction
  - 22.5% of county pop >= 65 years

- Structure of fall risk reduction
  - Nobody accountable for fall risk reduction
  - No definition of a fall
  - Using Morse Risk Assessment & Clinical judgment

- Process of fall risk reduction
  - Assess risk on admission only
  - Do not modify program based on data
  - No purposeful rounding
  - Lack of interdisciplinary input

- Outcomes...total and injurious fall rates significantly > CAH benchmarks
One Hospital’s Current Information

How Many Falls and Were They Injurious or Not?

- **Noninjurious**
- **Injurious (Mild Harm)**

Number of Events (n=17)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Noninjurious</th>
<th>Injurious (Mild Harm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Aug-Oct 2012 (n=5)</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Q2 Nov 2012 - Jan 2013 (n=2)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q3 Feb - Apr 2013 (n=1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q4 May - Jul 2013 (n=3)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Q5 Aug-Oct 2013 (n=3)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Q6 Nov - Dec 2013 (n=3)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

What does this information tell you about the hospital’s processes to decrease fall risk?
One Hospital’s Current Information

Was the patient known to be at risk?

Association Between Fall Risk Assessment and Injury

- **At Risk for Fall**
  - Noninjurious: 9
  - Injurious (Mild Harm): 4

- **Not at Risk**
  - Noninjurious: 1
  - Injurious: 1

- **Fall Risk Unknown**
  - Noninjurious: 1
  - Injurious: 1

What does this information tell you about the hospital’s processes to decrease fall risk?
What happened?

### Description of the Fall

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Falls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient found on floor</td>
<td>8</td>
</tr>
<tr>
<td>Patient reported fall</td>
<td>4</td>
</tr>
<tr>
<td>Patient calling for help, found on floor</td>
<td>2</td>
</tr>
<tr>
<td>Patient with staff</td>
<td>2</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
</tr>
</tbody>
</table>

What does this information tell you about the hospital’s processes to decrease fall risk?
One Hospital’s Current Information

What happened?

Association between Assisted Falls and Injury

<table>
<thead>
<tr>
<th>Number of Falls N=17</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>Assisted 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unassisted 9</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noninjurious</td>
<td>Injurious (Mild Harm)</td>
</tr>
</tbody>
</table>

What does this information tell you about the hospital’s processes to decrease fall risk?
Who fell?

Number of Falls (n=17)

- Admit Dx: Other: 6
- Admit Dx: Missing: 6
- Admit Dx: SOB & Pneumonia: 2
- Admit Dx: Fracture: 3

Characteristics of Patients who Fell

- Male: 3 Noninjurious, 4 Injurious (Mild Harm)
- Female: 8 Noninjurious, 2 Injurious (Mild Harm)
- Age < 65 years: 2 Noninjurious, 1 Injurious (Mild Harm)
- Age 65 - 80 years: 5 Noninjurious, 2 Injurious (Mild Harm)
- Age > 81 years: 4 Noninjurious, 3 Injurious (Mild Harm)

What does this information tell you about the hospital’s processes for fall risk reduction?
What was the patient trying to do?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Falls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulating</td>
<td>3</td>
</tr>
<tr>
<td>Transferring</td>
<td>3</td>
</tr>
<tr>
<td>Toileting</td>
<td>2</td>
</tr>
<tr>
<td>Changing Position</td>
<td>1</td>
</tr>
<tr>
<td>Dressing / Undressing</td>
<td>1</td>
</tr>
<tr>
<td>Other (Sleeping)</td>
<td>2</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
</tr>
</tbody>
</table>

What does this information tell you about the hospital’s processes for fall risk reduction?
One Hospital’s Current Information

Where and when did the fall occur?

- Bedside: 7 falls
- Bathroom: 3 falls
- Near bedside chair: 2 falls
- Patient room (missing): 5 falls

Number of Falls (n=17)

Between Midnight and 8 a.m.: 7 falls
Between 8 a.m. and 4 p.m.: 5 falls
Between 4 p.m. and Midnight: 5 falls

What does this information tell you about the hospital’s system for fall risk reduction?
One Hospital’s Current Information

How did the fall occur? (Patient-Level Contributing Factors)

<table>
<thead>
<tr>
<th>Contributing Factor</th>
<th>Number of Falls (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications</td>
<td>11</td>
</tr>
<tr>
<td>Cognitive impairment</td>
<td>6</td>
</tr>
<tr>
<td>Weakness</td>
<td>6</td>
</tr>
<tr>
<td>Impulsive</td>
<td>5</td>
</tr>
<tr>
<td>Sensory Impairment</td>
<td>4</td>
</tr>
<tr>
<td>Incontinence/Urgency</td>
<td>4</td>
</tr>
<tr>
<td>Bed/Chair Alarm</td>
<td>3</td>
</tr>
<tr>
<td>Physical surroundings cluttered</td>
<td>1</td>
</tr>
</tbody>
</table>

Contributing factors may reflect frailty

What does this information tell you about the hospital’s system for fall risk reduction?
One Hospital’s Current Information

How did the fall occur? (Organizational-Level Contributing Factors identified in Post-fall Huddle)

- Bed Alarm not turned on: 2
- Gait belt not used: 1
- Unattended while toileting: 1
- No alarms used: 1
- Only one bed rail up: 1
- Transferring in cluttered environment: 1
- Unknown - Missing Post Fall Huddle: 8

What does this information tell you about the hospital’s system for fall risk reduction?
One Hospital’s Current Knowledge

• How are patients falling?...Summary
  Older adults who are cognitively impaired, impulsive, on multiple medications, and are weak fall when staff are unaware they are moving.

• Where are our gaps? What have we done/not done??
  – Changes focused on structures...risk assessment
  – Interventions not yet linked to risk factors (no hourly rounding, no prospective audits of processes, little integration of pharmacy and rehab therapies)

• What should we do next?
  Recognize cognitive impairment, review medications, anticipate patient needs (hourly rounding), be aware when patient’s are mobile without assistance (family/sitters/alarms). link risk factors with interventions and proactively assess reliability
Why did this patient fall?

• Because their center of mass was outside their base of support

  a. [Diagram of standing figure]

  b. [Diagram of figure with center of mass outside base of support]

  c. [Diagram of figure falling]

  the center of gravity

• Why was their center of mass outside their base of support?
  – Sensory impairment (vision, vestibular, somatosensation)
  – Motor impairment (weakness, coordination, motor planning)

• AND....how could we have structured the environment to account for these impairments?
Universal Fall Risk Wisdom

Alarms alert us to patient movement...We need to assess how reliably we use bed and chair alarms on patients with cognitive impairment or who may overestimate their abilities.

Purposeful hourly rounding allows us to anticipate patient needs...We need to assess how reliably we use purposeful hourly rounding, especially during afternoons and nights when staff are less likely to be in patient rooms.

“A clever person solves a problem. A wise person avoids it.”
– Albert Einstein
Fall risk reduction team holds core team accountable for reliably using universal and targeted interventions for patients who have difficulty maintaining their center of mass inside their base of support ...

- Hourly rounding
- Low bed
- Nonskid footwear
- Patient/family education
- Top bed rails up
- Signage
- Alarm usage

- Gait belt
- Assisted transfers
- Assisted ambulation
- Supervised toileting
- Sitters
- Medication Review
- PT/OT evaluation
Summary and Next Steps

• Your hospital’s culture and project activities are intended to create an effective fall event reporting system

• Baseline data from our 2011 survey revealed that small rural hospitals in NE can benefit from support to create an effective fall event reporting system

• There is a random component to falls, so we must consider multiple sources of data (structure, processes, and outcomes) to assess the quality of a hospital’s fall risk reduction program
Summary and Next Steps

• Having the wisdom to improve your fall risk reduction program requires
  – Asking questions to guide your aggregation of data into information
  – Team sensemaking and a gap analysis to transform information into knowledge that answers: How do falls happen in our system?
  – The wisdom/will to take action

• Next Steps beginning with evaluation of webinar
  – Understand your DIKW needs
  – Determine essential data elements needed to collect on reporting form to create information
  – Measure your desire to sustain and expand a fall event reporting system for small rural hospitals in Nebraska


4. UNMC. College of Medicine. Patient Safety. CAPTURE Falls Tool Inventory. Available at: http://www.unmc.edu/patient-safety/cf_tool_inventory.htm


6. Rowley J. Where is the wisdom that we have lost in knowledge? Journal of Documentation. 2006;62:251-270.


Please complete the webinar evaluation by clicking on the link below:

https://www.research.net/s/capturefalls-eval9

We value your input!
CAPTURE Falls
Collaboration and Proactive Teamwork Used to Reduce

http://unmc.edu/patient-safety/capture_falls.htm