Engaging Patients in Patient Fall Prevention

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Fall Prevention at UIHC

I. Create Awareness & Interest
II. Build Knowledge & Commitment
III. Promote Action & Adoption
IV. Pursue Integration & Sustained Use

Purpose/Specific Aim

To identify factors that strengthen and sustain evidence-based fall prevention strategies for hospitalized adult oncology patients by examining the following fall risk and prevention factors:

- **Patient Factors**
  - Fall characteristics from incident reports 2009-2012
  - Patient Interviews regarding perspectives of fall risk and prevention strategies

- **Nursing Factors**
  - Fall prevention knowledge and self-efficacy
  - Documentation in medical record

- **Organizational Factors**
Background

- Fall prevention is a patient safety priority in every institution, yet 3% – 20% of hospitalized patients fall (The Joint Commission, 2010).

- Hospital fall prevention programs must address patient risk factors (e.g., 45% of falls are related to toileting) and context (Krauss, et. al., 2007; Milisen, et. al., 2012; Tzeng & Yin, 2012; Volz & Swaim, 2013).

- Limited evidence exists to specifically guide sustained use of fall prevention strategies for oncology patients (Cameron, et. al., 2010; Choi & Hector, 2012; Clyburn & Heydemann, 2011; Davies, Tremblay, & Edwards, 2010; Kline, et. al., 2008; Spyridonidis & Calnan, 2011; Stenberg & Wann-Hansson, 2011; Stern & Jayasekara, 2009; Tucker, et. al., 2012).

- Capturing patients’ perceptions is important but largely missing to help guide practice recommendations and fall prevention program planning (Evron, Schultz-Larsen & Fristrup, 2009; Nyman & Victor, 2012; Potter, et. al., 2012; Wiens, et. al., 2006).
Conceptual Framework

Methods

- Human subjects' protection approval obtained from IRB
- Describe patients’ perspectives of their fall risk and prevention strategies while hospitalized
  - 40 patients participated in brief, structured interviews
  - 4 oncology units
- Convenience sample of adult oncology patients who:
  - Had been hospitalized for less than 3 days
  - Were receiving inpatient cancer treatment
  - Communicated in English
Methods (cont.)

- Describe patient characteristics related to falls
  - Documentation in incident reports 2009-2012
  - Sample
    - Oncology patients who fell while inpatients

- Describe nurses’ knowledge (Bonner, et. al., 2007) and self-efficacy (Dykes, et. al., 2011) related to fall prevention
  - Staff survey
  - Sample
    - Registered nurses and nursing assistants working on an oncology unit
Methods (cont.)

- Describe interdisciplinary team members perspectives of organizational context related to fall prevention
  - **Staff survey** (Ganz, et. al., 2013)
    - Sample
      - Registered nurses and nursing assistants working on an oncology unit
  - **Clinician focus groups & interviews**
    - Sample
      - Staff nurses, nurse managers, advanced practice nurses, medical directors, physical therapists, social workers and pharmacists working on an oncology unit
Results from Patients

Interviews
Results – Patient Demographics

- Participants
  - n=39
  - Mean age=58.85 years (SD=13.09); range = 22-84 years
Results – Patient Interviews

- Fall in Past 5 Years: 44%
- A Fall with Injury: 44%
- Risk of Falling in Hospital: 42%
- Risk of Injury if Fell: 81%

- No: 56%
- No (Most Salient): 58%

Legend:
- Yes
- No
- No (Most Salient)
Results – Patient Interviews (cont.)

- Adequate Hearing & Vision: 74% Very Important, 26% Not Important
- Assistance to the Bathroom: 44% Very Important, 36% Not Important
- Daily Nursing Assessment: 63% Very Important, 37% Not Important
- Reporting a Change in Health: 97% Very Important, 3% Not Important

- Very Important
- Not Important
- Not At All Important (Most Salient)
Results – Patient Interviews (cont.)

- Participants reported the most important thing they could do to prevent falling:

- Get Help: 30%
- Be Careful (Most Salient): 27%
- Use Fall Prevention Equipment: 13%
- Other: 13%
<table>
<thead>
<tr>
<th>Results from Nursing Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurses &amp; Nursing Assistants Survey</td>
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</tbody>
</table>
## Results – Nursing Staff Demographics

<table>
<thead>
<tr>
<th></th>
<th>Registered Nurses (RN)</th>
<th>Nursing Assistants (NA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of RNs or NAs</td>
<td>n=52</td>
<td>n=18</td>
</tr>
<tr>
<td>Age in Years:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M (SD) Range</td>
<td>33.58 (12.01)</td>
<td>31.72 (12.16)</td>
</tr>
<tr>
<td></td>
<td>22-59</td>
<td>19-58</td>
</tr>
<tr>
<td>f (%) Female</td>
<td>50 (96.2%)</td>
<td>14 (77.8%)</td>
</tr>
<tr>
<td>f (%) White</td>
<td>49 (94.2%)</td>
<td>16 (88.9%)</td>
</tr>
<tr>
<td>M (SD) Years as RN or NA</td>
<td>8.52 (9.75)</td>
<td>7.04 (8.97)</td>
</tr>
<tr>
<td>M (SD) Years as RN or NA on Current Unit</td>
<td>5.88 (6.96)</td>
<td>2.26 (3.01)</td>
</tr>
<tr>
<td>Highest Level of Education:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f (%) Some College/Associate Degree</td>
<td>13 (25%)</td>
<td>16 (88.9%)</td>
</tr>
<tr>
<td>f (%) Bachelor of Science or Higher</td>
<td>38 (73.1%)</td>
<td>2 (11.1%)</td>
</tr>
<tr>
<td>f (%) Specialty Certification</td>
<td>15 (28.8%)</td>
<td>10 (55.6%)</td>
</tr>
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</table>
# Results – Nursing Staff Knowledge and Self-Efficacy

<table>
<thead>
<tr>
<th>Results</th>
<th>Registered Nurses</th>
<th>Nursing Assistants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Possible Score</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>M (SD)</td>
<td>20.13 (1.56)</td>
<td>18.17 (3.40)</td>
</tr>
<tr>
<td>Range</td>
<td>15-23</td>
<td>6-21</td>
</tr>
<tr>
<td>Self-Efficacy:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Possible Score</td>
<td>84</td>
<td>72</td>
</tr>
<tr>
<td>M (SD)</td>
<td>31.73 (8.40)</td>
<td>19.76 (7.35)</td>
</tr>
<tr>
<td>Range</td>
<td>14-54</td>
<td>12-40</td>
</tr>
</tbody>
</table>
### Results – Select Organizational Assessment (Nursing Staff)

<table>
<thead>
<tr>
<th>Organizational Assessment Items</th>
<th>Registered Nurses M (SD) n=49</th>
<th>Range</th>
<th>Nursing Assistants M (SD) n=17</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familiar with role in preventing falls.</td>
<td>3.43 (.61)</td>
<td>1-4</td>
<td>3.65 (.79)</td>
<td>1-4</td>
</tr>
<tr>
<td>Unit expert who maintains fall prevention awareness and knowledge.</td>
<td>3.08 (.73)</td>
<td>1-4</td>
<td>2.65 (1.12)</td>
<td>1-4</td>
</tr>
<tr>
<td>Prompts in place to ensure care is carried out appropriately for fall prevention.</td>
<td>3.33 (.59)</td>
<td>1-4</td>
<td>3.12 (1.05)</td>
<td>1-4</td>
</tr>
<tr>
<td>Electronic patient record facilitates completion of fall prevention activities.</td>
<td>3.04 (.79)</td>
<td>1-4</td>
<td>2.82 (1.02)</td>
<td>1-4</td>
</tr>
<tr>
<td>Use of fall interventions regularly reported to staff.</td>
<td>3.00 (.68)</td>
<td>1-4</td>
<td>3.18 (.88)</td>
<td>1-4</td>
</tr>
<tr>
<td>Committee monitors care processes to prevent falls.</td>
<td>3.25 (.67)</td>
<td>1-4</td>
<td>3.00 (.82)</td>
<td>1-4</td>
</tr>
<tr>
<td>Hospital leadership engaged in process of sustaining fall prevention program.</td>
<td>3.17 (.60)</td>
<td>1-4</td>
<td>3.18 (.95)</td>
<td>1-4</td>
</tr>
</tbody>
</table>
Results from Interdisciplinary Team

Focus Groups & Interviews
Qualitative Methods

- Focus groups & interviews
- Purposeful sampling (maximum variation)
- Inclusion Criteria:
  - Interdisciplinary team member from an inpatient oncology units
  - Willing to participate & be audiotaped
- Interview process
  - Semi-structured; one hour
  - Transcribed and verified for accuracy
- Rigor & trustworthiness
- Thematic analysis – preliminary results
Results – Interdisciplinary Team Participants

Participants (n = 24)

- Staff Nurses: 7
- Advanced Practice Nurses: 1
- Nurse Managers: 2
- Physician Assistants: 1
- Hospitalist: 1
- Physical Therapist: 1
- Pharmacist: 5

Total: 24
Results – Interdisciplinary Team

- Core Theme: “Working Hand-in-Hand”
  - Successes
  - Opportunities
Core Theme – “Working Hand-in-Hand”

- “we use housekeepers...they have a tendency to know who is on fall risk and will come and get them if they see them start to get out of bed ...”
  Nurse H

- “the unit clerks have started putting the ... uh... call light system on the bed, too... they text page on the Voalte and so that if a bed alarm is going off ...they’re (unit clerks) are being more verbal ...”
  Nurse Manager A
Core Theme – “Working Hand-in-Hand”

“before I leave the room, if I recognize that they’re at an increased fall risk for any reason, I’d actually contact – either speak in person with the nurse or the nursing assistant”

Physical Therapist

“one of my staff physicians – we showed him a fall leaves sign like – we’re like, ‘what does this mean to you?’ and he was like, ‘autumn...is it a decoration?’

Nurse G
Core Theme – “Working Hand-in-Hand”

- When asked ‘who is responsible’
  - “I would say us. Possibly – the hospitalist or myself or (other) PA if they’re working the weekend. It doesn’t typically go to our staff.”

Physician Assistant A
Patient Falls

Incident Reports
Results – Patients with a Fall

- Incident reports from 2009-2012 (n = 232 falls)
- Reported
  - Demographics: DRG and length of stay
  - Risk factors and score
  - Interventions in place
  - Patient activity at time of fall
- Analysis is underway
Conclusions

- Patients did not see themselves as at-risk for falling.
  - Patients often rated bathroom assistance as not at all important despite it being a top contributor to inpatient falls.
- Nurses have competing demand and workload issues that make fall prevention difficult to manage.
- Interdisciplinary team planning could improve
**Implications for Practice**

- Patients' perceptions are important for implementing and sustaining an inpatient fall prevention program.
- Translation of evidence-based fall prevention requires active strategies addressing fall risk assessment, interventions for prevention and use of falls data.
- Sustaining EBP fall prevention requires all clinicians to build the work into their normal communication, planning and workflow.
Recommendations

- Patients and caregivers should be engaged in a conversation at time of admission and repeated (based on patient condition) about fall risk and strategies to prevent falls.
  - Development of motivational interviewing skills among staff may facilitate patient engagement.
- A systems perspective is essential to promote a context for EBP fall prevention.
Questions

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