Reducing Falls in Outpatients: Evaluation of Fall Risk Assessment and Identification of Fallers

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DNP Capstone Project

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The Problem

- 80 Injurious Falls July-September, 2011

- Patients age 50-79

- Even Female/Male Distribution

- Accidental Falls Occurred Most

- Fall Factors-Tripping, Footwear, Gait/Mobility
Evidence of the Problem

- Falls are Problem at International, National and Regional Levels
- One in Three Adults Age 65 or Older Fall Each Year
- 2 Million Adults Age 65 or Older are Treated in an Emergency Room Each Year Related to Falls
- Falls are the Leading Cause of Injury and Injury Related Death in Older Adults
- 9 out of 10 Hip Fractures are the Result of a Fall
- In the UK Falls are the Leading Cause of Mortality Resulting in Injury in People Age 75 and Older

(CDC; Jorgensen, 2011; US Dept of Health & Human Services, 2011; Swann, 2010)
Significance of the Problem

- Falls are Priority Among Joint Commission Safety Goals
- Falls Are the Leading Cause of Accidental Death in Americans Age 65 and Older
- Treatment Costs Associated With Fall Related Injuries Projected to Reach $54.8 Billion by the Year 2020
- An Estimated 29% to 92% of Older Adults Develop a Fear of Falling Again After a Fall—This Phenomenon is Significant Since Inactivity is an Outcome
- Falls Are a Safety Issue Impacting Patient Care and Nursing Practice
- Etiology of Falls and Fall Prevention Significant to Practicing Nurses and Nurse Educators
- Staff Education Key to Identification of Patients at Risk for Falls and Fall Prevention in Any Setting

(Joint Commission; US Department of Health & Human Services; Guwaldi & Keller, 2009; Jorgensen, 2011; Seifert, 2011)
Purpose

• Survey Nursing Staff in an Internal Medicine Outpatient Clinic to Evaluate the Utilization of the Connecticut Collaboration for Fall Prevention Tool for Patients Age 65 and Above in the Internal Medicine Outpatient Clinic

• Determine if the Screening Tool is Beneficial in Identifying Patients at Risk for Falls

• Determine Outcomes Associated With Issues in Utilization of the Connecticut Collaboration for Fall Prevention Tool; Strength of the Tool in Identification of Patients Who Have Fallen; If the Tool Helped Change Behaviors of Patients or Nursing Staff and Prevent Falls
Framework

Rosswurm and Larrabee Model

1. Assess need for change in practice
   - Include stakeholders
   - Collect internal data about current practice
   - Compare internal data with external data
   - Identify problem

2. Link problem intervention and outcomes
   - Use standardized classification systems and language
   - Identify potential interventions and activities
   - Select outcomes indicators

3. Synthesize best evidence
   - Search research literature related to major variables
   - Critique and weigh evidence
   - Synthesize best evidence
   - Assess feasibility, benefits, and risk

4. Design practice change
   - Define proposed change
   - Identify needed resources
   - Plan implementation process
   - Define outcomes

5. Implement and evaluate change in practice
   - Pilot study demonstration
   - Evaluate process and outcome
   - Decide to adapt, adopt, or reject practice change

6. Integrate and maintain change in practice
   - Communicate recommended change to stakeholders
   - Present staff inservice education on change in practice
   - Integrate into standards of practice
   - Monitor process and outcomes

Source: Urol Nurs © 2005 Society of Urologic Nurses and Associates
Assumptions

• Challenges Associated With Improvement Projects

• Improvement Project Success Driven by Team Sharing Mutually Aligned Goals

• Falls are Preventable

• Joint Commission Standards

• Potential Barriers Associated with Change
## Literature Review

### Search Results

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<th>Category</th>
<th>CINAHL</th>
<th>PubMed</th>
<th>The Cochrane Library</th>
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<td>Outpatient Falls</td>
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<tr>
<td>Fall Prevention</td>
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Synthesis of Literature

• Falls are Problematic at the Regional, National and International Levels (Arroyo, 2011; Boyd & Stevens, 2009; Center for Disease Control and Prevention, 2011; Jorgensen, 2011; Seifert, 2010)

• Fall Related Injuries are the Leading Cause of Accidental Death in Americans Age 65 and Older (U.S. Department of Health and Human Services, 2011)

• Direct Costs Associated with Treatment of Fall Related Injuries in Americans Age 65 and older are Projected to Reach $54.8 Billion by the Year 2020 (Gulwadi & Keller, 2009)

• An Estimated 29% to 92% of Older Adults Who Have Fallen Develop a Fear of Falling Again (Jorgensen, 2011)

• The Numbers of Injurious Falls Occurring in Outpatient Settings is Unknown (Boyd & Stevens, 2009)

• A Component of Fall Prevention is Establishment of a Culture of Safety (Wexler, O’Neill D’Amico & Rolston, 2011)

• Fall Prevention Needs to go Beyond Fall Screening and Fall Risk Assessment and Focus on Individual Screening with Follow-up Assessment Protocols Linking Interventions to Specific Modifiable Risks (Quigley, 2009)
Methodology

Project Setting
• Internal Medicine Outpatient Clinic in a Tennessee Medical Center

Project Population
• Nursing Staff Employed in the Internal Medicine Outpatient Clinic in a Tennessee Medical Center
Methodology

Sampling Procedures

• Internal Medicine Outpatient Clinic Pilot Clinic Area for Fall Risk Assessment and Identification of “Fallers”
• Questionnaire to Nursing Staff Over 4-6 Week Period During Spring 2012
• Goal Was to See if Nursing Staff Could Better Identify Fallers Using the Screening Tool
Methodology

Resource Requirements and Source

- Administrative Director
- Quality Consultant
- Data Base Analyst
- Medical Information Specialist
## Methodology

### Budget

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<th>Personnel</th>
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<th>Hourly Salary</th>
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<td>Data Base Analyst</td>
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<tr>
<td>Medical Information Specialist</td>
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Project Implementation

- Internal Medicine Outpatient Clinic
- December, 2011 Screening Age Lowered to Age 65 in all Outpatient Clinics
- February 15, 2012 – Survey Distributed to 8 Internal Medicine Outpatient Clinic Nursing Staff
- March 22, 2012 - Survey Responses Complete
Project Implementation

Survey Questions:

• Identification of Patients who are at Risk for Falling
• Problems Associated with the Screening Tool
• Problems Associated with Identification of Patients at Risk for Falling
• Environmental Conditions in the Outpatient Clinic Contributing to Falls
• Does the Age of the Patients Screened Need to be Lower than Age 65?
Results

Nursing Demographics

- Eight Nursing Staff Completed a 10 Question Survey
- 1 RN
- 1 RN BSN
- 3 LPNs
- 1 Medical Assistant
- 2 Nursing Assistants

- Length of Service in Internal Medicine Outpatient Clinic 3 Months to 17 Years
- Average Length of Service 3.4 Years
- Mean Number of Service Years-2

Satisfaction with Survey Tool

- 1 Extremely Satisfied
- 4 Dissatisfied
- 2 Neutral
Results
Questionnaire Responses

Environmental Conditions Contributing to Falls

• Lack of Handrails
• Tripping Over the Floor
• Tripping Over One’s Feet
Results
Questionnaire Responses

Patients at Risk for Falls

- Elderly
- Handicapped
- Acutely Ill
- Polypharmacy
- Head Trauma
- Ear Problems
- Medical Conditions Affecting Strength, Balance, Gait, Proprioception, Cognition or Vision

- Hypertension
- Psychotropic Medications
- Diuretics
- Vasodilators
- Recently Hospitalized with Prolonged LOS
- Post-op Spinal Surgery
- Osteopenia/Osteoporosis
- Weakness
- Palliative Care
- F/U from ER Visits
Results

Questionnaire Responses

Best Ways to Identify Patients at Risk for Falls

- Medication Lists
- Patient and/or Family Report
- Observation
- Color Code Patient Chart
- Patient Summary for Diagnosis such as CVA, Parkinson’s Disease, Diabetes, Arthritis

• Visible Bruising
• Recent Hospitalization with Long LOS
• Recent Major Surgery or Spinal Disease
• Perception
• Open Discussion About Personal Needs to Prevent Falls
• Unsteady Gait
• Patients in Wheelchairs
• Patients Using Canes
Potential Improvements to Fall Risk Assessment Tool

• Include Patients Below Age 65
• Include Education as Best Prevention
• Reduce Number of Questions on Survey Tool
• Target Individual Patients
• Ask What Patients are Doing to Prevent Falls
Results
Questionnaire Responses

Aspects of Screening Tool that Nursing Staff Favor

• Efficiency
• Forms Help them Remember What to Ask
• Calls Attention to Intrinsic Factors
• The Tool asks Direct Questions
• Patients Keep the Form for Future Reference
Results
Questionnaire Responses

Undesirable Features of Screening Tool

• Time Used to Complete Form

• Does Nothing for Education or Prevention for Patients Under Age 65

• Questions Not Individually Targeted
Is Age 65 Young Enough For Assessing Fall Risk?

• It’s Fine
• Age 60 Better Related to Hip/Knee Replacements
• Age Should be Only One Qualifying Factor
• Yes, Unless History of Falls
• Yes, Unless Polypharmacy
• Yes, Unless Diagnosis Increases Fall Risk
Discussion

• Screening Tool Age Reduced From Age 70 to 65

• Lowering Screening Age is Relevant to Literature Review Since Each Year 1 in 3 Adults Age 65 or Older Will Fall

• No Reported Falls in Internal Outpatient Clinic During January to March 2012

• Difficulties of Project Attributed to Communication Issues

Arroyo, 2011; Boyd & Stevens, 2009; Center for Disease Control and Prevention, 2011; Jorgensen, 2011; Seifert, 2010
Limitations

• Survey Group Represented 1 Out of 120 Clinics

• 5 out of 8 Respondents to Survey had Actually Used the Screening Tool

• Only 2 Respondents Were RNs and Had Not Used the Tool

• It is Unknown if the Nursing Staff Utilizes the Screening Tool Correctly and Consistently

• Unable to Access a Larger Pool of Survey Respondents
Applications

• Continued Use of the Connecticut Collaboration for Falls Prevention Tool in the Outpatient Clinics if Used Consistently and Correctly Can Impact Practice, Patient Education and Research

• The Screening Tool Can Identify Patients at Risk for Falls

• The Screening tool Can be Used For Patient Education

• The Screening Tool Can Cue Nursing Staff to Conduct Research Related to Individual Patient Needs
Summary and Conclusion

Recommended Steps to Improve Future Performance in Utilization of the Connecticut Collaboration for Falls Prevention Tool

• Screening Tool Needs to be Completed by a RN
• RNs Need to be More Involved with Patients as they Complete the Screening Tool in Order that Further Assessment can be Done Based Upon Results of the Tool Findings
• Staff Education Related to Etiology of the Screening Tool
• Staff Training on Utilization of the Screening Tool
• Workplace Design
• Addition of a Malnutrition Screening Tool
• Creation of Patient Education Pamphlet
• Post Signage Related to Fall Prevention in Clinic Areas
References


Questions