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

Katherine Pendleton-Romig DNP, RN

Ida V. Moffett School of Nursing Samford University DNP Capstone Project

STTI International's 24th International Nursing Research Congress Prague, Czech Republic July 25, 2013

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

Medscape@ www.medscape.com 1. Assess 2. Link 3. Synthesize 4. Design 5. Implement 6. Integrate need for problem best evidence practice change and evaluate and maintain intervention change in change in change in and outcomes practice practice practice Include Use Search Define Pilot study Communicate stakeholders standardized research proposed demonstration recommended Collect classification Evaluate change to literature change internal data systems and related to Identify stakeholders process and major variabout current Present staff language needed outcome practice Identify ables · Decide to inservice resources Compare Critique · Plan implepotential adapt, adopt, education on and weigh internal interventions mentation or reject change in data with and activities evidence practice practice process external data Select Synthesize Define Integrate into change Identify outcomes indibest evidence standards of outcomes · Assess feasibilproblem cators practice ity, benefits. Monitor and risk process and outcomes

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

	CINAHL	PubMed	The Cochrane Library
Falls	12,739	34,096	5
Outpatient Falls	11	458	25
Fall Prevention	762	7,179	29

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

Personnel	Function	Hourly Salary	Total Hours	Total Expense
Quality Consultant	Procures Data/ Consultation	\$40.00	25	\$1,000.00
Data Base Analyst	Pulls Data From Risk Management System	\$25.00	1	\$25.00
Medical Information Specialist	Locates Charts for Chart Review	\$15.00	2	\$30.00
Administrative Director	Consultation	\$75.00	15	\$1,125.00
Total				\$2,180.00

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?

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 17Years
- Average Length of Service 3.4 Years
- Mean Number of Service Years-2

Satisfaction with Survey Tool

- 1 Extremely Satisfied
- 4 Dissatisfied
- 2 Neutral

Questionnaire Responses

Environmental Conditions Contributing to Falls

- Lack of Handrails
- Tripping Over the Floor
- Tripping Over One's Feet

Questionnaire Responses

Patients at Risk for Falls

- Elderly
- Handicapped
- Acutely III
- 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

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

Questionnaire Responses

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

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

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

Questionnaire Responses

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

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

- Boyd, R., & Stevens, J. (2009). Falls and fear of falling: Burden, beliefs and behaviors. *Age and Ageing, 38,* 423-428.
- Centers for Disease Control and Prevention. (2011). http://www.cdc.gov/Features/OlderAmericans/
- Delbaere, K., Crombez, G., Van Haastregt, J., & Vlaeyen, J. (2009). Falls and catastrophic thoughts about falls predict mobility restriction in community-dwelling older people: A structural equation modeling approach. *Aging and Mental Health*, 13, 587-592.
- Downing, W. (2011). Preventing falls: How to monitor risk and intervene. *Nursing & Residential Care, 13,* 82-84.
- Gulwadi, G., & Keller, A. (2009). Falls in healthcare settings. *Healthcare Design*, 28-34.
- Johansen, A., Dickens, J., Jones, M., Richmond, P., & Evans, R. (2011). Emergency department presentation following falls: Development of a routine falls surveillance system. *Emergency Medicine Journal, 28,* 25-28.
- Kennedy, A. (2010). A critical analysis of the NSF or older people standard 6: Falls. *British Journal of Nursing*, 19, 505-509.
- Kulik, C. (2011). Components of a comprehensive fall-risk assessment. Best Practices for Falls Reduction: A Practical Guide. *American Nurse Today,* 6-7.
- Li, W., Keegan, T., Sternfeld, B., Sidney, S., Quesenberry, C., & Kelsey, J. (2006). Outdoor falls among middle-aged and older adults: A neglected public health problem. *American Journal of Public Health*, 96, 1192-1200.

References

- McCarter-Bayer, A., Bayer, F., & Hall, K. (2005). Preventing falls in acute care: An innovative approach. Journal of Gerontological Nursing, 31, 25-33.
- NDNQI Patient Falls Indicator. (2006). Elements associated with patient falls. Retrieved from http://www.nursingquality.org
- Olanrewaju, O. (2011). Preventing falls when pushing people in wheelchairs. *Nursing and Residential Care,* 13.
- Payson, C., Currier, A., & Steelman, M. (2011). Focusing on staff awareness and accountability in reducing falls. Best practices for falls reduction: A practical guide. *American Nurse Today,* 8-10.
- Perell, K. (2002-2003, Winter). Assessing the risk of falls: Guidelines for selecting appropriate measures for clinical practice settings. *Generations*, *26*, 66-68.
- Quigley, P. (2009). Prevention of fall-related injuries: A clinical research agenda 2009-2014. *Journal of Rehabilitation Research and Development*, 46, vii-xii.
- Quigley, P. (2011). Current and emerging innovations to keep patients safe. Best practices for falls reduction: A practical guide. *American Nurse Today*, 14-17.
- Rosswurm, M. & Larrabee, J. (1999). A model for change to evidence-based practice. *Journal of Nursing Scholarship, 31,* 317-322.
- Seifert, K. (2010). We're not falling for that: Preventing falls in the ambulatory setting. *American Academy of ambulatory Care Nursing*, 32, 7-11.

References

Swann, J. (2010). Simple ways to prevent falls. British Journal of Healthcare Assistants, 4, 166-169.

The Joint Commission. (2008). http://www.jointcommission.org/standards

Wexler, S., O'Neill D'Amico, C., & Rolston, E. (2011). Creating a culture of safety: Building a sustainable falls-reduction program. Best practices for falls reduction: A practical guide. *American Nurse Today,* 11-13.

Zant, W. (2009). Reducing falls among outpatients. American Journal of Nursing, 109, 41-42.

Zoltick, E., et al. (2011). Dietary protein intake and subsequent falls in older men and women: The Framingham Study. *Journal of Nutritional Health Aging*, 15, 147-152.

Questions

