



# Falls Prevention Educational Program

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#### Background & Significance

##### Prevalence of Falls

- > Deaths
  - > Globally: 40%
  - > Nationally: 24,669 in 2009
  - > Locally: 28 between 1994-2001 in Valdosta, GA
- > Cost
  - > Globally: > \$240 billion by 2040
  - > Nationally: \$28.2 billion in 2010
    - > \$162 billion = lost quality of life costs
  - > Locally: \$214 million annually in Georgia from 1999-2001
- > Frequency
  - > 1/3 adults ≥ 65 fall at least once annually
  - > Primary cause of nonfatal injuries treated in ER for ages birth to 14 and ≥25 years old in 2009
  - > 1525 ER visits for persons ≥18 secondary to fall related injuries
  - > 1<sup>st</sup> month after discharge from acute care facility correlates with 15% increase in fall related hospital readmission
  - > A majority of the falls are foreseeable and avertable

##### Effects of falls

- > Increases
  - > morbidity and mortality rates
  - > Deterioration in health status, lifestyle, & quality of life
  - > Nursing home placement
  - > Psychological issues
    - > Fear of falling
    - > Anxiety, depression, self-isolation, vulnerability
- > Reduces
  - > Activity levels/mobility
  - > Independence

##### Educational Interventions

- > Promotes self-efficacy
- > Reduces fear
- > Addresses barriers to improve compliance
- > Enhances fall risk knowledge
- > Facilitates changes in behaviors and attitudes
- > Can reduce falls when a component of multifactorial intervention

#### Aim

##### Quality Improvement:

- > To provide an individualized, fall prevention educational program to patient, family members and/or caregivers with the overall goal of reducing falls in the community setting.

#### Methodology

##### Design:

##### Theoretical Underpinnings: Health Belief Model

##### Components

- > Perceived susceptibility, severity, benefits, & costs
- > Motivational & Enabling factors (cues to action)
- > Incorporates the educational recipients' point of view when considering severity, frequency, and perceived risk factors of falls and potential benefits and barriers to fall prevention interventions

##### Quality Improvement-Outcomes focus: IOM Aims

##### > Safety

- > Assessment of knowledge deficit to individualize education
- > Increase knowledge facilitating better decisions
- > Increase awareness of fall risk factors

##### > Patient Centered

- > Active listening & cooperation with patient to establish goals
- > Focus on patient's needs
- > Provide list of community resources

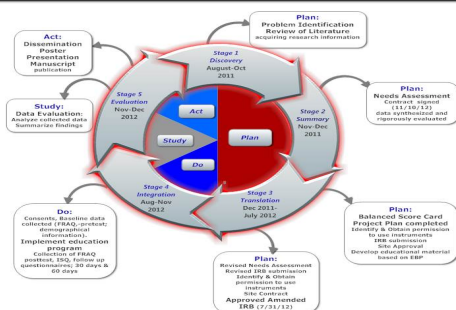
##### > Effectiveness

- > Validation through EBP fall prevention interventions & education
- > Identify fall risk factors
- > Reduction in falls
- > Implementation if fall prevention intervention

##### > Equality

- > Opportunity provided to all individuals who met the AAN criteria for fall risk screenings

Figure 1: Ott Quality Improvement Framework (modified ACE Star Model & Model of Improvement)

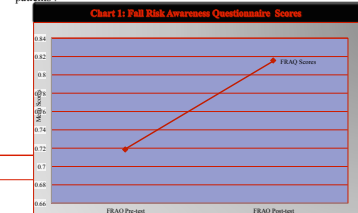


#### Setting:

The project was implemented at a privately owned, outpatient physical therapy clinic in Valdosta, Georgia, USA.

#### Sample:

The project consisted of eight patients who are community dwelling (private residence or assisted living) individuals age 18 and older who have been referred for outpatient therapy and meet the established criteria per the American Academy of Neurology (AAN) for assessing fall risks in patients.



#### Results

##### Fall Risk Awareness

A ten percent increase in FRAQ scores were noted following the educational program (See Chart 1).

##### Patient Satisfaction

The very satisfied was the overall consensus toward the presentation and content of the information regarding:

- > the explanation of fall risk factors (75%),
- > types of fall prevention resources available (75%),
- > practical day to day recommendations (75%),
- > explanation of fall outcomes (62.5%),
- > recommendations on lifestyle changes (75%)
- > overall information provided (75%)
- > No patients were unsatisfied or very unsatisfied. (See Chart 2).

##### At home interventions

Multiple "implementable" home

##### interventions were identified:

- > Removing throw rugs and clutter from the house
- > 50% implemented lifestyle changes
- > 50% participated in regular exercise classes
- > 75% had annual eye exams

##### Falls

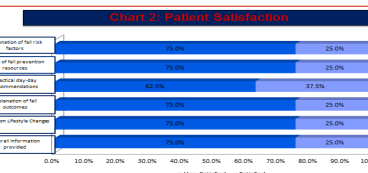
Primary objective: to decrease the number of falls sustained in community dwelling individuals.

Initial report: 4 falls within the last 2 years; 2 falls within last 12 months

30 day follow up post educational intervention: 0 falls

#### Figure 2: Evaluation Summary

Goals	Evaluation	Outcomes
1) Increase awareness of fall risk factors 2) Patient and family members satisfied with education 3) Provide beneficial resources list 4) Decrease falls 5) Decrease Fall Injuries & Readmissions by providing education on EBP fall prevention interventions 6) Implementation of fall prevention intervention 7) To provide all patients who meet criteria the opportunity to participate in educational program	1) Fall Risk Assessment Questionnaire 2) Information Satisfaction Questionnaire Follow up Telephone Questionnaire 3) Falls Checklist 4) Outcomes: patient's number of falls within last year 5) 30 & 60 days Post-discharge Questionnaire 6) Implementation of fall prevention intervention 7) AAN Falls Risk Assessment Guidelines	1) 100% increase in Awareness Scores between pre and post tests 2) 75% very satisfied, 25% Satisfied with overall program No negative feedback 3) All participants receive resource handout 4) Decrease in the number of falls by 12.5% 5) No falls leading to medical treatment hospitalizations or readmissions 6) Has implemented at least one fall prevention intervention since 30 day educational session 7) 8 patients completed study



#### Conclusion:

This quality improvement project demonstrates an educational intervention can:

- > increase fall risk knowledge
- > promote fall prevention interventions
- > maintain patient satisfaction
- > reduce the number of falls

##### Barriers overcame:

- ✓ having a small patient population
- ✓ using follow up phone calls instead of face to face interviews
- ✓ scheduling difficulties with outpatient therapy & follow up phone calls
- ✓ phone call reception and distractions.

##### Future considerations:

- \*Administration of follow up questionnaires at PCP or specialist visit.

\*A majority of the falls are foreseeable and avertable. The primary objective is to provide effective, efficient, evidence-based education that empowers and motivates patients, families, and caregivers to increase awareness and implement fall prevention techniques at home.

#### Sustainability

Falls are a significant problem for the healthcare system. As the population ages, the problem will only escalate. This QI project identifies that repeated educational sessions in conjunction with appropriate physical activity i.e. physical therapy, may make a difference in patients' lives. This QI project can be foundational for future studies to build upon or simply to initiate conversations between healthcare providers and patients about falls. Conversations and education can increase fall prevention awareness and in turn, reduce falls, one patient at a time.