

## We're Not Falling For That: Implementing a Process Improvement Plan to Reduce Falls in an Ambulatory Setting

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## Objectives

- Provide a definition of falls
- Describe intrinsic and extrinsic risk factors related to falls
- Implement the PDCA method to reduce the incidence of falls
- Describe an Ambulatory Falls Risk Assessment Tool and Post-Fall Reporting Form
- Describe a falls data collection method
- Identify the components of a Fall Prevention Program for the ambulatory setting

## Getting a grasp on falls

- Falls are the leading cause of injury-related death and non-fatal injuries in persons over 65 years old
- Approximately 30% of community dwelling older adults fall every year
- 10% result in serious soft tissue injuries
- 40-70% of elderly people have a fear of falling

CDC 2008

## More reasons to prevent falls

- More than 90% of hip fractures among adults 65 or older are caused by falls
- 1 in 5 hip fracture patients die within a year of their injury
- Falls are the 6<sup>th</sup> most common cause of sentinel events

CDC 2008

## National Patient Safety Goal

- Goal 9 – Reduce the risk of patient harm resulting from falls
- Joint Commission advocates for institution-wide risk assessment for falls and documentation of a fall prevention program

## Defining the problem - falls

- What is the scope of the problem?  
**What** is a fall?  
**Where** do falls happen?  
**When** do falls happen?  
**Why** do falls happen?  
**Who** is falling?  
**How** many falls are occurring?

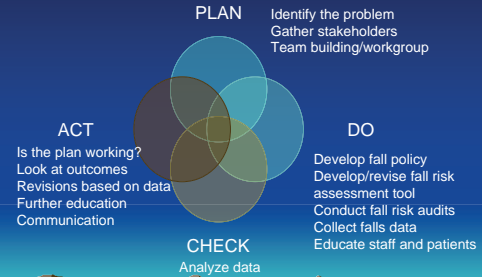
## What is a fall?

### Definition of a Fall in Ambulatory Setting

- “An unplanned descent to the floor (or extension of the floor, e. g. trash can or other equipment) with or without injury to the person, and occurs within an ambulatory setting. All types of falls are to be included whether they result from physiologic reasons (fainting) or environmental reasons (slippery floor). Includes assisted falls (when a staff member attempts to minimize the impact of the fall).”

Adapted from the NDNQI definition of a fall

## Plan: Identify the Problem - PDCA



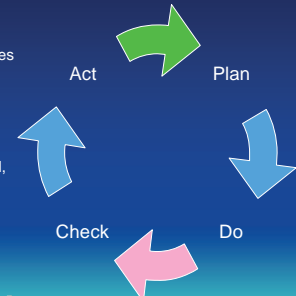
## Basic Assumptions of PDCA

- Decisions should be based on facts instead of hunches and intuition
- People who perform the work know it best
- Teams can have more success than individuals working alone
- Teams need to be trained in problem-solving processes
- It helps to display information graphically

Sandras WA, 1995  
Walton, M. 1990

## The PDCA Cycle

- Cycle is continuous
- Overlapping among the stages
- Planning for change or improvement constantly
- Evaluate whether or not the change has had the desired effect
- Improvement is implemented, then refined or rejected
- If successful – communicate throughout organization



## Planning

- Build a team to examine the issue
- Include key stakeholders
- Multidisciplinary members
  - Leader/Chairperson – CNS
  - Quality Management
  - MET (Medical Emergency Team nurse)
  - Physical Therapist
  - Nursing Education Specialist (2)
  - Staff Nurses
  - Nurse Manager – Orthopedic department



## Ambulatory Falls Workgroup

- Meet monthly
- Develop ambulatory fall report form
- Review falls data
- Review Fall Risk Assessment Audits
- Review/revise Ambulatory Fall Policy
- Explore methods to reduce incidence of falls

NO fall is a great fall!



Prevention of falls is KEY!

### Recognize who is at Risk

**Intrinsic factors:** Based on individual or disease state

Physical function: Poor vision, muscle weakness	Gait and/or balance problems
Medications: Antihypertensives, Psychotropics, anti-epileptic, sedatives and hypnotics, polypharmacy	Dizziness (Syncope)
Problems with bladder and/or bowel control	Fall within the last 12 months
Altered mental status (confusion)	Fear of falling "Fallophobia"


### Extrinsic factors - environmental

- Wet/slippery floor
- Equipment in the way
- Tripping on an object on the floor
- Cane, walker or crutches out of reach
- Inadequate lighting in room
- Poor footwear (non-supportive, slippers)

### Fall Risk Assessment Tool (for ambulatory setting)

- Multiple tools available for inpatient setting (Hendrich II Model, Morse scale)
- Difficult to find validated tool in literature for ambulatory setting
- Developed our own

### Mayo Clinic Ambulatory Fall Risk Assessment Tool



### Completing the Fall Risk Assessment Tool

- Joint Commission requires that fall assessment be done in areas that see patients on a regular basis (i.e., repeat appointments) and are high risk area for falls
- 4 areas identified in our clinic:
  - Hematology/Oncology Unit
  - OPIV (Outpatient IV therapy)
  - Physical Therapy department
  - Radiation Oncology

## Reassessment of fall risk

- Physical Therapy reassessment every 30 days
- Radiation Oncology at the first management teaching appointment
- Whenever there is a significant change in the patient's condition:
  - Recent history of falls
  - Change in cognitive impairment/dementia
  - Change in functional or mobility (gait) problem
  - Balance impairment

## Fall Risk Assessment Audit Tool

- Fall risk assessment completed & documented
- Was fall risk identified?
- Should patient be identified as fall risk and wasn't?
- Appropriate interventions documented?
- Was there a change in patient's status?
- Reassessment of fall risk completed and documented?

## Ambulatory Fall Report Form

- Demographics/general information
- Contributing factors
  - Symptoms prior to fall
  - Use of assistive devices
  - Disability present
  - Activity just prior to fall
  - Equipment involved with fall
  - History of falls
  - Appointment/procedure prior to fall
  - Was the fall a MET call? (Medical emergency nurse called?)
  - Was the person injured?
  - Treatment (if any) provided

## Staff and Patient Education

- Mayo nurses participated in the NQF (National Quality Forum) Scholars Program 2008-2009
- Focus on fall prevention
- Developed evidence-based falls project

## The PICO question



- P** - Patient, population or problem
- I** - Intervention
- C** - Comparison
- O** - Outcomes

## Initial PICO question

- Will interdepartmental communication of patients at risk for falls reduce the incidence of falls?
- Extensive literature search – did not find evidence for this intervention

## New questions evolved- focused on education

PICO question #1:

- Does staff education about syncope as a risk factor for falls decrease the incidence of falls secondary to syncope?

30% of all ambulatory falls can be related to syncope. One study showed a decrease in falls after staff education on syncope & falls. (Peterson, R. & Berns, S.)

## We're not falling for that! Staff education program

- Targeted all laboratory and radiology staff
- Expanded to Primary Care Practice Clinics at two locations
- Falls prevention presentation for orientation of new staff
- Falls mandatory on-line education –all staff
- Future - teach volunteers and general service personnel fall prevention

## Curriculum

- Statistics and consequences of falls
- Syncope as a risk factor for falls with lab draws and procedures
- Identify intrinsic and extrinsic factors
- Interventions to prevent falls
- What to do if a fall occurs
- Reminder of policy/procedures

## Outcomes of staff education

- Results of post quiz showed improvement in knowledge regarding causes of falls and identifying prevention methods
- Lab staff shared interventions they have used to prevent a fall
- Important question to ask –  
**Have you ever felt faint before, during or after a blood draw?**



## Ambulatory Falls Prevention Guide

- Wallet sized card
- Yellow – represents “fall risk”
- List of risk factors for falls
- List of “what you can do to prevent falls”

**Bold reminder:**

**Communicate with other staff if patient is a fall risk or has fallen!**

## Ambulatory Falls Prevention Guidelines Card

Who is at risk for falls?	What can you do to prevent falls?
<b>Patients who:</b> <ul style="list-style-type: none"><li>• are confused</li><li>• have impaired judgment</li><li>• are highly anxious</li><li>• are unable to walk independently</li><li>• use a cane, wheelchair, walker or other assistive device</li><li>• have attached equipment such as oxygen or IV</li><li>• are over age 65 or under age 4</li><li>• have sensory deficits</li><li>• have poor vision</li></ul>	<ul style="list-style-type: none"><li>• Remove any obstacle in patient's path</li><li>• Assist patient to a chair</li><li>• Offer a wheelchair if appropriate</li><li>• Be sure assistive device is within reach</li><li>• Assist patient walking with equipment</li><li>• Alert next provider that patient requires assistance</li></ul>

**Communicate with other staff if patient is a fall risk or has fallen!**

## PICO question #2

Does pre-admission fall risk education of patients decrease the incidence of falls post-operatively?



## Patient Education

- Face-to-face education with orthopedic patients on prevention of falls
- Patients given fall prevention education materials:
  - Fall and Injury Prevention During Your Hospital Stay
  - Preventing Falls in the Hospital
  - Preventing Falls at Home

## Results so far

- No falls in 6 months for orthopedic pre-knee replacement surgery patients who received intensive patient education pre-operatively

## Gathering the baseline data

- **Where** are the falls occurring?
- **When** are the falls occurring?
- **Why** are the falls occurring?
- **Who** is falling?

## Data Collection

- Falls data obtained from:
  - Occurrence reports
  - Post-fall report form
  - MET nurse reports
  - Security reports

## Challenges in collecting data

- Clear definition of a fall
- Accurate and timely reporting of falls
- Categorize falls by type of fall and injury - need to adopt common language
- Do not have the same measurement as inpatient (i.e. – falls per patient days)

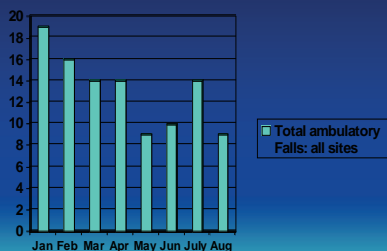
## Check: Falls Data Collection

- Currently use excel spreadsheet
- Quality Management Nurse compiles data
- Plan to convert to MIDAS in the future

## Check: Data Collected

- Who fell: Patients, visitors, volunteers, and employees
- Location of fall
- Description of fall
- Injury (if any) – rank the injury level
- Intervention (if any)

## 2009 Fall Data: Total Falls



## NDNQI Patient Fall Indicator – Injury level

Level of injury is a **required** data element

- None – patient had no injuries resulting from the fall
- Minor – resulted in application of a dressing, ice, cleaning of a wound, limb elevation, or topical medication
- Moderate – resulted in suturing, application of steri-strips, skin glue or splinting
- Major – resulted in surgery, casting, traction, or required consultation for neurological or internal injury
- Death – patient died as a result of injuries sustained from the fall (not from physiologic cause of fall)

From: NDNQI

## Act: Plan to expand patient education

- Explore methods to educate more patients in the clinic setting
- Provide “Preventing Falls at Home” pamphlet to all patients on initial visit
- Planning for pre-op class for patients
- Possible “Preventing Falls” class for patients at risk for falls (include family or caretaker)

## Looking to the future

- Develop an electronic Fall Risk Assessment tool for new EMR (Cerner)
- Fall Risk Alert on main page – accessible by all health care providers and ancillary staff who provide patient care
- Emphasize the **value** of intra- and interdepartmental communication of fall risk and falls



## Celebrate successes



## But don't stop there - more work to be done

- Analyze data – look for ways to improve processes and performance
- Develop/revise policies and procedures
- Communicate new initiative:
  - At staff meetings
  - At management meetings
  - Via employee newsletter or flyers
- Empower staff to make a difference!

## Future Direction

- Complete the development of an Ambulatory Fall Risk Environmental Assessment Tool
- Develop MIDAS database of all ambulatory falls to facilitate reporting
- Implement Fall Reporting Form throughout all ambulatory sites
- Continue with chart audits to 4 designated areas
- Consider expanding fall risk assessment tool in more ambulatory areas

## Teamwork Gets the Job Done!



## References

- CDC – Centers for Disease Control (2008) Falls Among Older Adults: An Overview. Accessed at <http://www.cdc.gov/HomeandRecreationalSafety/Falls/adultfalls.html>
- National Center for Patient Safety (2009). VHA NCPS Fall Prevention and Management. Accessed from [http://www.va.gov/NCPS/CogAids/Fall Prevention](http://www.va.gov/NCPS/CogAids/Fall%20Prevention)
- Peterson, R. & Berns, S. (2006) Prevention and Education to decrease patient falls due to syncope. *Journal of Nursing Care Quality*, 21 (4), 331-334.
- Wright, S., Goldman, B., & Beresin, N. (2007) Three essentials for successful fall management: Communication, Policies and Procedures and Teamwork. *Journal of Gerontological Nursing*, 42-48.