PREVENTING FALLS

A Gentiva Presentation

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Objectives

- The learner will understand the definition of a fall and be able to verbalize the effect of a fall on the patient, caregiver and healthcare costs.
- The learner will be able to list the common types of falls, the hazards of frequent falls and the internal and external factors related to falls.
- The learner will differentiate between various risk assessments tools and explain the importance of risk assessment related to fall prevention.
- The learner will name interventions and how to apply interventions for fall reduction.
- The learner will discuss interventions to reduce injuries related to falls.

Definition of a Fall

- Fall - A sudden uncontrolled, unintentional, downward displacement of the body to the ground or other objects.
  - Excluding falls resulting from violent blows or other purposeful actions

Un-witnessed Fall - a person/patient is found on the floor and neither the patient nor anyone else knows how he or she got there.

Statistics

- 15% of reason for for Emergency Room visits for patients 65 and older [2]
- One out of three adults, aged 65 and older fall each year [1]
- Fall related deaths for 65 or older population have been on the rise over the past decade [1]
- The most common cause of traumatic brain injuries (TBI) occur from falls.
  - Cause of 46% of fatal falls [1]
- In 2002, Direct medical costs related to falls totaled $2 billion for fatal falls [1]
  - $19 billion for non fatal falls
- Men fall 49% more than often than women
  - Men are more likely to die from falls [1]
- Fall related fractures are more than twice as high for women as for men [1]
- In one year, an average of 15% of falls occurred in the hospital [3]
- A person who has experienced a fall, is 8x more likely to fall again within a year.

Common Times to Falls

- Toileting
- Transferring
- Walking to the Bathroom
- Transferring from Chair
- Walking in hallways
- Household walking (without A.D)
- Rolling out of bed
- Attempting to get out of bed
- Overall, greatest number of falls occur at night.

Factors that Increase Fall Risk

- Past Falls is a predictor of the Future
- Fear of Falling
  - Compensatory strategies
    - Postural compensation
    - Behavioral compensation
    - Avoidance Behavior
  - FEAR OF FALLING
- Focus on Fall Prevention/Reduction
  - Reduction of Injury.

URINARY INCONTINENCE

- All contribute highly to falls and associated fractures
  - Nocturia/ incontinence
  - Urinary Frequency
  - Urge Incontinence

Understanding Falls

INTRINSIC FACTORS (PATIENT CONDITIONS)

- *ANTICIPATED FACTORS*

- History of Falls (greatest risk factor)
- Incontinence
- Cognitive/Psychological Status
- Depression/Anxiety Disorders
- Mobility/strength/balance
- Dizziness/Vertigo/Vestibular Disorders
- Postural Hypotension
- Age (>65)
- Osteoporosis
- Musculoskeletal changes (OA,RA)
- Fear/anxiety associated with falls
- **Low vision**

EXTRINSIC FACTORS (ENVIRONMENT)

- *ANTICIPATED FACTORS*

- Footwear, inappropriate, lack of
- Low toilet seat
- Wheels in beds or chairs
- Restraints
- Prolonged length of stay
- Unsafe equipment
- Broken equipment
- Beds left in high position
- Environment (wet floor, floor glare, cluttered room, poor lighting, inadequate handrail support, monochromatic color schemes, loose cords or wires,
- Pets

More on…Understanding Falls

INTRINSIC FACTORS (PATIENT CONDITION)

Unanticipated

- Seizures
- Cardiac Arrhythmias'
- CVA or TIA
- Syncope
- “Drop Attacks”

EXTRINSIC FACTORS (ENVIRONMENT)

Unanticipated

- Individual reactions to medications

Preventing Falls

SINGLE INTERVENTION

- Move it or Lose it!!!
  - Physical Therapy
    - Balance training and Exercise (HEP)
    - Tai Chi
  - Home Safety Assessment
  - Medication Withdrawal
  - Hip Protectors

MULTIFACTORIAL INTERVENTIONS

- Multidisciplinary Health and Environmental screening and intervention.
  - PT, OT SN
- Environmental modification
  - Removing slip hazards
  - Furniture Rearrangement
  - Adequate lighting
  - Non slip bath mats
  - Stair rails
  - Grab bars next to toilet and shower
  - Raised toilet seats
  - Visual Aides

Preventing Falls

- Patient Education
  - Self Advocacy
  - CDC Questionnaire
  - Begin a regular exercise program
  - Routine Medication Review by HCP
  - Routine Vision Checks
  - Make Home Safer
- Restraints
- Side Rails
- Toileting Programs
- DME
- Alarms

Fall Risk Assessment Tools

- TUG Test:
  - > 14 seconds associated with high fall risk
  - >30 seconds predictive of requiring ambulation devise and being dependent in ADL's
- 5 X sit to stand
  - Normal = 10 sec.
  - Fall Risk = >14 – 15 secs
- Functional Reach Test
  - >10 inches = Low Fall Risk
  - 6" to <10" = Risk for falling 2x greater than normal
  - <6" = Risk of Falling 4x greater than normal
  - Unwilling to reach = Risk of falling 8x greater than normal
  - < 6" = limited functional balance
  - 10+ = Adequate functional Balance

Fall Risk Assessment Tools

- Missouri Alliance of Home Care – MAHC
  - 10+ = Adequate functional Balance
- Morse Scale
- Hendrich Scale –
  - Nursing assessment that addresses anticonvulsant and benzodiazopene medications; dizziness; mobility; depression;

- Berg Balance Test
  - 16 functional questions with Max score of 56.
    - 41-56 = independent however <45 = may be greater risk for falling;
    - with Hx of Falls and BBS <51, or No History of falls and BBS < 42 is predictive of falls
    - Score of <40 on BBS associated with almost 100% fall risk.

- Tinnetti Balance Assessment Tool
  - Overall Score of 28 with Balance Score = 16 and Gait Score+ 12.
  - 25-28 = low fall risk
  - 19 – 24 = Medium fall risk
  - < 19 = high fall risk.

Missouri Alliance for HOME CARE

Home Care Fall Reduction Initiative

MAHC 10 - Fall Risk Assessment Tool

Click here to review the Validation Study of the Missouri Alliance for Home Care's fall risk assessment tool.

Conduct a fall risk assessment on each patient at start of care and re-certification.

Patient Name:_____

(Circle one) SOC or Re-certification Date:_____

Required Core Elements **Assess one point for each core element "yes".** *Information may be gathered from medical record, assessment and if applicable, the patient/caregiver. Beyond protocols listed below, scoring should be based on your clinical judgment.*	Points
Age 65+	
Diagnosis (3 or more co-existing) Includes only documented medical diagnosis	
Prior history of falls within 3 months An unintentional change in position resulting in coming to rest on the ground or at a lower level	
Incontinence Inability to make it to the bathroom or commode in timely manner Includes frequency, urgency, and/or nocturia.	
Visual impairment Includes but not limited to, macular degeneration, diabetic retinopathies, visual field loss, age related changes, decline in visual acuity, accommodation, glare tolerance, depth perception, and night vision or not wearing prescribed glasses or having the correct prescription.	
Impaired functional mobility May include patients who need help with IADLS or ADLS or have gait or transfer problems, arthritis, pain, fear of falling, foot problems, impaired sensation, impaired coordination or improper use of assistive devices.	
Environmental hazards May include but not limited to, poor illumination, equipment tubing, inappropriate footwear, pets, hard to reach items, floor surfaces that are uneven or cluttered, or outdoor entry and exits.	
Poly Pharmacy (4 or more prescriptions – any type) All PRESCRIPTIONS including prescriptions for OTC meds. Drugs highly associated with fall risk include but not limited to, sedatives, anti-depressants, tranquilizers, narcotics, antihypertensives, cardiac meds, corticosteroids, anti-anxiety drugs, anticholinergic drugs, and hypoglycemic drugs.	
Pain affecting level of function Pain often affects an individual's desire or ability to move or pain can be a factor in depression or compliance with safety recommendations.	
Cognitive impairment Could include patients with dementia, Alzheimer's or stroke patients or patients who are confused, use poor judgment, have decreased comprehension, impulsivity, memory deficits. Consider patients ability to adhere to the plan of care.	
A score of 4 or more is considered at risk for falling **Total**	

Clinician's signature_____

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Morse Fall Scale

(Adapted with permission, SAGE Publications)

The Morse Fall Scale (MFS) is a rapid and simple method of assessing a patient's likelihood of falling. A large majority of nurses (82.9%) rate the scale as "quick and easy to use," and 54% estimated that it took less than 3 minutes to rate a patient. It consists of six variables that are quick and easy to score, and it has been shown to have predictive validity and interrater reliability. The MFS is used widely in acute care settings, both in the hospital and long term care inpatient settings.

Item	*Scale*	*Scoring*
1. History of falling; immediate or within 3 months	No 0 Yes 25	_____
2. Secondary diagnosis	No 0 Yes 15	_____
3. Ambulatory aid Bed rest/nurse assist Crutches/cane/walker Furniture	 0 15 30	_____
4. IV/Heparin Lock	No 0 Yes 20	_____
5. Gait/Transferring Normal/bedrest/immobile Weak Impaired	 0 10 20	_____
6. Mental status Oriented to own ability Forgets limitations	 0 15	_____

The items in the scale are scored as follows:

History of falling: This is scored as 25 if the patient has fallen during the present hospital admission or if there was an immediate history of physiological falls, such as from seizures or an impaired gait prior to admission. If the patient has not fallen, this is scored 0. Note: If a patient falls for the first time, then his or her score immediately increases by 25.

Secondary diagnosis: This is scored as 15 if more than one medical diagnosis is listed on the patient's chart; if not, score 0.

Ambulatory aids: This is scored as 0 if the patient walks without a walking aid (even if assisted by a nurse), uses a wheelchair, or is on a bed rest and does not get out of bed at all. If the patient uses crutches, a cane, or a walker, this item scores 15; if the patient ambulates clutching onto the furniture for support, score this item 30.

Intravenous therapy: This is scored as 20 if the patient has an intravenous apparatus or a heparin lock inserted; if not, score 0.

Resources/Patient Education Brochures

- CDC STEADI (Stopping Elderly Accidents, Deaths & Injuries) Tool Kit for Health Care Providers.
  - Making Fall Prevention Part of Your Practice
  - Get Background Information about Falls
  - Case Studies
  - Patients Encouragement, Resources and Referrals
  - Algorithm for Fall Risk Assessment and interventions

- www.cdc.gov/injury/steadi

"People who use canes are brave. They can be more independent and enjoy their lives."

Shirley Warner, age 79

Four things you can do to prevent falls:

1. Begin an exercise program to improve your leg strength & balance
2. Ask your doctor or pharmacist to review your medicines
3. Get annual eye check-ups & update your eyeglasses
4. Make your home safer by:
   - Removing clutter & tripping hazards
   - Putting railings on all stairs & adding grab bars in the bathroom
   - Having good lighting, especially on stairs

Contact your local community or senior center for information on exercise, fall prevention programs, or options for improving home safety.

For more information on fall prevention, please visit:

www.cdc.gov/injury

www.stopfalls.org

This brochure was produced in collaboration with the following organizations:

VA Greater Los Angeles Healthcare System

Division of VA Desert Pacific Healthcare Network

Fall Prevention Center of Excellence

CS220817SA

Stay Independent

Falls are the main reason why older people lose their independence.

Are you at risk?

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

Check Your Risk for Falling **Please circle "Yes" or "No" for each statement below.** ***Why it matters***

Yes (2) No (0) I have fallen in the past year. *People who have fallen once are likely to fall again.*

Yes (2) No (0) I use or have been advised to use a cane or walker have been advised to use a cane or walker to get around safely. *People who may already be more likely to fall.*

Yes (1) No (0) Sometimes I feel unsteady when I am walking. *Unsteadiness or needing support while walking are signs of poor balance.*

Yes (1) No (0) I steady myself by holding onto furniture when walking at home. *This is also a sign of poor balance.*

Yes (1) No (0) I am worried about falling. *People who are worried about falling are more likely to fall.*

Yes (1) No (0) I need to push with my hands to stand up from a chair. *This is a sign of weak leg muscles, a major reason for falling.*

Yes (1) No (0) I have some trouble stepping up onto a curb. *This is also a sign of weak leg muscles.*

Yes (1) No (0) I often have to rush to the toilet. *Rushing to the bathroom, especially at night, increases your chance of falling.*

Yes (1) No (0) I have lost some feeling in my feet. *Numbness in your feet can cause stumbles and lead to falls.*

Yes (1) No (0) I take medicine that sometimes makes me feel light-headed or more tired than usual. *Side effects from medicines can sometimes increase your chance of falling.*

Yes (1) No (0) I take medicine to help me sleep or improve my mood. *These medicines can sometimes increase your chance of falling.*

Yes (1) No (0) I often feel sad or depressed. *Symptoms of depression, such as not feeling well or feeling slowed down, are linked to falls.*

Total_____ **Add up the number of points for each "yes" answer. If you scored 4 points or more, you may be at risk for falling. Discuss this brochure with your doctor.**

American Geriatric Society Guidelines for Fall Mgmt.

SUMMARY OF RECOMMENDATIONS

SCREENING AND ASSESSMENT

1. All older individuals should be asked whether they have fallen (in the past year).
2. An older person who reports a fall should be asked about the frequency and circumstances of the fall(s).
3. Older individuals should be asked if they experience difficulties with walking or balance.
4. Older persons who present for medical attention because of a fall, report recurrent falls in the past year, or report difficulties in walking or balance (with or without activity curtailment) should have a multifactorial fall risk assessment.
5. Older persons presenting with a single fall should be evaluated for gait and balance.
6. Older persons who have fallen should have an assessment of gait and balance using one of the available evaluations.

7. Older persons who cannot perform or perform poorly on a standardized gait and balance test should be given a multifactorial fall risk assessment.
8. Older persons who have difficulty or demonstrate unsteadiness during the evaluation of gait and balance require a multifactorial fall risk assessment.
9. Older persons reporting only a single fall and reporting or demonstrating no difficulty or unsteadiness during the evaluation of gait and balance do not require a fall risk assessment.
10. The multifactorial fall risk assessment should be performed by a clinician (or clinicians) with appropriate skills and training.

Please visit this link for the full guideline:

http://americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/prevention_of_falls_summary_of_recommendations

Accidental falls are serious problems among older adults. Falls are the leading cause of fatal and non-fatal injuries in people 65 and older. One- third of seniors will suffer a fall and 60% of those falls occur in the home. A fall or injury can lead to loss of interest or pleasure in doing daily activities and decreased socialization, along with feelings of hopelessness and depression. These issues can contribute to future falls and a decline in independence. This can lead to displacement of living situation and inability to remain in their home. While falls can seem like common occurrences for Seniors, they should not be considered a normal consequence of aging.

References

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Preventing Falls

- Questions and Answers
- Evaluations