Fall Prevention II
Impact, Assessment and Hidden Risks

Webinar Education Series
May 2016
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MEDICAL SUPPLIES FOR CARE AT HOME SINCE 1957
Fall Prevention II
This webinar will address the following topics:

1. How falls impact the health care system
2. Making an accurate Fall Risk Assessment
3. Identifying dangers in the community
4. Fall prevention programs in your community
5. Community and educational resources
Facts about Falls

The Centers for Disease Control and Prevention reports:

1 of out every 3 people age 65 and older fall each year.

Every 29 minutes an older adult dies from a fall.

1 out of 5 falls causes a serious injury such as a head trauma or fracture.
Impact on the healthcare system

Medical costs
Fall injuries total over $28 billion annually.

Hospital costs account for 2/3 of the total.

Hospitals
Falls and Trauma is one of 10 hospital-acquired conditions (HACs) for which Medicare will not cover.
Making an Accurate Fall Risk Assessment

Patient risk factors include:

- History of falls
- Confusion
- Age (over 65)
- Impaired judgment
- Sensory deficit
- Medications
- Unable to ambulate independently
- Decreased level of cooperation
- Increased anxiety/emotional lability
- Incontinence/urgency
- Cardiovascular/respiratory disease affecting perfusion and oxygenation
- Postural hypotension with dizziness
- Attached equipment (IV pole, tubes, etc.)
- Community safety hazards
## Fall Risk Assessment Tools

### Risk factors:
- Walking aid used
- Hx of dizziness, Parkinson’s
- Fear of falling
- Hx of stoke, RA, Pain
- Antihypertensives, Sedatives, Antiepileptics
- History of falls
- Blood glucose >126
- Lives alone
- Activity, Age, Vision, ADLs
- Number of drugs used

### FRAT-up

**Fall Risk Assessment Tool**

<table>
<thead>
<tr>
<th>Health profile of the subject:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the subject use a walking aid?</td>
</tr>
<tr>
<td>Dizziness or unsteadiness last year?</td>
</tr>
<tr>
<td>Does the subject suffer Parkinson?</td>
</tr>
<tr>
<td>Urinary incontinence last year?</td>
</tr>
<tr>
<td>Fear of falling (Deshpande)?</td>
</tr>
<tr>
<td>Does the subject suffer rheumatic disease?</td>
</tr>
<tr>
<td>History of previous strokes?</td>
</tr>
<tr>
<td>Is the subject female?</td>
</tr>
<tr>
<td>Does the subject use antiepileptics?</td>
</tr>
<tr>
<td>Does the subject use any pain?</td>
</tr>
<tr>
<td>Does the subject use antihypertensives?</td>
</tr>
<tr>
<td>Does the subject use sedatives?</td>
</tr>
<tr>
<td>History of previous falls?</td>
</tr>
<tr>
<td>Does the subject live alone?</td>
</tr>
<tr>
<td>Diabetes blood glucose 126?</td>
</tr>
</tbody>
</table>

### Current risk of the subject: Unknown

### Visual stereognosis:

- [ ] Use prevalence

### Age:

- [ ] Use prevalence

### CESD:

- [ ] Use prevalence

### MMSE score:

- [ ] Use prevalence

### Physical activity level:

- [ ] Use prevalence

### Hearing impairment?:

- [ ] Use prevalence

### Visual acuity (3 meter):

- [ ] Use prevalence

### Contrast sensitivity?:

- [ ] Use prevalence

### Subject’s number of IADL:

- [ ] Use prevalence

### Revised Walking Subscore:

- [ ] Use prevalence

### Number of ADL disabilities (0-6):

- [ ] Use prevalence

### Number of drugs used by the subject:

- [ ] Use prevalence

### How does the subject feel:

- [ ] Use prevalence

### Additional Information:

- [ ] Use prevalence

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[http://ffrat.farseeingresearch.eu/runAssessment](http://ffrat.farseeingresearch.eu/runAssessment)
Current Risk Result:

- Predicts the risk as a probability – 1.0 = 100% chance of a fall
- Fall prevention protocols and interventions can decrease the number of falls.
- To be effective, a prevention strategy requires a prior step to evaluate the fall risk of the subjects.
- Despite extensive research, existing assessment tools for fall risk have been insufficient for predicting falls.
Quick Assessment of Patient’s Risk

• **Timed Up and Go (TUG) Test**
  – Use this test to assess mobility.

• **30-Second Chair Stand Test**
  – This test will assess leg strength and endurance.

• **4-Stage Balance Test**
  – Assess balance using this test

http://www.cdc.gov/steadi/videos.html
Sidewalk Cutouts

Cutouts are now at all transitions.
• Change in level and angle are difficult to distinguish.

New “detectable warnings”
• The bright color can warn of the transition, but they also bring additional risk.
Hidden Dangers in the Community

“Detectable Warnings”

Brightly colored with truncated domes.
• Present an uneven surface for walking and can be slippery when wet.

Can be placed on flat or sloping transitions.
• Do not distinguish the surface, primarily to warn the visually impaired of “entering traffic”.

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Hidden Dangers in the Community

Doors and Entrances

Variety in types of doors
- Manual
- Automated
- Fully automated
- Actuated Automation

Difficulty Navigating Doors
- Double entrances
- Entryway grates
- Heavy doors
- Managing walking aids
Hidden Dangers in the Community

Automated?
Hidden Dangers in the Community

Escalators

Difficult transitions
• Change of speeds, top & bottom
• Visual distinction
• Step height

Other challenges
• Walking aids
• Balance
• Differing speeds, steps-vs-handrails

Best solution, take the elevator!
Hidden Dangers in the Community

Wet Weather & Spills

Be aware when coming in from wet or snowy weather
- Greatest risk with non-carpeted floors
- Beware if no entrance mats

We think of this in the home/bathroom, but must remember this as well.
Hidden Dangers in the Community

Shopping: Parking

Parking lots offer little space for exiting vehicles.

Average parking space:
9 feet = 108 inches

Car width can be 76+ inches

Subtract 6” for the doors and it can leave only 10” to exit.
Hidden Dangers in the Community

Shopping: Grocery

In-Aisle Promotions

- Multiple in aisle promotions
- Easy to back into, trip
- Appear in unexpected location
Hidden Dangers in the Community

Shopping: Retail Stores

Race Track Layout

• Aisle confusing and difficult to navigate.
• Also with in-aisle promotions
Fall Prevention: Physical aspects

• **Regular exercise**
  It is important that the exercises focus on increasing leg strength and improving balance, and that they get more challenging over time.

• **Medication review by a doctor or pharmacist**
  Identify prescription and over-the-counter medicines that may cause side effects or interactions such as dizziness or drowsiness.

• **Eye examination**
  by an eye doctor at least once a year and update their eyeglasses to maximize their vision. Consider glasses with single vision distance lenses for some activities such as walking outside.
Regular Exercise

• Regular exercise – Not hours at the gym!
• Make it fun
• Make it interesting
• Include each type of exercise
  – Endurance
  – Strength
  – Balance
  – Flexibility
Endurance

- Endurance, or aerobic, activities increase breathing and heart rate.

These activities help keep you healthy, improve fitness, and help do the everyday tasks.
Endurance

- Endurance exercises improve the health of your heart, lungs, and circulatory system.

- They also delay or prevent many diseases that are common in older adults such as diabetes, colon and breast cancers, heart disease, and others.
Endurance activities will make it easier for you to:

- Push your grandchildren on the swings
- Vacuum
- Rake leaves
Strength

• Even small increases in muscle strength can make a big difference in your ability to stay independent and carry out everyday activities such as climbing stairs and carrying groceries.
Strength

• Some people call using weight to improve your muscle strength “strength training” or “resistance training.”

• Strength exercises include:
  – Lifting weights
  – Using a resistance band
Strength

- **Strength** training can maintain your ability to:

  - Carry a full laundry basket from the basement to the second floor
  - Carry your smaller grandchildren
  - Lift bags of mulch in the garden
Balance

• Balance exercises help prevent falls

• Many lower-body strength exercises also will improve balance.
Balance

- Exercises to improve your balance include:
  - Standing on one foot
  - Heel-to-toe walk
  - Tai Chi
Balance exercises can help you:

- Stand on tiptoe to reach something on the top shelf
- Walk up and down the stairs
- Walk on an uneven sidewalk without falling
Flexibility

- Stretching can help your body stay flexible and limber.
- It will give more freedom of movement for your regular physical activity as well as for your everyday activities.
Flexibility

• To increase your flexibility, try:
  – Shoulder and upper arm stretch
  – Calf stretch
  – Yoga
Flexibility

- **Flexibility** or stretching exercises make it possible for you to:
  - Look over your shoulder to see what’s behind you as you back the car out of the driveway
  - Make the bed
  - Bend over to tie your shoes
Exercise & Physical Activity

From the National Institute for Aging

STEADI
Stopping Elderly Accidents, Death and Injuries

• Make fall prevention part of your clinical practice
• Learn to screen patients 65+ for falls, identify risk factors, and offer interventions.
• Continuing Education available for this free interactive course.

http://www.cdc.gov/STEADI/
Fall Prevention
Community and Educational Resources

Centers for Disease Control and Prevention
cdc.gov

National Council on Aging
ncoa.org

Caregiver Action Network
caregiveraction.org

Shield HealthCare Community
shieldhealthcare.com/community
Fall Prevention Community and Educational Resources


National Falls Prevention Resource Center Community Programs: http://www.ncoa.org/assets/files/pdf/center-for-healthy-aging/Select-EB-FP-Programs-Grid-021215.pdf

TIP

Search keyword “Fall Prevention” at shieldhealthcare.com/community
Fall Prevention II

References:

Aha-solutions.org

CDC.Gov
http://www.cdc.gov/HomeandRecreationalSafety/Falls/adultfalls.html

CMS.gov
http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program.html

Sage Journals
http://hhc.sagepub.com/content/23/2/125.abstract
Questions not answered during the live webinar will be answered via email.
This concludes our presentation. Thank you for joining us.

Special thanks to Barbara E. West, RN, MSN, CWOCN, and Capital Nursing Education