# STAY INFORMED: THE IMPORTANCE OF FALLS RISK ASSESSMENT AS A MATTER OF PRACTICE





# IT'S A GREAT DAY TO BE FALLS-FREE







FALLS PREVENTION COALITION OF IDAHO



National Council on Aging

# SEMINAR MATERIALS & RECORDING

Slides will be available on the ICOA website:

www.aging.idaho.gov/falls

- Recording will be available from our YouTube channel <u>www.YouTube.com/@IdahoCOA</u>
- Additional materials and resources are available from our

resource library : <u>www.aging.idaho.gov/falls</u>

# FOR THOSE JOINING US VIRTUALLY

- If you are **disconnected**, log back in as soon as possible
- If we lose connection, our tech specialist will work diligently to get us reconnected. Please stand by.
- If solar flares shut down this hemisphere, the link will be provided to you so you can review the recording of the seminar



# WHAT WE'LL DISCUSS

- Why Fall Risk Assessment and Prevention is Important
- Identifying Imbalance Through Simple Assessments
- Making Referrals for Falls Prevention
- Panelist Q&A

WHY FALL RISK ASSESSMENT AND PREVENTION IS IMPORTANT



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## WHAT IS A "FALL"?

Unintentionally moving downward, typically rapidly and freely without control, from a higher to a lower level

## **Assessing the Facts About Falls**

- 1 in 3 older Idahoans (>65) fall at least once/year
- Falling once doubles chances of falling again
- Risk of injury 2.5 X higher than for vehicle accidents
- Over 850,000 people hospitalized/year
- 300,000 of these hospitalizations include hip fractures
- The #1 cause of TBI across all ages
- Only about 50% of adults inform their healthcare provider about falls
- Every 19 minutes an older person dies from a fall
- Total cost for fall-related injuries in US: \$50 billion (2015)
- Average medical cost in Idaho for an unintentional fall was \$38,373 (2020)
- Quality of life impact- social isolation, depression, fear, further decline
- Factors That Impact Risk can be Controlled



# **OUTCOMES AFTER HOSPITALIZATION**

### **1-YEAR AFTER INJURY**

### **POST-HOSPITAL OUTCOMES**

- Half required placement
- Only 1 in 3 home without assistance
- Only 6% go home even with assistance
- 5% needed rehab facility
- Half were eventually readmitted

- Only 1 in 4 discharged
- 1 in 3 died
- 3 times greater risk of death for those who required admission to a facility

## **RISK FACTORS FOR FALLS**

- Nutrition & Hydration
- Physical Health
  - Medication/Polypharmacy
  - Diminished fitness & mobility
  - Chronic medical conditions
  - Incontinence
- Emotional Health Fear of falling
- Environmental Safety
  - Trip/slip hazards
  - Assistive devices



# SYSTEM-SPECIFIC CONDITIONS CAN AFFECT FALLS RISK

## Vision

- Blindness
- Cataracts
- Glaucoma

## **Brain/Central Nervous System**

- Parkinson's disease
- Multiple sclerosis

## **Inner Ear**

- Infection
- Meniere's disease

## Skin

- Neuropathy (Numbness, diabetes)
- Injury

## Musculoskeletal

- Sarcopenia
- Joint deformity
- Poor posture

## FALL RISKS (AT HOME)

- Prior falls
- Higher-risk conditions
  - Rheum
  - Polypharmacy
  - Female > 80
  - Visual impairment
  - Cognitive decline

Smith AA, Silva AO, Rodrigues RA, Moreira MA, Nogueira JA, Tura LF. Assessment of risk of falls in elderly living at home. Rev Lat Am Enfermagem. 2017 Apr 6;25:e2754. doi: 10.1590/1518-8345.0671.2754. PMID: 28403333 PMCID: PMC5396481.

## WHAT YOU CAN DO

## Remember: Falling is NOT a result of normal aging (Sarcopenia)

- Stay informed about the outcomes and risk factors for falls
- Perform simple cursory evidence-based falls risk assessments
- Recommend appropriate increased activity to avoid sarcopenia
- Regularly review medications (OTC and Rx)
- Ask how many times a patient has fallen in the last 6 months
- Provide medical and educational referrals, and patient materials (clinical-community partnerships)



IDENTIFYING IMBALANCE THROUGH SIMPLE ASSESSMENTS



# **TOBIE STRONG**

Physical Therapist St. Luke's Health System strongt@slhs.org

### PT, DPT, OCS



# **RISK FACTORS** STEADI

### INTRINSIC

- Advanced age
- Previous falls
- Muscle weakness
- Gait and balance problems
- Poor vision
- Orthostatic hypotension
- Chronic medical conditions \*
- Fear of falling

### **EXTRINSIC**

- Lack or handrails
- Poor stair design
- Lack of bathroom grab bars
- Low light environments
- Obstacles and tripping hazards
- Surfaces (slippery, uneven)
- Medications
- Improper use of assistive device

## **EFFECTIVE INTERVENTIONS FOR RISK FACTORS**

- Vestibular disorder
- Vit D insufficiency
- Medications
- Orthostatic hypotension
- Vision impairments
- Orthopedic impairments
- Home hazards
- Gait and balance problems



## WHAT'S IMPORTANT WHEN CHOOSING A SCREENING TOOL

- Validity (specificity and sensitivity)
- Population
- Ease of application
- Speed of application
- Categorization
- Next steps





### ASSESSMENT Timed Up & Go (TUG)

Purpose: To assess mobility

#### Equipment: A stopwatch

**Directions:** Patients wear their regular footwear and can use a walking aid, if needed. Begin by having the patient sit back in a standard arm chair and identify a line 3 meters, or 10 feet away, on the floor.

#### (1) Instruct the patient:

When I say "Go," I want you to:

Always stay by the patient for safety.

2017

NOTE:

Stand up from the chair.
 Walk to the line on the floor at your normal pace.
 Turn.
 Walk back to the chair at your normal pace.

5. Sit down again.

② On the word "Go," begin timing.
③ Stop timing after patient sits back down.
④ Record time.

#### Time in Seconds:

An older adult who takes ≥12 seconds to complete the TUG is at risk for falling.

CDC's STEADI tools and resources can help you screen, assess, and intervene to reduce your patient's fall risk. For more information, visit <u>www.cdc.gov/steadi</u>



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

| Date |  |
|------|--|
| Time |  |

#### OBSERVATIONS

Patient

Observe the patient's postural stability, gait, stride length, and sway.

#### Check all that apply:

- Slow tentative pace
- Loss of balance
- Short strides
- Little or no arm swing
- Steadying self on walls
- Shuffling
- En bloc turning
- Not using assistive device properly

These changes may signify neurological problems that require further evaluation.

STEAD Stopping Elderly Accidents, Deaths & Injuries

### Timed "Up and Go"

The timed "Up and Go" test measures, in seconds, the time taken by an individual to stand up from a standard armchair - walk a distance of 3 meters (approximately 10 feet) – turn - walk back to the chair and sit down.

The subject wears their regular footwear and uses their customary walking aid.

No physical assistance is given.

They start with their back against the chair, their arms resting on the armrests, and their walking aid at hand.

They are instructed that, on the word "go" they are to get up and walk at a comfortable and safe pace to a line on the floor 3 meters away, turn, return to the chair and sit down again.

The subject walks through the test once before being timed in order to become familiar with the test.

• Instructions to the patient: "When I say 'go' I want you to stand up and walk to the line, turn and then walk back to the chair and sit down again. Walk at your normal pace."

- Scoring: Time for 'Up and Go' test \_\_\_\_\_\_seconds.
- Time-Up & Go (>12 seconds indicates increased risk for falls)

### ASSESSMENT **30-Second Chair Stand**

**Purpose:** To test leg strength and endurance **Equipment:** A chair with a straight back without arm rests (seat 17" high), and a stopwatch.

#### (1) Instruct the patient:

#### 1. Sit in the middle of the chair.

- 2. Place your hands on the opposite shoulder crossed, at the wrists.
- 3. Keep your feet flat on the floor.

4. Keep your back straight, and keep your arms against your chest.

5. On "Go," rise to a full standing position, then sit back down again.

6. Repeat this for 30 seconds.

#### (2) On the word "Go," begin timing.

If the patient must use his/her arms to stand, stop the test. Record "0" for the number and score.

#### (3) Count the number of times the patient comes to a full standing position in 30 seconds.

If the patient is over halfway to a standing position when 30 seconds have elapsed, count it as a stand.

#### ④ Record the number of times the patient stands in 30 seconds.

Number

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2017



#### SCORING

Patient

Date

Time

NOTE:

safety.

Chair Stand Below Average Scores

| AGE   | MEN  | WOMEN |  |
|-------|------|-------|--|
| 60-64 | < 14 | < 12  |  |
| 65-69 | < 12 | < 11  |  |
| 70-74 | < 12 | < 10  |  |
| 75-79 | < 11 | < 10  |  |
| 80-84 | < 10 | < 9   |  |
| 85-89 | < 8  | < 8   |  |
| 90-94 | < 7  | < 4   |  |

A below average score indicates a risk for falls.

STEAD Stopping Elderly Accidents

### **The 30-Second Chair Stand Test**

Purpose: To test leg strength and endurance

#### **Equipment:**

A chair with a straight back without arm rests A stopwatch

#### Directions:

- On "Go," begin timing.
- If the patient must use his/her arms to stand, stop the test. Record ``0'' for the number
- Count the number of times the patient comes to a full standing position in
- 30 seconds.
- If the patient is over halfway to a standing position when 30 seconds have elapsed, count it as a stand.
- Record the number of times the patient stands in 30 seconds.

#### Instructions to the patient:

- 1. Sit in the middle of the chair.
- 2. Place your hands on the opposite shoulder crossed at the wrists.
- 3. Keep your feet flat on the floor.
- 4. Keep your back straight and keep your arms against your chest.
- 5. On "Go," rise to a full standing position and then sit back down again.
- 6. Repeat this for 30 seconds.

#### ASSESSMENT CONTINUED

### The 4-Stage Balance Test

| Time |  |
|------|--|
|      |  |

Patient

Date

#### Instructions to the patient:

- I'm going to show you four positions.
- > Try to stand in each position for 10 seconds.
- > You can hold your arms out, or move your body to help keep your balance, but don't move your feet.
- For each position I will say, "Ready, begin." Then, I will start timing. After 10 seconds, I will say, "Stop."



Notes:

| CDC's STEADI tools and resources can help you screen, assess, and intervene to reduce your patient's fall risk. |  |
|---|--|
| For more information, visit <u>www.cdc.gov/steadi</u>   |  |



### **4- Stage Balance Test**

- Purpose: Validated measure to screen individuals for a fall risk. Static balance
- Equipment: stopwatch
- Directions:
  - There are four (4) standing positions that get progressively harder to maintain.
  - Ideally describe and demonstrate each position to the patient. Stand next to the patient to help them assume the correct position.
  - When the patient is steady, time how long they can maintain the position. Remain ready to assist the patient if they should lose their balance.
  - If the patient can hold a position for 10 seconds without moving their feet or needing support, go on to the next position. If not, STOP the test.
  - Patients should not use an assistive device (cane or walker) and they should keep their eyes open.

# WHAT YOU CAN DO

- Become familiar with evidence-based assessments (STEADI)
- Provide regular assessment with older clients and anyone who has fallen or feels at risk of falling
- Refer clients to the appropriate healthcare or consumer education resource
- Follow-up



# MAKING REFERRALS FOR FALLS PREVENTION



# ERIN A. OLSEN

Coordinator, Falls Prevention Coalition of Idaho

Idaho Commission on Aging

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# WHERE TO REFER

- Nutrition for dietary concerns
- Medical, OT, PT etc. for medical conditions
- Counseling for FoF
- Consumer education
  - Local Health District -Fit & Fall Proof<sup>®</sup>
  - Technology Project (U of I)

- Local Area Agency on Aging (AAA)
  - Mind Over Matter (Incontinence)
  - Chronic Disease
  - Chronic Pain
  - Diabetes
  - Powerful Tools for Caregivers
  - Bingocize<sup>®</sup>
- Home Hazard remediation
  - Habitat for Humanity
  - Assistive Technology Project



# PANELIST Q&A

Please raise your hand. Daniel will call on

you.

We will answer as many questions as time

allow.s

# THANK YOU FOR WORKING TO PREVENT FALLS

