



# Initiating the Conversation on Fall Prevention, it's up to ALL of us!

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# Objectives

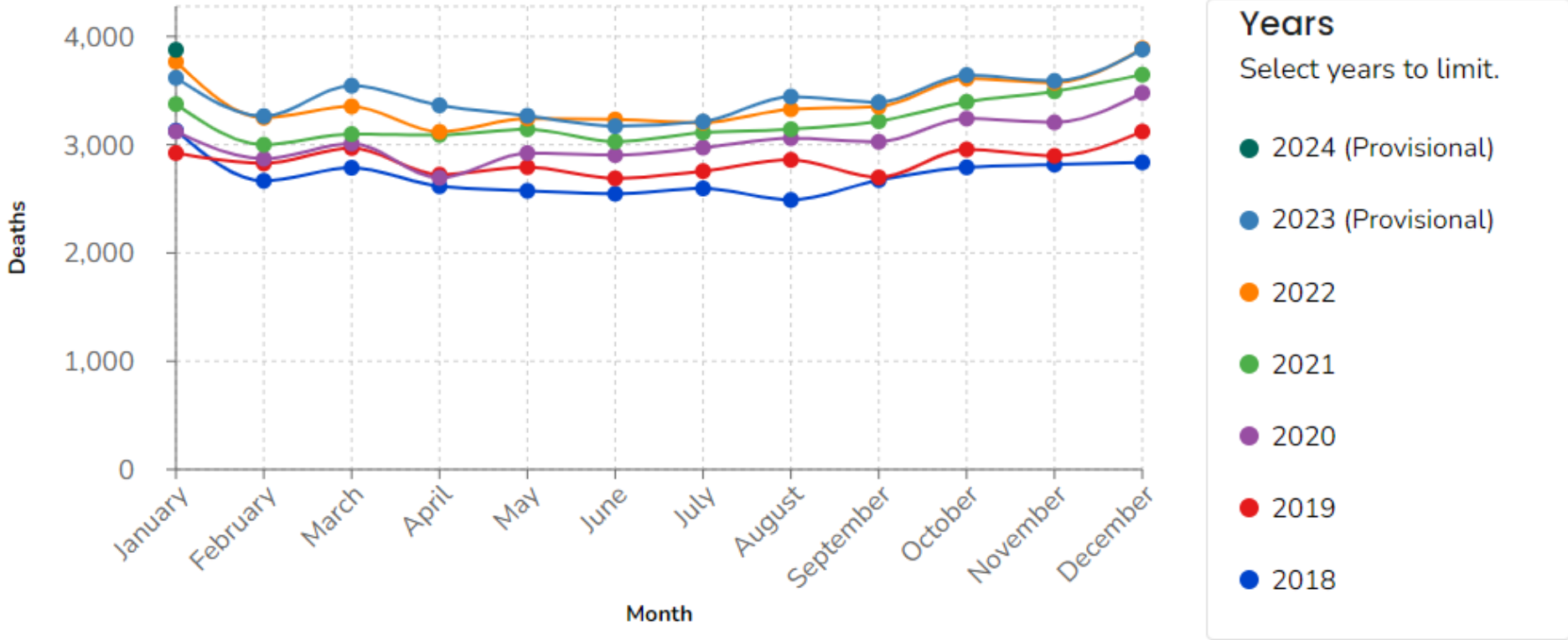
1. Explain the importance of fall prevention, for the Mobility in the 5Ms, with older adults.
2. Describe use of the screen, assess, and intervene CDC Steadi algorithm for fall prevention.
3. Apply fall prevention screening, assessment and education techniques in a patient case.

# Fall Prevention Importance

- 1 in 4 older adults report falling every year <sup>1</sup>
  - About 3 million ER visits due to falls
  - About 1 million fall-related hospitalizations
- “Falls are the leading cause of injury for adults ages 65 years and older” <sup>1</sup>
- “In 2019, 83% of hip fracture deaths and 88% of emergency department visits and hospitalizations for hip fractures were caused by falls.” <sup>1</sup>

# Provisional and Final Fatal Injury Data by Month, United States

Injury type: Unintentional Older Adults Falls (Age 65 and Older) per CDC <sup>1</sup>



# Near Fall

- A stumble event or loss of balance that would result in a fall if sufficient recovery mechanisms were not activated. At least two of the following compensatory mechanism should be activated to be determined as a near fall. <sup>2</sup>
  - (1) unplanned movement of arms or/and legs
  - (2) unplanned change in stride length
  - (3) lowering of the center of mass
  - (4) unplanned change in stride velocity
  - (5) trunk tilt.

# Consequences of a fall or near fall for the older adult

- Fatality
- Pain
- Limited mobility
- Increased level of assistance
- Depression
- Reduced confidence
  - Leading to further reduction in mobility

## Question?

- What do you currently do in your practice for fall prevention with your patients?

# What's being done in healthcare for fall prevention? <sup>3</sup>

- Falls ranked as lowest priority of 5 conditions
- < 40% of providers asked most or all of their older patients if they had fallen during the past 12 months
- < 25% referred older patients to PT for balance or gait training
- < 20% referred older patients to community-based fall prevention programs
- < 16% standardized functional assessments



# Whose responsibility is fall prevention?

- ALL healthcare providers, patient, peers, caregivers, and family
  - Monitoring, encouraging, educating
- Identify a trusted provider
  - Build buy in

# When should we start the conversation on fall prevention?

- Inquire EARLY about physical activity
  - Utilize behavior change planning for increased physical activity
  - Exercise is Medicine resource <sup>4</sup>
    - <https://www.exerciseismedicine.org/>

# EVERY PATIENT: Activity Level

- Physical Activity Vital Sign <sup>5</sup>
  - 1) On average, how many days/week do you engage in moderate to vigorous physical activity (like brisk walking)?  
Days \_\_\_\_\_
  - 2) On average, how many minutes do you engage in physical activity at this level? Minutes \_\_\_\_\_
  - TOTAL activity (days/wk x minutes/day)= \_\_\_\_\_ minutes/wk
- Modify the question for older adult
  - Instead of physical activity, could ask about “mobility”

# How to start with fall prevention?

- CDC Steadi Fall Prevention Algorithm <sup>6</sup>
  - Screen
    - ALL patients
  - Assess
    - Additional assessment to identify needs
  - Intervene
    - Referrals as needed

# Step 1) Screen fall risk yearly or any time patient presents with an acute fall

- Screening tools <sup>6</sup>
  - Stay Independent-CDC 12 question tool
  - 3 key questions
    1. Feels unsteady when standing or walking?
    2. Worries about falling?
    3. Has fallen in past year?
      - If YES, ask “how many times?” “were you injured”

## If NO fall risk identified...

- Prevention education <sup>6</sup>
  - Recommend effective prevention strategies
    - Reinforce PHYSICAL ACTIVITY
  - Assess vitamin D intake
  - Refer to community or fall prevention program
  - Repeat screening yearly or any time patient presents with an acute fall.

## Step 2) If fall risk is identified: Assess<sup>6</sup>

- Physical activity, strength, balance, gait
- Medications
- Home/community hazards
- Measure orthostatic blood pressure
- Check visual acuity
- Feet/footwear check
- Vitamin D intake
- Comorbidities

# Strength

- 30 second sit to stand
  - Patient crosses their arms, rises to a full standing position, then sits back down for 30 seconds.
  - Provider counts the number of times the patient stands over a 30 second time.

## Age-based norms:

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



# Balance

## ○ 4-Stage Balance Test

- Stand with your feet side by side. Time \_\_\_\_\_
- Place instep of one foot so it is touching the big toe of the other foot.  
Time \_\_\_\_\_
- Tandem stand: Place one foot in front of the other, heel touching toe.  
Time \_\_\_\_\_ \*\*Increased falls risk if unable to hold tandem stance  
for 10 seconds
- Stand on one foot. Time \_\_\_\_\_

# Gait and balance

## ○ TUG

- Stand up from a chair, walk at a normal pace 10 feet away to a line on the floor, turn around and walk back at a normal pace, and sit back down in the chair.
- Timed when provider says “go” and end time when patient sits back down.
- Increased risk of falling if TUG  $\geq$  12 seconds

# Medication Review <sup>6</sup>

- Examples of medication that may increase risk of falls
  - Opioid or narcotic pain meds
  - Depression meds
  - Anti-anxiety meds
  - Prescription and over the counter sleep aids
  - Muscle relaxing meds
  - Over the counter allergy and motion sickness meds
  - Medications for bladder control
  - Anti-psychosis or mood stabilizing meds
  - High blood pressure/heart meds

# Medication Review <sup>6</sup>

- Screen
- Assess for best management
- Formulate
  - Stop meds when possible
  - Switch to safer alternatives
  - Reduce medications to lowest effective doses
- Educate

# Home & Community Safety

- Ask about home environment
- Provide CDC handout on home self-assessment
  - Remove clutter
  - Good lighting
  - Adaptive equipment
  - Removing throw rugs
  - Stable railings
  - Accessibility of all areas
- Check feet & footwear
- Mobility & transportation

## Step 3) Intervene after assessment

- Physical Therapy referral
  - Gait, strength, balance impairment
- Occupational Therapy referral
  - Home hazards, ADL impairment
- Ophthalmologist/optometrist
- Podiatrist
- Doctor, PA, NP, Pharmacist
  - Medication management, supplements, comorbidity management
- Social Worker
- Others...

# Resources for Fall Prevention education

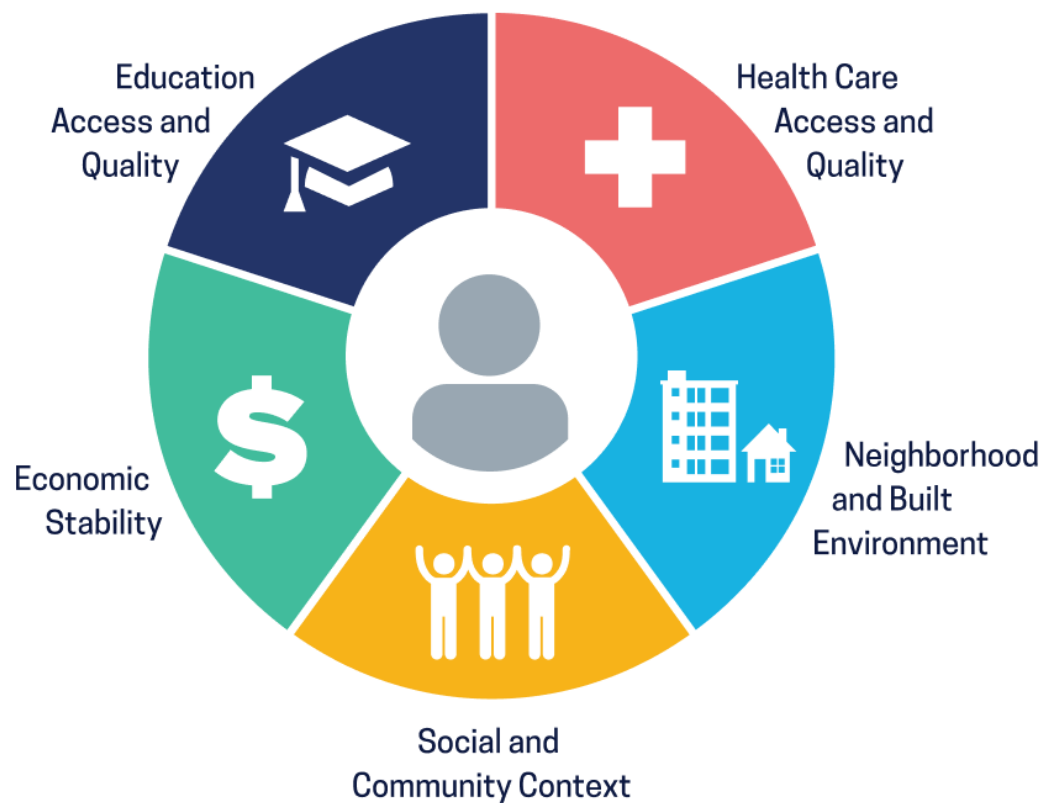
- Individualized education
- Community resources
  - Senior Center
  - Fitness Centers
  - Group classes-socialization is important <sup>7</sup>
- “Stepping On” Fall prevention class
  - Evidence based to reduce falls risk by 31% <sup>8</sup>
- NDC3.org
  - Find community classes in your area

# Limitations to participation in fall prevention activities <sup>9</sup>

- Low education < high school
- Lived in disadvantaged neighborhoods
- Obese
- Fair/poor self rated health
- Problems with walking or used a walking aid
- Fallen in the past year



# Social Determinants of Health



# Successful fall prevention education <sup>11</sup>

- Patients are more likely to engage if...
  - They perceive their fall risk as temporary or modifiable
  - More agreeable to MINOR adjustments
  - Education/strategies align with self-identity

# Patient Case 1

- 68-year-old female presents to your office for a medical appointment. She reports doing well, just in for an annual medical check-up. You notice she is walking well, but has well-worn shoes.

## Take a minute to answer this:

- From your healthcare perspective, what will be your next step in regard to fall prevention in this case?

## Patient Case 2:

- Your patient is a 70-year-old male patient, for check-up of blood pressure medication, which was prescribed a few months ago. You notice he has difficulty getting up from the chair.

## Take a minute to answer this:

- From your healthcare perspective, what will be your next step in regard to fall prevention in this case?

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**Thank you!**

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