TexMed 2024

Fall Risk and Prevention: A Guide for the Geriatric Mental Health Workforce

May 4, 2024
9 am
Disclosures

• All presenters have no actual or potential conflicts of interest in relation to this program/presentation

• No off label uses of medication will be discussed in this presentation
Learning Objectives

1. Increase awareness of the prevalence and impact and falls on older adults
2. Understand and be able to utilize validated screening tools for fall risk in clinical practice
3. Enhance ability to create a differential for causes and contributors for falls in individual patients
4. Describe and be able to implement interventions to mitigate risk of falls, including medication reconciliation and appropriate referrals
STEADI: Stopping Elderly Accidents, Deaths, and Injuries

- 1 older adult fall death every 20 minutes
- Over 95% of hip fractures result from falls
- Fall risk increases with age
- 3 million older adults are treated for a fall injury every year

https://www.cdc.gov/steadi/patient.html
### 10 Leading Causes of Death, United States

**2020, Both Sexes, All Ages, All Races**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Cause</th>
<th># Deaths</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>Poisoning</td>
<td>102,001</td>
<td>45.3%</td>
</tr>
<tr>
<td></td>
<td>Motor vehicle, traffic</td>
<td>45,404</td>
<td>20.2%</td>
</tr>
<tr>
<td></td>
<td>Fall</td>
<td>44,686</td>
<td>19.9%</td>
</tr>
</tbody>
</table>

---

**Notes:**
- **Poisoning** includes poisoning by the following substances: (1) toxic substances (exclusive of alcohol and tobacco); (2) food; (3) gases; (4) explosive substances; (5) drugs and medicinal substances; and (6) other substances.
- **Motor vehicle, traffic** includes accidents involving motor vehicles (automobiles, trucks, buses, etc.), as well as non-motorized vehicles (bicycles, skateboards, etc.).
- **Fall** includes non-vehicle accidents involving falls and sudden death by suicide.

**Additional Causes:**
- **Heart Disease**
- **Cerebrovascular Disease**
- **Cancer**
- **Respiratory Infections**
- **Chronic Low, Respiratory Disease**
- **Diabetes Mellitus**
- **Influenza & Pneumonia**

**Sources:**
- [Wisqars.cdc.gov/lcd/](https://wisqars.cdc.gov/lcd/)
Who is at elevated risk?

- Fall prevention is important for everyone
- Additional attention may be dedicated to those at higher levels of risk
Who is at elevated risk?

*Percent of older adults who reported a fall

https://www.cdc.gov/steadi/patient.html
Evaluating Risk

# Check Your Risk for Falling

<table>
<thead>
<tr>
<th>Circle “Yes” or “No” for each statement below</th>
<th>Why it matters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (2)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (2)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
<tr>
<td>Yes (1)</td>
<td>No (0)</td>
</tr>
</tbody>
</table>

To check your risk online, visit: [www.bit.ly/3o4RIW8](http://www.bit.ly/3o4RIW8)

This checklist was developed by the Greater Los Angeles VA Geriatric Research Education Clinical Center and affiliates and is a validated fall risk self-assessment tool (Rubenstein et al. J Safety Res; 2011: 42(6):493-499). Adapted with permission of the authors.
3 Key Questions

• Have you fallen in the last year?
  o How many times? Were you injured?

• Do you feel unsteady when standing or walking?

• Do you feel worried about falling?

*Answer "yes" to any is a positive screen!*
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:
   1. Stand up from the chair.
   2. Walk to the line on the floor at your normal pace.
   3. Turn.
   4. 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.
## The 4-Stage Balance Test

### 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."

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>①</strong></td>
<td>Stand with your feet side-by-side.</td>
<td>Time: ________ seconds</td>
</tr>
<tr>
<td><strong>②</strong></td>
<td>Place the instep of one foot so it is touching the big toe of the other foot.</td>
<td>Time: ________ seconds</td>
</tr>
<tr>
<td><strong>③</strong></td>
<td>Tandem stand: Place one foot in front of the other, heel touching toe.</td>
<td>Time: ________ seconds</td>
</tr>
<tr>
<td><strong>④</strong></td>
<td>Stand on one foot.</td>
<td>Time: ________ seconds</td>
</tr>
</tbody>
</table>
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.

Score:

Chair Stand Below Average Scores

<table>
<thead>
<tr>
<th>AGE</th>
<th>MEN</th>
<th>WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-64</td>
<td>&lt;14</td>
<td>&lt;12</td>
</tr>
<tr>
<td>65-69</td>
<td>&lt;12</td>
<td>&lt;11</td>
</tr>
<tr>
<td>70-74</td>
<td>&lt;12</td>
<td>&lt;10</td>
</tr>
<tr>
<td>75-79</td>
<td>&lt;11</td>
<td>&lt;10</td>
</tr>
<tr>
<td>80-84</td>
<td>&lt;10</td>
<td>&lt;9</td>
</tr>
<tr>
<td>85-89</td>
<td>&lt;8</td>
<td>&lt;8</td>
</tr>
<tr>
<td>90-94</td>
<td>&lt;7</td>
<td>&lt;4</td>
</tr>
</tbody>
</table>

A below average score indicates a risk for falls.
Fear of Falling

• Increases risk of:
  o **FALLS!**
  o Activity Restriction – Cycle of muscle atrophy, deconditioning, loss of postural control, gait impairment
  o Depression
  o Social isolation
  o Poor quality of life
  o Frailty
Screening for Fear of Falling

- **Falls Efficacy Scale - International (FES-I)**
  - 16 questions of self-reported concern about falling while performing 16 ADLs
  - Low, moderate, or high concern

- **Single Question Fear of Falling and Activity Restriction (SQ-FAR)**
  - **Are you afraid of falling?**
  - **If so, have you restricted any activities because of this fear?**
  - 74% specificity and 86% specificity when compared with FES-I

Investigating Why They Fell
(or may be at risk for falling)

Jessica H. Voit, MD
UT Southwestern Medical Center
Step 1 – Patient Perception

How often do you fall? What about *almost* falling?

Let me ask your family members what they notice about your gait.

Are you concerned about the consequences of falling?

Step 2 – Describe the Situation

Step 1: Elicit person’s experience and perception of fall (Identify perceived cause of fall, consequences)

Step 2: Recreate the situational context of fall (Note location, time, position of fall)

Step 3: Identify key symptom onset: acute or chronic; review past medical history (Note perception of symptom frequency)

Step 4: Perform a physical examination (Note pertinent positive and negative findings)

Step 5: Synthesize Steps 1-4, construct case vignette, review possible fall etiology, and determine plan of care

Figure. Stepwise processes involved in the clinical approach of falls evaluation.

Step 3 – Identify Symptoms and Hx

- Neuro
- Cardiac
- GI
- Pain
- Weakness
- Vitals?
- Glucose?
- EtOH? Illicits?
- Relevant PMH?
- Medication Review
- Altered Sensory - neuropathy - vision

Step 4 – Examination

Gait

- Timed Up and Go
- Gait observation
- Turns
- Assistive Device?

Step 5 – Synthesize and Plan

Step 1: Elicit person’s experience and perception of fall (identify perceived cause of fall, consequences)

Step 2: Recreate the situational context of fall (note location, time, position of fall)

Step 3: Identify key symptom onset: acute or chronic; review past medical history (note perception of symptom frequency)

Step 4: Perform a physical examination (note pertinent positive and negative findings)

Step 5: Synthesize Steps 1-4, construct case vignette, review possible fall etiology, and determine plan of care

Reducing Fall Risk

Kayla Murphy, MD
UT Southwestern Medical Center
Outline:

1. Evidence base for exercise and practical implementation tips
2. Addressing medical conditions contributing to falls
3. Using our interdisciplinary teams
4. Reviewing medications
Evidence base for exercise

Published online 2021 Nov 29. doi: [10.3390/ijerph182312562](https://doi.org/10.3390/ijerph182312562)

The Effect of Exercise Intervention on Reducing the Fall Risk in Older Adults: A Meta-Analysis of Randomized Controlled Trials

*Mingyu Sun,¹,† Leizi Min,²,† Na Xu,¹ Lei Huang,³ and Xuemei Li¹,*
Integrated training: resistance training, core training, and balance training

Physical training

Fitness training: Pilates, Ba Duan Jin, and Tai Chi

Integrated training (SMD = 3.16) > physical training (SMD = 0.88) > fitness training (SMD = 0.57)

Duration of exercise program:

32 weeks (SMD = 2.92) > 12–32 weeks (SMD = 0.98) > less than 12 weeks (SMD = 0.68)

more than five times a week (SMD = 2.39) > 3–5 times a week (SMD = 1.17)
Exercise programs

- Endurance (walking, biking)
- Balance (single leg balance, tai chi)
- Resistance (weights)
- Flexibility (stretching)

**No meaningful difference in reducing falls between these**

Exercise and Physical Activity Plan

I want to get active to:
Choose as many as you want.

- Be healthier
- Have fun
- Have more energy
- Ease pain
- Feel less stressed
- Be a role model for family
- Have better balance
- Sleep better
- Have a healthy pregnancy
- Age well
- Have better focus

What kind of activities are you looking for?
Choose as many as you want.

Show me activities I can do...
- By myself
- With friends or family
- With kids under 6
- With kids 6 to 12
- With teens
- While taking care of a baby

Show me activities I can do...
- Indoors
- Outdoors
- At home
- Away from home

https://health.gov/moveyourway/activity-planner
Exercise and Physical Activity Plan

Choose activities to add to your weekly plan.

After you choose an activity, you can add how many minutes and days per week you want to do that activity. Here’s how:

- Type in numbers or click the arrows to add or subtract minutes and days per week
- Click the “Add to your plan” button

Once you’re done adding activities, click the “Review your plan” button.

https://health.gov/moveyourway/activity-planner
# Exercise and Physical Activity Plan

**This week, I’m planning to do:**

![Heart symbol] 450 minutes of moderate-intensity aerobic activity

![Heart symbol] 2 days of muscle-strengthening activity

Add up your minutes of aerobic activity and number of muscle-strengthening sessions, and include both totals in the bottom row of the tracker for each day.

<table>
<thead>
<tr>
<th></th>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gardening and weeding</td>
<td>20 minutes, 4 days this week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tai chi</td>
<td>20 minutes, 4 days this week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total minutes and sessions**

**Total minutes of aerobic activity this week:**

**Total sessions of muscle-strengthening activity this week:**

---

**Remember, aim for this mix each week:**

![Heart symbol] 150 minutes of moderate-intensity aerobic activity

![Heart symbol] 2 days of muscle-strengthening activity

[https://health.gov/moveyourway/activity-planner](https://health.gov/moveyourway/activity-planner)
### Questions to Ask Yourself About Getting Ready to Exercise

Answer these questions to assess how active you are now and why you want to become more active.

1. Am I currently exercising on a regular basis?
   - [ ] Yes
   - [ ] No

2. How much time do I spend sitting each day?

3. How much time am I active and how often each week?

4. When I'm active, what kinds of activities am I doing?

5. What motivated or would motivate me to start exercising?
   - [ ] To become more physically fit
   - [ ] To help prevent future health problems
   - [ ] To reduce stress
   - [ ] To manage a chronic condition, like heart disease or diabetes
   - [ ] To spend time with friends and family or make new friends
   - [ ] Other: 

---


Acknowledging and addressing medical conditions contributing to fall risk

• Vision and hearing impairment
Comparison of personal sound amplification products and conventional hearing aids for patients with hearing loss: A systematic review with meta-analysis

PSAPs and conventional hearing aids showed similar benefit for hearing gain, sound quality, and listening effort.

PSAPs easily available and cost effective, but need to consider significant variation in devices/brands.
Acknowledging and addressing medical conditions contributing to fall risk

- Vision and hearing impairment
  - Corrective lenses, hearing aids

- Neuropathy and vascular disease affecting balance
  - Foot exams, orthotic shoes

Increased risk:
- Diabetes
- Chemotherapy
- Heavy alcohol use

Acknowledging and addressing medical conditions contributing to fall risk

• Vision and hearing impairment
  
  Corrective lenses, hearing aids

• Neuropathy and vascular disease affecting balance
  
  Foot exams, orthotic shoes

• Urinary or fecal incontinence
  
  Differential: UTI, diabetes, atrophic vaginitis, stool impaction/constipation, medications
  
  Voiding diary, connect to PCP or uro/gyn, review medications, urinalysis, ask about constipation
  
  Work up for underlying cause, incontinence supplies

1. Urinary incontinence work up: https://www.aafp.org/pubs/afp/issues/2013/0415/p543.html
Acknowledging and addressing medical conditions contributing to fall risk

- Vision and hearing impairment
  - Corrective lenses, hearing aids

- Neuropathy and vascular disease affecting balance
  - Foot exams, orthotic shoes

- Urinary or fecal incontinence
  - Work up for underlying cause, incontinence supplies

- Cognitive impairment
  - Cognitive screening, home safety assessment

Acknowledging and addressing medical conditions contributing to fall risk

• Vision and hearing impairment
  - Corrective lenses, hearing aids

• Neuropathy and vascular disease affecting balance
  - Foot exams, orthotic shoes

• Urinary or fecal incontinence
  - Work up for underlying cause, incontinence supplies

• Cognitive impairment
  - Cognitive screening, home safety assessment

• Orthostatic hypotension
  - Orthostatic vitals, compression stockings

How to check orthostatic vitals

1. Have the patient lie down for 5 minutes.
2. Measure blood pressure and pulse rate.
3. Have the patient stand.
4. Repeat blood pressure and pulse rate measurements after standing 1 and 3 minutes.

A drop in BP of ≥20 mm Hg, or in diastolic BP of ≥10 mm Hg, or experiencing lightheadedness or dizziness is considered abnormal.

Managing Orthostatic Hypotension

### TABLE 9-2
Nonpharmacologic Treatments for Orthostatic Hypotension

- Liberalization of salt consumption
- Liberalization of water intake (up to 2.5 L/d)
- Acute water bolus (drinking 500 mL water)
- Sleeping with the head of the bed raised 30 to 45 degrees with the help of an electric bed or mattress
- Physical activity with recumbent exercises (eg, stationary bicycle, rowing machine) or in a swimming pool
- Physical countermaneuvers (eg, standing up slowly, leg crossing, buttock clenching)\(^{52}\)
- Abdominal binder\(^{53}\)
- Waist-high compression stockings producing at least 15 mm Hg to 20 mm Hg pressure\(^{54}\) (knee-high or thigh-high stockings are typically not useful)
Acknowledging and addressing medical conditions contributing to fall risk

- Vision and hearing impairment
  - Corrective lenses, hearing aids
- Neuropathy and vascular disease affecting balance
  - Foot exams, orthotic shoes
- Urinary or fecal incontinence
  - Work up for underlying cause, incontinence supplies
- Cognitive impairment
  - Cognitive screening, home safety assessment
- Orthostatic hypotension
  - Orthostatic vitals, compression stockings
- Osteoporosis
  - Screening, weight bearing exercise, bisphosphonates

Osteoporosis

Screening with bone density testing:
- Women ≥ 65 years of age and men ≥ 70 years of age, regardless of clinical risk factors
- Younger postmenopausal women, women in the menopausal transition, and men aged 50 to 69 years with clinical risk factors for fracture
- Adults who have a fracture at age 50 years and older
- Adults with a condition (e.g., rheumatoid arthritis, organ transplant) or taking a medication (e.g., glucocorticoids, aromatase inhibitors, androgen deprivation therapy) associated with low bone mass or bone loss

Once diagnosed:
- Following up with PCP/metabolism clinic for consideration of therapy
- Resistance and balance exercise
- Monitoring vitamin D (≥ 30 ng/mL but below ≤ 50 ng/mL)
- Addressing other fall risks

LeBoff MS, et al. The clinician's guide to prevention and treatment of osteoporosis. Osteoporos Int. 2022
Home Assessments

Safety Assessment of Function and the Environment for Rehabilitation—Health Outcome Measurement and Evaluation (SAFER-HOME v3)
  • This pre-discharge assessment is an interview and observation-based assessment that evaluates an individual's ability to engage in functional activities safely.

In-Home Occupational Performance Evaluation for Providing Assistance (I-HOPE Assist)
  • This tool assesses changes in performance and safety in the home before home modifications and after home modifications.

Home Falls and Accidents Screening Tool (Home FAST)
  • A short, 25-item assessment for identifying fall hazards in the homes of older adults

Westmead Home Safety Assessment (WeHSA)
  • This tool has a long-form and a short-form and targets potential fall risks in older adults.

Home Safety Self-Assessment Tool (HSSAT)
  • Patients and patient caregivers can use this self-assessment tool to self-identify and correct potential fall hazards.

Informal practitioner-created checklists.
  • Can create your own based on patient's differing levels of physical or cognitive disability, adults who are aging in place, etc.

List of home safety assessments: https://www.ncbi.nlm.nih.gov/books/NBK560539/
Home Safety Self Assessment Tool (HSSAT)

The list identifies all of the potential home hazards that may cause a fall. If the item applies to your home, place a check in the box. Then add the total number of checks and enter it in the box below.

1. Lack of railings or unstable railing
2. Unsafe steps (too steep/cracked)
3. Unmarked or raised threshold
4. Lack of lighting at night
5. Lack of a ramp for a wheelchair
6. Uneven/cracked pavement
7. Ice or snow on driveway/walkway
8. Lack of an outdoor grab bar

Other:

Total number of problems

* The numbers correspond to the hazard in the picture and solutions on the following page

Involving interdisciplinary team members

Examining high risk medications

SSRIs and falls

Table 4. Interaction between SSRI use and frailty associated with falls after 12 months of follow-up.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Odds Ratio (95% confidence interval)</th>
<th>Unadjusted Model(^a)</th>
<th>p*</th>
<th>Adjusted Model(^b)</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>No SSRI use or frailty</td>
<td>1 (ref.)</td>
<td>1</td>
<td>–</td>
<td>1 (ref.)</td>
<td>–</td>
</tr>
<tr>
<td>SSRI use and frailty</td>
<td>2.48 (2.14–2.87)</td>
<td>&lt;.001</td>
<td>2.97 (2.30–3.82)</td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Frailty, no SSRI use</td>
<td>1.17 (1.04–1.32)</td>
<td>.007</td>
<td>1.57 (1.05–2.32)</td>
<td>.025</td>
<td></td>
</tr>
<tr>
<td>SSRI use, no frailty</td>
<td>1.43 (1.27–1.63)</td>
<td>&lt;.001</td>
<td>1.65 (1.26–2.15)</td>
<td>&lt;.001</td>
<td></td>
</tr>
</tbody>
</table>

SSRIs + frailty = highest risk of falls

SSRIs also independently increase falls

Examining high risk medications

- Antiepileptics OR 1.55 (1.25 - 1.92)
- Opioids OR 1.6 (1.35 - 1.91)
- Parkinson's meds, NSAIDs not significantly increased risk
- Long term exposure to PPIs increased fall risk
Examining high risk medications

Patient Cases

Lessley Chiriboga, MD
UT Southwestern Medical Center
Case 1 - Introduction

• 76 year old woman
  o First evaluated for neuropathy in 2013
  o Established with primary care clinic in 2015
  o Started psychiatric care in 2018

• PMH
  o HTN
  o HLD
  o T2DM with polyneuropathy
  o Hypothyroidism
  o Osteoarthritis
  o Anemia
  o Vitamin B12 deficiency

• Psych hx
  o MDD
  o Anxiety
  o insomnia

• Significant Medications
  o Amitriptyline 50 mg qhs
  o Bupropion XL 150 mg daily
  o Cetirizine 10 mg daily
  o Fluoxetine 60 mg daily
  o Gabapentin 100 mg tid
  o OTC Vitamin B12 supplement
  o Tizanidine 4 mg daily as needed
  o Tramadol 50 mg every 4 hours as needed
  o Zolpidem 5 mg qhs prn insomnia

• Retrospective STEADI score: 5
First Fall

Patient had a fall in 2018 (71 y/o)

1. + lightheadedness and unsteadiness at baseline, but no prior fall

2. Setting: during nighttime awakening in the bathroom, she had more dizziness than usual. Needed assistance from her husband to get up.

3. PMH: T2DM with neuropathy, anemia
   New PMH: orthostatic hypotension, polyarthritis, and RLS

4. Minor skin breaks and contusions to right forearm, no head injury signs. +orthostasis

5. Possible sources: medication side effects (Tizanidine), orthostatic hypotension, age, and neuropathy
   Plan: Tizanidine was decreased, and she was referred for autonomic testing with neurology

---

Figure. Stepwise processes involved in the clinical approach of falls evaluation.
Results

• Autonomic Function Testing
  o Mild cardiovagal and sympathetic adrenergic impairment
  o Mild diabetic autonomic neuropathy

• Medication Updates
  o Tizanidine was eventually discontinued --> lightheadedness frequency improved
  o Ropinirole was started --> RLS improved
Medication Timeline

Medication started
Medication discontinued
Medication continued

2013
Amitriptyline
Tizanidine
Tramadol
Vitamin B12
Zolpidem

2015
Amitriptyline
Tramadol
Bupropion XL
Cetirizine
Fluoxetine
Gabapentin
Tizanidine
Vitamin B12
Zolpidem

2017
Fluoxetine
Escitalopram
Bupropion XL
Cetirizine
Gabapentin
Tizanidine
Vitamin B12
Zolpidem

2018
Bupropion XL
Tizanidine
Melatonin
Ropinirole
Cetirizine
Escitalopram
Gabapentin
Vitamin B12
Zolpidem

2019
Buspirone
Cetirizine
Gabapentin
Ropinirole
Vitamin B12
Zolpidem

2020
Ropinirole
Buspirone
Cetirizine
Escitalopram
Gabapentin
Melatonin
Vitamin B12
Zolpidem

2021
Aripiprazole
Atomoxetine
Bupropion
Cetirizine
Gabapentin
Melatonin
Zolpidem

2022
Escitalopram
Vitamin B12
Aripiprazole
Atomoxetine
Buspirone
Cetirizine
Gabapentin
Melatonin
Zolpidem

2023
Aripiprazole
Duloxetine
Atomoxetine
Buspirone
Cetirizine
Gabapentin
Melatonin
Zolpidem
Summary of 2023

• 2 falls less than 6 months apart
  o Likely cause was increased dizziness
  o Both had head injuries. One required ER evaluation for scalp laceration, no LOC

• New PMH
  • alpha-synucleinopathy with pure autonomic failure
  o Osteoporosis
  o Sensorineural hearing loss

• Ddx
  o Lewy body
  o Parkinsonism

• Repeat STEADI score: 8

• Strengths
  o Insight
  o Support from her husband
  o Well established with her treatment team
Case 2 - Introduction

- 82 year old woman
- PMH
  - Hyperparathyroidism
  - Major neurocognitive disorder
  - Grief
  - Major depressive disorder
  - Alcohol use disorder
- Limitations
  - Reliability of her report - major NCD
  - Obtaining collateral - she becomes defensive in the clinic

- Risk for falls
  - STEADI score: 5. Falls in the past 1 year, feeling unsteady, will hold on to furniture, and experience sadness/depression
  - Alcohol use --> greater risk for mechanical falls
  - Recalculated STEADI score: 7, if we consider the common effects of alcohol use as medication side effects
Case 2

• Medications changes
  • Acamprosate for alcohol use disorder

• Immediate Results
  • Reduction in alcohol consumption
  • Better engagement in appointments

• Long term Results
  • Continued decreased alcohol use, currently 2 drinks or less per week
  • No falls in more than 1 year
  • Update STEADI score: 1 for sadness/depression
  • Patient is more involved in treatment planning regarding depression and grief
Take Aways

- Falls are highly prevalent in older adults
- It is crucial to screen for fall risk and evaluate gait
  - History of falls is a big risk for future falls!
- Have a standardized approach to assessing a patient at high risk for falls
- Take a multifaceted approach to fall prevention

Thank you!

Questions?