Choosing Wisely for Older Adults in Primary Care

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Acknowledgements

Clinical Guideline Source
- American Geriatrics Society
- American Board of Internal Medicine

Disclosures
- Nothing to disclose

Objectives

1. Give an overview of the Choosing Wisely Campaign
2. Highlight five principles from the Choosing Wisely for Older Adults that are relevant to primary care and review the evidence behind each
3. Apply the Choosing Wisely evidence to actual patient cases

Choosing Wisely: What is it?

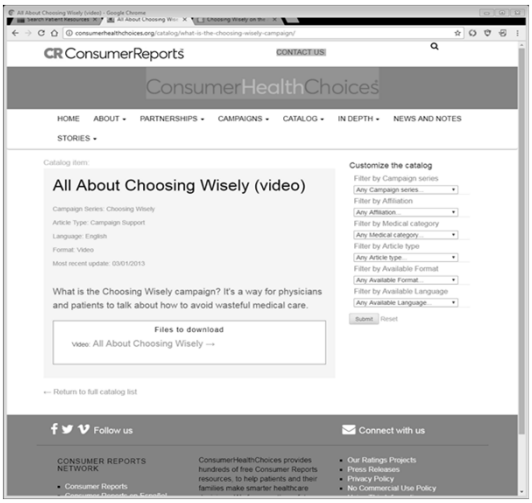
- A United States-based health educational campaign, led by the American Board of Internal Medicine
- Aim: Help patients/care consumers choose care that is
  - Supported by evidence
  - Free from harm
  - Truly necessary
- Each medical specialty produces a lists of treatments and procedures that providers and patients should question

Choosing Wisely®
An initiative of the ABIM Foundation

http://www.choosingwisely.org/

Choosing Wisely

- Lists from most medical specialties
- Include references to relevant literature
- Patient-friendly resources, developed by Consumer Reports

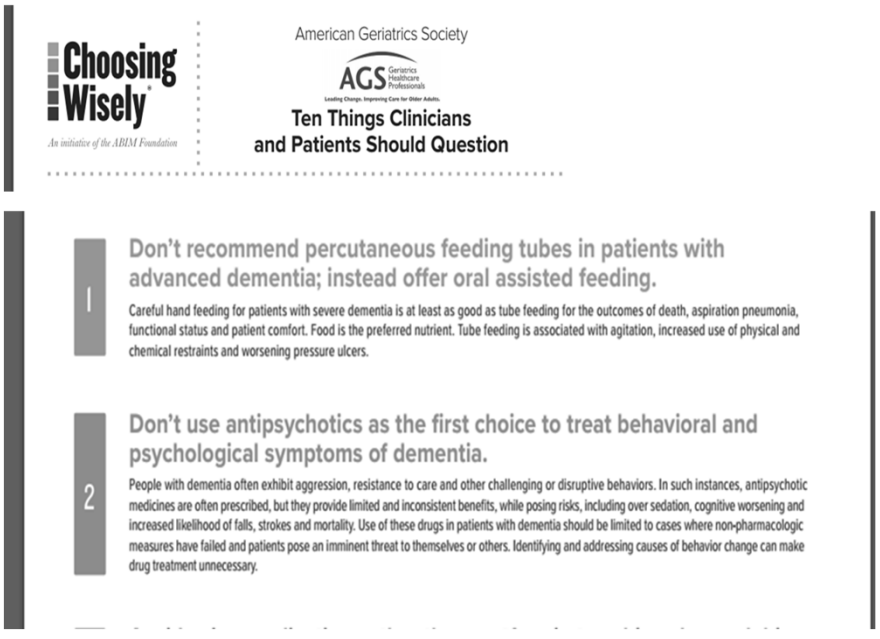


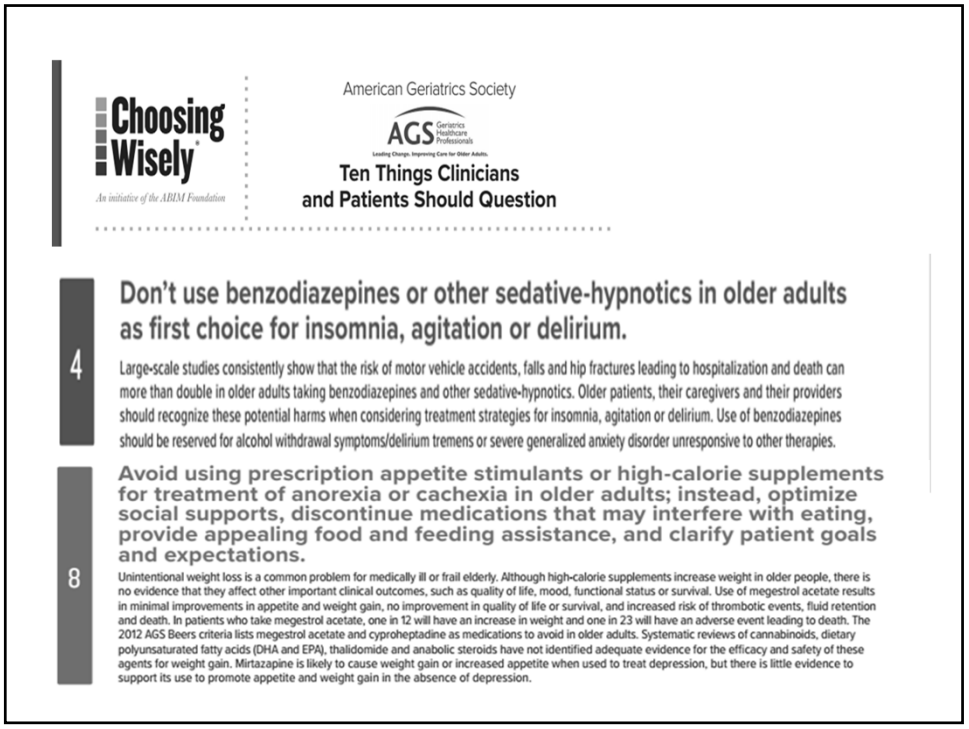
American Geriatrics Society's Final Five

1. Don't recommend percutaneous feeding tubes in patients with advanced dementia; instead offer assisted oral feeding.
2. Don't use antipsychotics as first choice to treat behavioral and psychological symptoms of dementia.
3. Avoid using medications to achieve hemoglobin A1c <7.5% in most adults age 65 and older; moderate control is generally better.
4. Don't use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation or delirium.
5. Don't use antimicrobials to treat bacteriuria in older adults unless specific urinary tract symptoms are present.

AGS' Final Five – List 2

6	• Don't prescribe cholinesterase inhibitors for dementia without periodic assessment for perceived cognitive benefits and adverse gastrointestinal effects.
7	• Don't recommend screening for breast or colorectal cancer, nor prostate cancer (with the PSA test) without considering life expectancy and the risks of testing, overdiagnosis and overtreatment.
8	• Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults; instead, optimize social supports, provide feeding assistance, and clarify patient goals and expectations.
9	• Don't prescribe a medication without conducting a drug regimen review.
10	• Avoid physical restraints to manage behavioral symptoms of hospitalized older adults with delirium.

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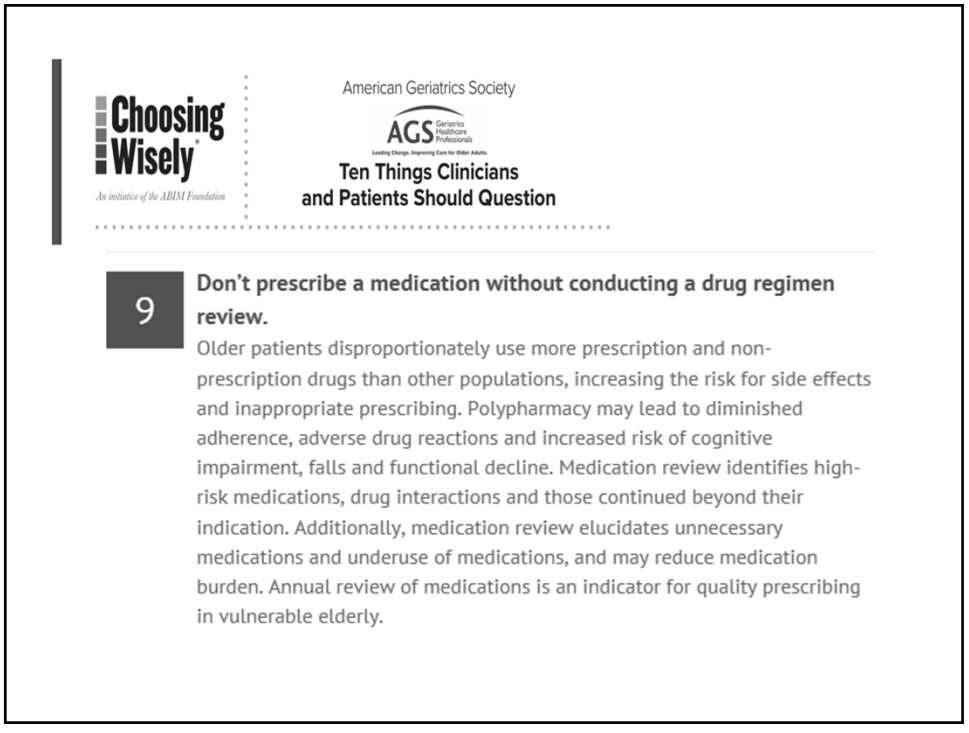
AGS Geriatrics Healthcare Professionals
Leading Change. Improving Care for Older Adults.
Ten Things Clinicians and Patients Should Question
4
Don't use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation or delirium.
Large-scale studies consistently show that the risk of motor vehicle accidents, falls and hip fractures leading to hospitalization and death can more than double in older adults taking benzodiazepines and other sedative-hypnotics. Older patients, their caregivers and their providers should recognize these potential harms when considering treatment strategies for insomnia, agitation or delirium. Use of benzodiazepines should be reserved for alcohol withdrawal symptoms/delirium tremens or severe generalized anxiety disorder unresponsive to other therapies.
8
Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults; instead, optimize social supports, discontinue medications that may interfere with eating, provide appealing food and feeding assistance, and clarify patient goals and expectations.
Unintentional weight loss is a common problem for medically ill or frail elderly. Although high-calorie supplements increase weight in older people, there is no evidence that they affect other important clinical outcomes, such as quality of life, mood, functional status or survival. Use of megestrol acetate results in minimal improvements in appetite and weight gain, no improvement in quality of life or survival, and increased risk of thrombotic events, fluid retention and death. In patients who take megestrol acetate, one in 12 will have an increase in weight and one in 23 will have an adverse event leading to death. The 2012 AGS Beers criteria lists megestrol acetate and cyproheptadine as medications to avoid in older adults. Systematic reviews of cannabinoids, dietary polyunsaturated fatty acids (DHA and EPA), thalidomide and anabolic steroids have not identified adequate evidence for the efficacy and safety of these agents for weight gain. Mirtazapine is likely to cause weight gain or increased appetite when used to treat depression, but there is little evidence to support its use to promote appetite and weight gain in the absence of depression.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Ten Things Clinicians and Patients Should Question
9
Don't prescribe a medication without conducting a drug regimen review.
Older patients disproportionately use more prescription and non-prescription drugs than other populations, increasing the risk for side effects and inappropriate prescribing. Polypharmacy may lead to diminished adherence, adverse drug reactions and increased risk of cognitive impairment, falls and functional decline. Medication review identifies high-risk medications, drug interactions and those continued beyond their indication. Additionally, medication review elucidates unnecessary medications and underuse of medications, and may reduce medication burden. Annual review of medications is an indicator for quality prescribing in vulnerable elderly.

Choosing Wisely®: Tube Feeding Patients with Advanced Dementia

1

- Don't recommend percutaneous feeding tubes in patients with advanced dementia; instead offer assisted oral feeding.

Feeding in Advanced Dementia

- Dysphagia prominent in late-stage dementia
- Apraxia and inattention interfere with self-feeding
- Health professionals often recommend a percutaneous feeding tube in this setting to make feeding easier and "prevent aspiration"
- Discussions with families tend to focus on procedural risks, not outcomes and alternatives
- **Feeding tubes are not helpful**
- **Feeding tubes have risks**

Lack of Benefits of Feeding Tubes

- Do *not*
  - prolong life
  - improve functional status or mitigate functional decline
  - prevent aspiration or aspiration pneumonia
  - promote wound healing
  - prevent weight loss
  - prevent malnutrition

Risks of Feeding Tubes

- Overall complication rate: 32-70%
- Complications
  - Sinus and middle ear infections
  - Skin irritation, infection, ulceration around tube (4-16%)
  - Bleeding and/or leaking around tube (13-20%)
  - Nausea, vomiting, diarrhea
  - Blockage with need to unclog (2-35%)
  - Fall out and need to replace (2/3)
  - Pneumonia (in up to 2/3 of cases)
  - Pressure sores
  - Agitation → restraints (chemical, physical)

Alternative to Feeding Tubes

- Hand ("oral assisted") feeding
  - Preserves pleasure of oral intake and taste of food
  - Promotes human contact/interaction
  - Reduces risk of weight loss
  - Permits cueing (remind to swallow, cough gently after each swallow, take small amounts at a time)
- Reduce anticholinergic drug burden (contribute to dry mouth, cause swallowing dysfunction and choking)
- Reduce meds that cause anorexia and nausea (e.g., donepezil, SSRIs)

Choosing Wisely®: Antipsychotics

2

- Don't use antipsychotics as first choice to treat behavioral and psychological symptoms of dementia.

Dementia and Disruptive Behavior

- People with dementia often become restless, aggressive, disruptive, and/or resist care
- Behaviors occur nearly universally during disease progression and regardless of dementia etiology
- These behaviors contribute to caregiver burnout and may result in placement
- Antipsychotics often used to treat these behaviors
- **Antipsychotics are not helpful**
- **Antipsychotics have risks**

Buhr GT et al. *J Am Med Dir Assoc* 2007;8(3 suppl 2):101-13.

Lack of Benefits of Antipsychotics

- Limited benefit – do not reduce disruptive behavior
- Do not improve quality of life
- Do not improve function
- Higher health care costs

Rosenheck et al. *Arch Gen Psychiatry* 2007;64:1259-68.
Gill et al. *Ann Intern Med.* 2007;146:775-86.

Risks of Antipsychotics

- Worsened cognition
- Drowsiness / over sedation
- Aspiration pneumonia
- Orthostatic hypotension
- Alterations in gait
- Falls and fractures
- Stroke
- Cardiac sudden death (prolongation of QT interval)
- Weight gain, diabetes, dyslipidemia (Zyprexa)

Alternatives to Antipsychotics

- Identify and address unmet needs
  - Pain
  - Constipation
  - Urinary retention
  - Hunger
  - Thirst
  - Vision or hearing difficulty
  - Feeling too cold or too hot
  - Occult infection (UTI, pneumonia)
- Eliminate medications that worsen dementia symptoms
  - Anticholinergics
  - Sedative hypnotics

Alternatives to Antipsychotics

- Reduce environmental stressors (noise, bright lights)
- Structure / daily routine
- Daily exercise
- Distraction, redirection
- Social interactions, reminiscence, art and music
- Increase caregiver support (e.g., regular respite)

Common problems (of most concern to caregivers)	**Solutions**
Repetitive questioning	Expect to provide repetitive answers. Re-orient.
Argumentativeness	Agree. Model behavior. Avoid debating.
Toileting issues	Timed voiding.
Upset, agitated, restless	Daytime activity and structure. Provide pet? Be calm.
Refusing care	Be flexible. Relax rules so long as safe.
Awake at night	Establish routines. Hire overnight coverage. Avoid bedtime beverages and caffeine.
Verbal aggression	Distract. Redirect. Identify and avoid antecedents.
Wandering	Daytime exercise and activity. Safety-proof walkways.

Choosing Wisely®: Benzodiazepines

4

- Don't use benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitation or delirium.

Insomnia in Later Life

- Chronic sleep problems: 57% of older adults
- One-third of older adults take a sleeping pill
  - Benzodiazepines
  - Non-benzodiazepine hypnotics (e.g., Zolpidem)
  - Over-the-counter sleep aids
- **Sleeping pills are not helpful**
- **Sleeping pills have risks**

Lack of Benefits of Sedative-Hypnotics

- Minimal improvements in sleep duration and sleep quality with benzodiazepines
- True also for
  - "Z" drugs (Zolpidem/Ambien, Zaleplon/Sonata, Zopliclone/Imrest)
  - Over-the-counter agents
    - Diphenhydramine/Benadryl, Nytol, Sominex
    - Doxylamine/Unisom
    - Advil PM
    - Tylenol PM

Risks of Sedative-Hypnotics

- Memory loss, confusion, disorientation
- Daytime fatigue
- Dizziness
- Sleepwalking (Zolpidem)
- Falls leading to hospitalization and death (1.8-fold increase)
- Hip fractures (3.1-fold increase)
- Motor vehicle crashes (1.6-fold increase)
- Crashes requiring hospitalization (5.6-fold increase)

Stenbacka. *Alcohol* 2002.
Finkle. *J Am Geriatr Soc* 2011.
Rapoport. *J Clin Psychiatr* 2009.
Meuleners. *J Am Geriatr Soc* 2011.

Alternatives to Sedative-Hypnotics

- Treat underlying contributors to insomnia
  - Depression
  - GERD
  - Nocturia
  - Obstructive sleep apnea
  - Pain
- Implement lifestyle modifications
  - Regular exercise
  - Avoid alcohol and caffeine
  - Avoid stimulating activity at least 2 hours prior to bedtime
  - Last meal of day at least 3 hours prior to bedtime
  - Create a restful environment
  - Wake up at same time every day
  - Eliminate daytime naps
- Cognitive behavioral therapy *
- Melatonin

* Geiger-Brown JM et al. *Sleep Med Rev* 2015;23:54-67.
* Wu JQ et al. *JAMA Intern Med* 2015;175:1461-72.

Choosing Wisely®: Appetite Stimulants

8	• Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults; instead, optimize social supports, provide feeding assistance, and clarify patient goals and expectations.

Unintentional Weight Loss

- Unintentional weight loss common in old age
  - Annual incidence of approximately 13% in elderly veterans living in the community*
  - Prevalence estimates as high as 27% in frail elderly receiving community services**
- Definition:***
  - Loss of 5% or more of body weight in 1 month
  - Loss of 10% or more of body weight over 6 months or longer

* Wallace JI et al. *J Am Geriatr Soc.*1995;43:329-37.
** Alibhai et al. *CMAJ* 2005;172:773-80.
***Stajkovic S et al. *CMAJ* 2011;183:443-49.

Anorexia and Weight Loss

- Usually multifactorial
  - Sensory (taste/smell)
  - Mechanical (chewing, swallowing)
  - Medications that interfere with eating, cause weight loss, nausea or diarrhea (anticholinergics, digoxin, theophylline, chemo agents, anti-retrovirals, vitamins with iron, donepezil, NSAIDs)
  - Medical (endocrine conditions e.g., hyperthyroidism, hyperparathyroidism)
  - Functional (mobility, upper body impairments)
  - Psychological (depression, dementia)
  - Social
  - Financial (food access)
- Health professionals often recommend appetite stimulants or high-calorie nutritional supplements for this issue
- **Appetite stimulants and supplements are not helpful**
- **Appetite stimulants have risks**

Lack of Benefits of Appetite Stimulants and Nutritional Supplements

- Minimal improvement in appetite and weight gain
- No improvement in muscle strength
- No improvement in quality of life or survival
- No effect on muscle function or disability

Risks of Appetite Stimulants

- Thrombotic events
- Fluid retention
- Death

Time to stop using megestrol acetate for unintentional weight loss

Megestrol acetate for treatment of anorexia-cachexia syndrome (Review)

Ruiz Garcia V, López-Briz E, Carbonell Sanchis R, Gonzalvez Perales JL, Bort-Marti S

Clinical effect	Clinical impact
MA improves appetite	NNT = 4
MA has a small effect on weight gain	NNT = 12
MA does NOT improve quality of life	
MA increases VTE risk	NNH = 2–55
MA increases risk of dying	NNH = 23

Mirtazapine

- Atypical antidepressant
- Increased appetite and weight gain are side effects
  - 17% increase in appetite and 10% increase in weight
  - Most weight gain takes place in the first 4–8 weeks
- No evidence of weight gain in absence of depression*
- Weight gain not clearly superior compared with other antidepressants**

Table 1. Weight Changes with Mirtazapine and Sertraline

Weight Change	Mirtazapine n = 25	Sertraline n = 25
Weight change, pounds, range	−3 to +16	−7 to +20
Mean weight gain, pounds	2.65	2.68
Patients gaining ≥7% body weight, n (%)	1 (4)	1 (4)
Patients gaining ≥5 pounds, n (%)	7 (28)	6 (24)

Note: There were no statistical differences between the two medications.

**Cochrane Database Syst Rev* 2011;12:CD006528.
***J Amer Geriatr Soc* 2002;50:1461-1467.

Oral liquid nutrition supplements

- A multibillion-dollar expense to healthcare
- Main ingredients
  - Water
  - Sucrose (sugar)
  - Corn syrup (more sugar)
  - Maltodextrin (less sweet sugar)
  - Few oils, proteins (whey and soy), multivitamin

- Liquid candy bar with vitamins
- Distraction from real food?

Oral liquid supplement vs real food

	Boost	**Ensure**	**Low-fat yogurt and orange**
Serving size	8 oz	8 oz	8 oz + 1 orange
Calories	240	250	206
Fiber	0 g	< 1 g	3 g
1st two ingredients	Water Corn syrup solids	Water Corn syrup	Low-fat milk Milk solids
Cost (1999)	$1.40	$1.43	$1.09
Taste Best = 1 to Worst = 5	4	5	1

Oral liquid supplements in geriatrics

- In undernourished, short-term, hospitalized patients:
  - Fewer complications: OR 0.72 (95% CI, 0.53–0.97)
  - Lower mortality: OR 0.66 (95% CI, 0.49–0.90)
- Disappointing impact on other circumstances of unintentional weight loss
- No clear impact on functional status, mood, or length of hospital stay
- No evidence for supplementation at home or in well-nourished individuals
- Generally suboptimal evidence base

So…what's a primary care provider to do?

- Address contributors to weight loss as appropriate to goals and circumstances
  - Target investigation for reversible causes
  - Assess and address common problems
    - Cognitive decline
    - Depression
    - Insufficient social supports
    - Review medications for "anorexigenic" agents

Alternatives to Appetite Stimulants and Nutritional Supplements

- Bolster feeding support in those experiencing increased dependency in eating
- Eliminate dietary restrictions
- Enhance food flavor
- Make meals a social occasion
- Exercise to burn calories
- Routine bowel movements to prevent satiety
- Work with patients, surrogate decision-makers, caregivers, and loved ones to clarify treatment goals and expectations

Choosing Wisely®: Drug Regimen Review

9

- Don’t prescribe a medication without conducting a drug regimen review.

Multiple Medications

- 20% of older adults take ≥10 medications
- Practice guidelines reinforce prescribing by chronic condition
- Underuse of potentially beneficial medications

Boyd CM et al. *JAMA* 2005;294(6):716-724.
Steinman MA. *Am J Geriatr Pharmacother* 2007;5(4):314-316.

Risks of Multiple Medications

- Receiving incorrect medications
- Adverse drug reactions
- Nonadherence

Hajjar ER et al. *Am J Geriatr Pharm* 2007;5:345-51.

Risks of Multiple Medications

- Cognitive impairment
- Falls
- Functional decline

Steinman MA, Hanlon JT. *JAMA* 2010;304:1592-1601.

Medication Review

Helps identify:

- Unnecessary medications
- Potentially harmful medications
- Opportunities to reduce medication burden
- Underuse of indicated medications

Drenth-van Maanen AC. *Drugs Aging* 2009;26:687-701.

Other Considerations

- Goals of care
- Life expectancy
- Time to benefit
- Burden of therapy
- Values/quality of life

Reuben DB. *JAMA* 2009;302:2686-94.

Illustrative Cases for Discussion

Case 1

SM, an 81 yo woman with Parkinson's disease and advanced dementia. Her husband accompanies her to her clinic visit with you and notes that he is having trouble feeding her, and that she has started coughing during meals. On exam, you note that she has a new stage I pressure ulcer on her coccyx.

What would your first step be?

Case 2

Mr. DV, 84 yo homeless man with dementia, diabetes, GERD, BPH, depression/anxiety, and chronic insomnia
Presentation: Fall with multiple rib fractures
Meds: Lorazepam, Olanzapine

What concerns would you have about his medications, given his fall?

Case 3

Mr. PG, your 78 yo uncle, with CAD, HTN, and COPD for whom you are DPOA-HC as he has no other living relatives. He lives alone, and you stop by once a week to check in on him. Recently he has been more listless, seems not to engage with you, and his clothes seem to be fitting more loosely. You take him to his PMD who writes a prescription for Ensure.

What would your response be in this situation?

Case 4

Mrs. MW, a 91 yo woman with moderate dementia, osteoporosis, HTN, hypothyroidism, and essential tremor presents to establish primary care. Her review of systems is notable for generalized weakness and frequent heartburn. Vitals show 130/78, 58 supine and 110/60, 97 standing. She takes the following medications:

- Donepezil 10 mg daily
- Valsartan 40 mg daily
- Propranolol 20 mg 2x/day
- Levothyroxine 75 mcg daily

What medication changes would you recommend ?

Conclusions

- Treatments that may be helpful for younger adults may not be safe or reliable in older people, because of physical changes of aging
- Initiate conversations about potentially unnecessary tests or treatments with your older patients
- Encourage your patients to ask questions of their healthcare team and discuss alternatives with them

Questions?

Thank you for your attention!