



Deprescribing Deftness

Jessica Wright PA-C, MBA, DFAAPA
OHSU Inpatient Geriatrics Consult Service
56th Annual Primary Care Review, 2025

Disclosures

Non-Declaration Statement:

- I have no relevant relationships with ineligible companies to disclose within the past 24 months.



Tools of Choice for Deprescribing



<https://www.vecteezy.com/free-vector/magic-eight-ball> Magic Eight Ball Vectors by Vecteezy

Discuss the following with the patient/guardian

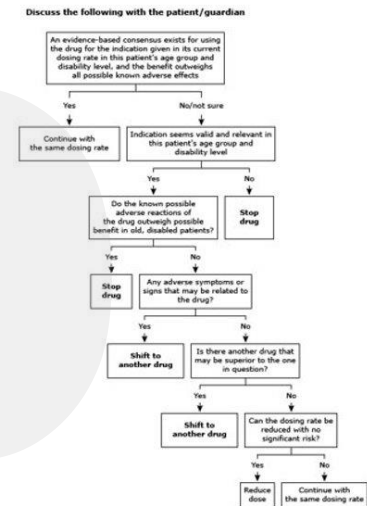


Tools of Choice for Deprescribing

A) Magic 8 Ball



B) Complicated Decision Tree



Objectives



Identify commonly prescribed
high-risk medications



Identify resources for
deprescribing



Practice case-based
deprescribing

High Risk Highlights

Antihistamines/Anticholinergics

Benzodiazepines

Z-drugs

Potpourri

Prescribing Cascades

Antihistamines and AnticholinergicsTM Drugs

Antihistamines

First generation antihistamines:

diphenhydramine (Benadryl), hydroxyzine (Vistaril), Promethazine (Phenergan), Meclizine (Antivert)

AnticholinergicsTM

Antispasmodics (GI/GU): Scopolamine, Dicyclomine (Bentyl), *Oxybutynin* (*Ditropan*), Prochlorperazine (Compazine)

Antidepressants: Amitriptyline, Doxepin, Nortriptyline (Pamelor), Paroxetine (Paxil)

Red as a beet

-cutaneous vasodilation

Dry as a bone

-anhidrosis

Hot as a hare

-hyperthermia

Blind as a bat

-mydriasis / blurred vision

Mad as a hatter

-delirium, confusion, memory impairment

Full as a flask

-urinary retention, constipation

Benzodiazepines and Z-drugs

Benzodiazepines

- Short or intermediate acting: Alprazolam (Xanax), Lorazepam (Ativan), Temazepam (Restoril), Triazolam (Halcion)
- Long-acting: Diazepam (Valium), Clonazepam (Klonopin)

Z-drugs

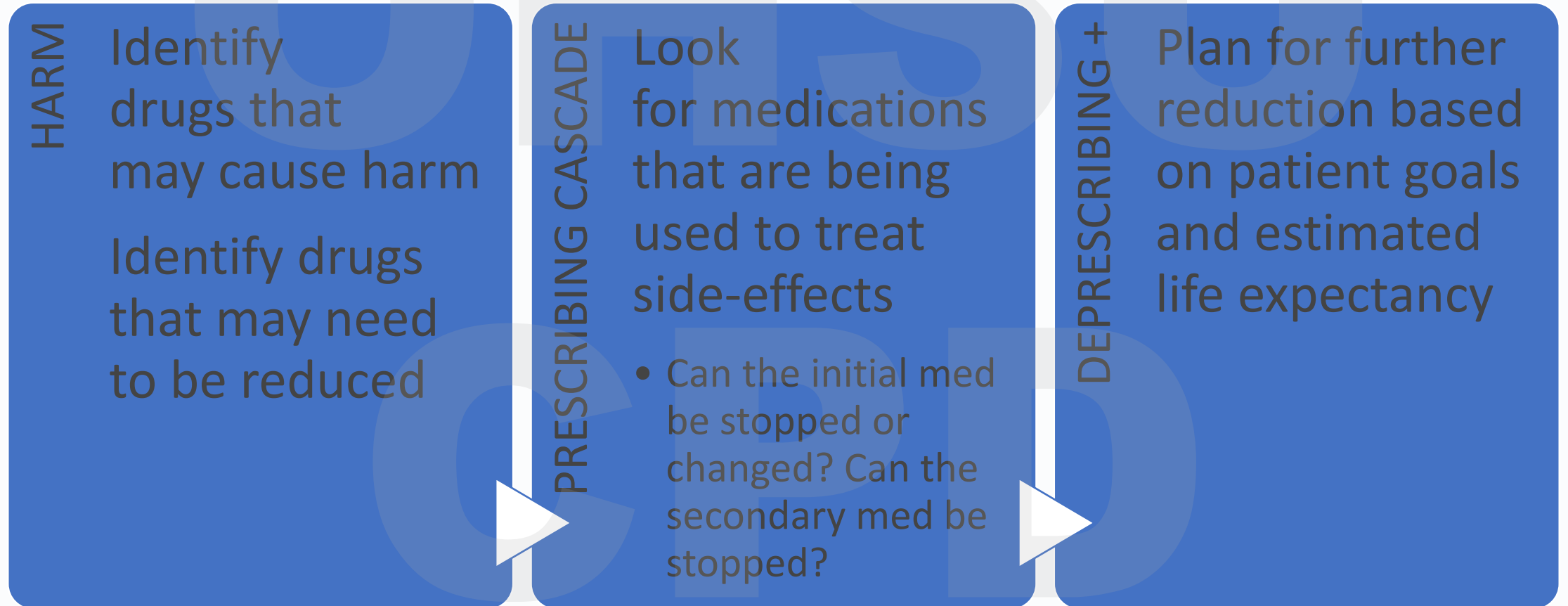
- Zaleplon (Sonata)
- Zolpidem (Ambien)



Potpourri

- Opioids (not all of them!)
 - Fentanyl, Morphine, XR preparations
- Corticosteroids
 - Prednisone, Dexamethasone
- Fluroquinolones
 - Ciprofloxacin, Levofloxacin

Jessica's Deprescribing Method






Harm

Tools to Identify High Risk Medications

Beer's List

JOURNAL OF THE AMERICAN GERIATRICS SOCIETY



SPECIAL ARTICLE |  **Free Access**

American Geriatrics Society 2023 updated AGS Beers Criteria® for potentially inappropriate medication use in older adults

By the 2023 American Geriatrics Society Beers Criteria® Update Expert Panel 

First published: 04 May 2023 | <https://doi.org/10.1111/jgs.18372> | Citations: 42

Listen to the GeriPal Podcast with the authors at <https://bit.ly/GeriPalEp266>
Panel Members and Affiliations are provided in Appendix.
See related Editorial by [Rochon and Hilmer](#)

Beer's List

<https://agsjournals.onlinelibrary.wiley.com/doi/10.1111/jgs.18372>

Table 2. 2019 American Geriatrics Society Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults*

Organ System, Therapeutic Category, Drug(s)	Rationale	Recommendation	Quality of Evidence	Strength of Recommendation
Anticholinergics^b				
First-generation antihistamines Brompheniramine Carbinoxamine Chlorpheniramine Clemastine Cyproheptadine Dexbrompheniramine Dexchlorpheniramine Dimenhydrinate Diphenhydramine (oral) Doxylamine Hydroxyzine Meclizine Promethazine Pyrimamine Triprolidine	Highly anticholinergic; clearance reduced with advanced age, and tolerance develops when used as hypnotic; risk of confusion, dry mouth, constipation, and other anticholinergic effects or toxicity Use of diphenhydramine in situations such as acute treatment of severe allergic reaction may be appropriate.	Avoid	Moderate	Strong
Antiparkinsonian agents Benztropine (oral) Trihexyphenidyl	Not recommended for prevention or treatment of extrapyramidal symptoms with antipsychotics; more effective agents available for treatment of Parkinson disease	Avoid	Moderate	Strong
Antispasmodics Atropine (excludes ophthalmic) Belladonna alkaloids Clidinium-chlordiazepoxide Dicyclomine Homatropine (excludes ophthalmic) Hyoscyamine Methscopolamine Propantheline Scopolamine	Highly anticholinergic, uncertain effectiveness	Avoid	Moderate	Strong
Antithrombotics Dipyridamole, oral short acting (does not apply to the extended-release combination with aspirin)	May cause orthostatic hypotension; more effective alternatives available; IV form acceptable for use in cardiac stress testing	Avoid	Moderate	Strong
Anti-infective Nitrofurantoin	Potential for pulmonary toxicity, hepatotoxicity, and peripheral neuropathy, especially with long-term use; safer alternatives available	Avoid in individuals with creatinine clearance <30 mL/min or for long-term suppression	Low	Strong
Cardiovascular Peripheral alpha-1 blockers for treatment of hypertension Doxazosin Prazosin Terazosin	High risk of orthostatic hypotension and associated harms, especially in older adults; not recommended as routine treatment for hypertension; alternative agents have superior risk/benefit profile	Avoid use as an antihypertensive	Moderate	Strong



OLISU

STOPP/START

CRD

STOPP/START- V3

Screening Tool of Older Persons' Prescriptions (STOPP) version 3.

The following prescriptions are potentially inappropriate to use in patients aged 65 years and older.

Section A: Indication of medication

1. Any drug prescribed without a clinical indication.
2. Any drug prescribed beyond the recommended duration, where treatment duration is well defined.
3. Any duplicate drug class prescription for daily regular use (as distinct from PRN use) e.g., two concurrent NSAIDs, SSRIs, loop diuretics, ACE inhibitors, anticoagulants, antipsychotics, opioid analgesics (optimisation of monotherapy within a single drug class should be observed prior to considering a new agent).

Section B: Cardiovascular System

1. Digoxin for heart failure with normal systolic ventricular function (no clear evidence of benefit)
2. Verapamil or diltiazem with NYHA Class III or IV heart failure (may worsen heart failure with reduced ejection fraction i.e., HFREF).
3. Beta-blocker in combination with verapamil or diltiazem (risk of heart block).

OH SU

Decision Tree

The Choose Your Own Adventure of Deprescribing

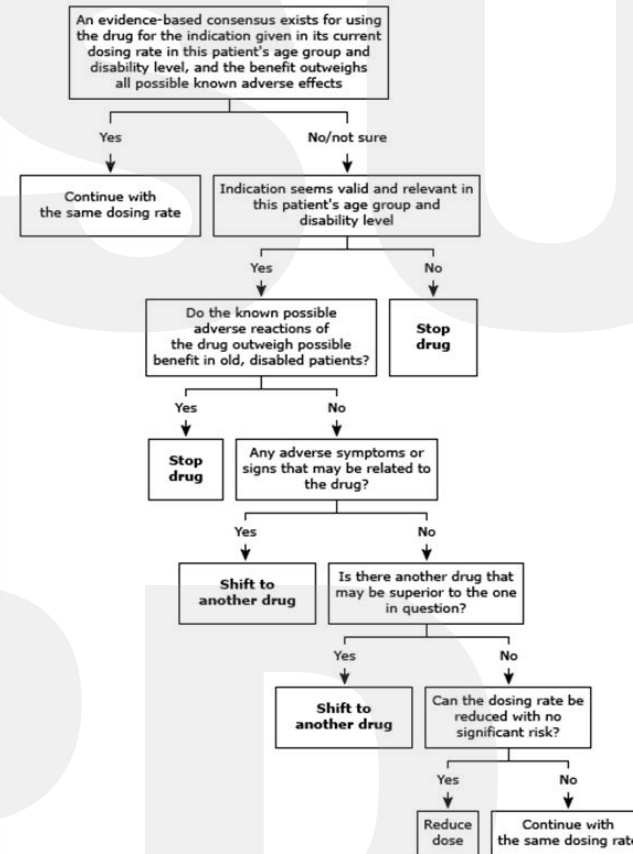
CPD

Up To Date

<https://www.uptodate.com/contents/drug-prescribing-for-older-adults>

Medication review

Discuss the following with the patient/guardian



Reproduced with permission from: Garfinkel D, Mangin D. Feasibility study of a systematic approach for discontinuation of multiple medications in older adults: Addressing polypharmacy. Arch Intern Med 2010; 170:1648. Copyright © 2010 American Medical Association. All rights reserved.

UpToDate®

A photograph of a waterfall cascading over dark, mossy rocks. The water is white and frothy as it falls. The background is dark and rocky, with some green moss visible. The overall tone is dark and moody.

OHHSU

Prescribing Cascades

CPD

ThinkCascades

Drug A		Side effect		Drug B
Cardiovascular System (n=2)				
Calcium Channel Blocker	→	Peripheral edema	→	Diuretic
Diuretic	→	Urinary incontinence	→	Overactive bladder medication
Central Nervous System (n=4)				
Antipsychotic	→	Extrapyramidal symptoms	→	Antiparkinsonian agent
Benzodiazepine	→	Cognitive impairment	→	Cholinesterase Inhibitor or memantine
Benzodiazepine	→	Paradoxical agitation or agitation secondary to withdrawal	→	Antipsychotic
Selective Serotonin Reuptake Inhibitor (SSRI) / Serotonin-norepinephrine Reuptake Inhibitor (SNRI)	→	Insomnia	→	Sleep agent (e.g., Benzodiazepines, Benzodiazepine Receptor Agonists, Sedating antidepressant, Melatonin)
Musculoskeletal System (n=1)				
NSAID	→	Hypertension	→	Antihypertensive
Urogenital System (n=2)				
Urinary Anticholinergics	→	Cognitive impairment	→	Cholinesterase inhibitor or memantine
Alpha-1 Receptor Blocker	→	Orthostatic hypotension, dizziness	→	Vestibular sedative (e.g., betahistine, Antihistamines, Benzodiazepines)

OHSU

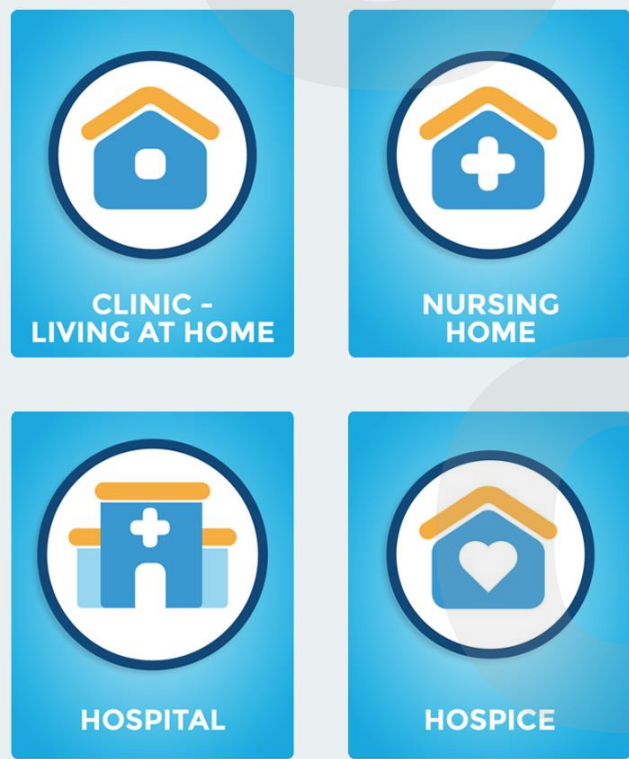
Deprescribing +

GPD

Eprognosis

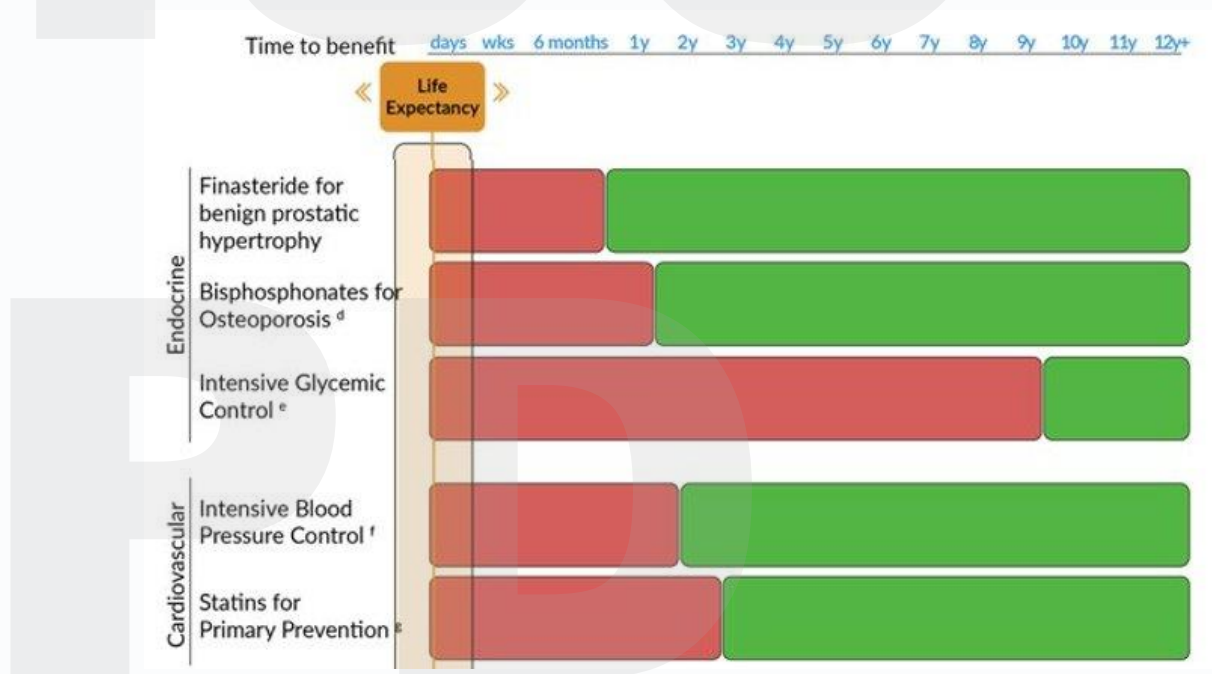
Life Expectancy

<https://eprognosis.ucsf.edu/calculators/>



Time to Benefit

https://eprognosis.ucsf.edu/time_to_benefit.php



MDCALC

<https://www.mdcalc.com/>

HAS-BLED Score for Major Bleeding Risk



Estimates risk of major bleeding for patients on anticoagulation to assess risk-benefit in atrial fibrillation care.

When to Use ▾

Pearls/Pitfalls ▾

Why Use ▾

Hypertension
Uncontrolled, >160 mmHg systolic

No 0

Yes +1

Renal disease

No 0

Yes +1

0 points

Risk was 0.9% in one validation study (Lip 2011) and 1.13 bleeds per 100 patient-years in another validation study (Pisters 2010).

Anticoagulation should be considered: Patient has a relatively low risk for major bleeding (~1/100 patient-years).

Copy Results 📋

Next Steps >>>



Artificial Intelligence

Use of AI For Deprescribing

ChatGPT 4o mini ▾

Log in

Sign up

Not intended to substitute clinical decision making but can be a powerful tool

to request a quote from local plumbers

an outfit that will look good on camera

Test my knowledge
on ancient civilizations

Give me ideas
for what to do with my kids' art

Please help me identify which of the following medications increase risk for falls in my 82 year old patient: |

ChatGPT can make mistakes. Check important info.

?

Please help me identify which of the following medications increase risk for falls in my 82 year old patient: gabapentin, tylenol PM, vitamin D, Ranitidine, Metoprolol




ChatGPT can make mistakes. Check important info.

For an 82-year-old patient, it's important to consider how medications can affect balance and fall risk. Here's a look at each medication you mentioned:

1. **Gabapentin:** This medication is often used for nerve pain and seizures. It can cause dizziness, drowsiness, and coordination problems, which can increase the risk of falls, especially in older adults.

In summary, **gabapentin** and **Tylenol PM** are most likely to increase the risk of falls in your patient. It's important to monitor for these side effects and consider alternative treatments or additional support to reduce fall risk.

of falls.

4. **Ranitidine:** This medication is used to reduce stomach acid. While it may have some side effects, it is not commonly associated with an increased risk of falls.
5. **Metoprolol:** This is a beta-blocker used for  hypertension and heart conditions. It can cause dizziness, especially when standing up quickly, which could contribute to falls in some patients,

4. Ranitidine:

Monitoring and Follow-up

- **Regular Follow-up:** Schedule regular check-ins to monitor the patient's response to medication changes and adjust as necessary.
- **Fall Risk Assessment:** Conduct a fall risk assessment before and after changes to medications and implement fall prevention strategies, such as physical therapy or home modifications, as needed.

Always tailor the taper plan to the individual patient's needs, and consult with their healthcare team before making any changes to medication.

reduce by 12.5 mg every week or as tolerated.

monitoring.

symptoms.

Create a Patient Handout

can you

Safe Medicine Tapering Plan

Dear Patient,

We want to help you stay safe and healthy. Some of your medicines can make you more likely to fall, so we need to adjust them carefully. Here's a simple plan to help you through this process.

1. Gabapentin

- **Why Adjust?** Gabapentin can make you feel dizzy or unsteady.
- **How We'll Do It:** We will slowly lower your dose to help reduce these effects.
 - **Step 1:** We'll cut your dose by 100 mg each week.
 - **Step 2:** We will check how you're doing and adjust as needed.

2. Tylenol PM

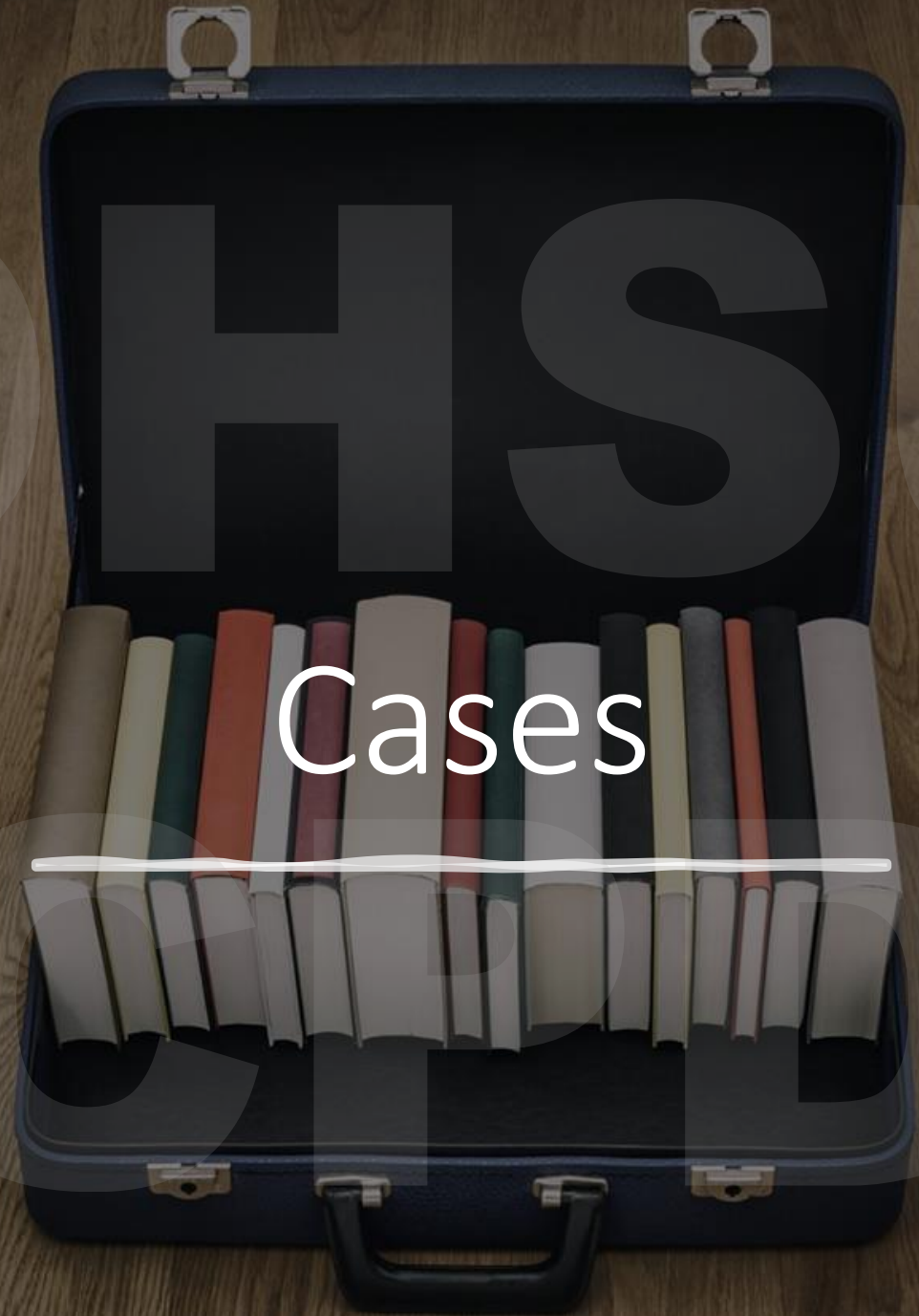
- **Why Adjust?** Tylenol PM has a sleeping medicine that can make you drowsy and unsteady.
- **How We'll Do It:** We'll gradually reduce how often you take it.



OH SU

Cases

Case





Case 1: Greta

76 yo nursing home dwelling woman with chronic pain, neuropathy, hx of CVA, CKD III and depression admitted for nonhealing coccyx ulcer, chronic malnutrition due to decreased appetite and mostly wheelchair bound due to frequent falls. She reports that her depression is not well controlled and she struggles with diarrhea, which has complicated her wound healing.

Case 1:Greta

- Tylenol 1000 mg TID
- Amlodipine 2.5 mg once daily
- Atorvastatin 20 mg once daily
- Bupropion SR 150 mg one tab BID
- Clopidogrel 75 mg once daily
- Gabapentin 600 mg one tab in a.m., at lunch and 2 tabs at bedtime
- Meloxicam 15 mg once daily
- Metformin 500 mg twice daily
- Metoprolol succinate 25 mg once daily
- Ranitidine 150 mg twice daily
- Oxycodone 5 mg one tab q 6 hours PRN
- Trazodone 100 mg once nightly
- Loperamide 2 mg as needed

76 yo nursing home dwelling woman with chronic pain, neuropathy, hx of CVA, CKD III and depression admitted for nonhealing coccyx ulcer, chronic malnutrition due to decreased appetite and mostly wheelchair bound due to frequent falls. She reports that her depression is not well controlled and she struggles with diarrhea, which has complicated her wound healing.

Deprescribing Plan for Greta

A) Stop Meloxicam

B) Stop Ranitidine

C) Stop Bupropion

D) Other

Case 2: James

86 yo community-dwelling male with hx of CAD s/p PCA (2016), angina, atrial fibrillation, HFpEF, anxiety with depression, chronic back pain with radiculopathy, type II DM, CKD (Cr 1.7), admitted for generalized weakness and falls, has an unintentional weight loss and is now around 155 pounds.



Photo by [Andrew Rivera](#) on [Unsplash](#)

Case 2: James

- Lorazepam 0.5 mg once nightly
- Lisinopril 10 mg once daily
- Buspirone 30 mg once daily
- Apixaban 5 mg twice daily
- Nitroglycerin 0.4 mg SL PRN
- Rosuvastatin 20 mg once daily
- Isosorbide CR 60 mg once daily
- Gabapentin 600 mg TID
- Norco 5/325 0.5 mg q 6 PRN
- Ibuprofen 800 mg TID PRN
- Lyrica 200 mg once daily
- Metformin SR 1500 mg once daily
- Seroquel 25 mg nightly
- Tamsulosin 0.4 mg daily
- Trazodone 150 mg once nightly

86 yo community dwelling male with hx of CAD s/p PCA (2016), angina, atrial fibrillation, HFpEF, anxiety with depression, chronic back pain with radiculopathy, type II DM, CKD (Cr 1.7), admitted for generalized weakness and falls, has an unintentional weight loss and is now around 155 pounds.

Deprescribing Plan for James

A) Stop Seroquel

B) Stop Benzodiazepine

C) Stop Lyrica or Gabapentin

D) All of the Above



Case 3: Virginia

81 yo assisted living facility dwelling woman with PMH of hypertension, depression, chronic lower back pain due to lumbar compression fracture, SLE with pericarditis, anxiety with depression, Type II DM (A1c 6.7%) admitted for altered mental status and fall. Has been newly diagnosed with atrial fibrillation.

Case 3: Virginia

- Amlodipine 10 mg daily
- Duloxetine 120 mg once daily
- Famotidine 20 mg twice daily
- Glipizide 10 mg twice daily
- Furosemide 20 mg daily and once daily PRN leg swelling
- Hydroxychloroquine 200 mg daily
- Hydroxyzine 25 mg twice daily PRN anxiety
- Naproxen 500 mg twice daily
- Pantoprazole 40 mg once daily
- Pioglitazone 45 mg once daily
- Prednisone 5 mg once daily
- Tramadol 50 mg twice daily as needed
- Trazodone 50 mg once nightly

81 yo assisted living facility dwelling woman with PMH of hypertension, depression, chronic lower back pain due to lumbar compression fracture, SLE with pericarditis, anxiety with depression, Type II DM (A1c 6.7%) admitted for altered mental status and fall. Has been newly diagnosed with atrial fibrillation.

Deprescribing Plan for Virginia

A) Stop Hydroxyzine

B) Stop Famotidine

C) Stop Naproxen

D) Stop or reduce amlodipine

Case 4: Miriam

83 yo independent living facility dwelling, retired high school principle with PMH of hypertension Type II DM, CKD II (Cr 1.0), mild chronic anemia, OA, macular degeneration and falls, she weighs 142 lbs. Hospitalized 10 months ago and went through 3 ½ weeks of rehab for left hip and rib fractures after a fall in her apartment. Her low velocity hip fracture qualifies as a fragility fracture giving her the diagnosis of osteoporosis.



Photo by [Vladimir Soares](#) on [Unsplash](#)

Case 4: Miriam

- ASA 81 mg daily
- Amlodipine 7.5 mg daily
- Calcium 500 mg BID with meals
- Cyanocobalamin 500 mcg daily
- Furosemide 20 mg BID + PRN
20 mg daily ankle swelling
- Lisinopril 20 mg daily
- Omeprazole 20 mg BID
- Potassium 20 mEq BID
- Magnesium 400 mg daily
- Meclizine 25 mg Q6H PRN dizziness
- MVI
- Trazodone 50 mg QHS
- PRN
acetaminophen, diclofenac topical
gel, PEG, tramadol, TUMS

83 yo independent living facility dwelling, retired high school principle with PMH of hypertension Type II DM, CKD II (Cr 1.0), mild chronic anemia, OA, macular degeneration and falls, she weighs 142 lbs. Hospitalized 10 months ago and went through 3 ½ weeks of rehab for left hip and rib fractures after a fall in her apartment. Her low velocity hip fracture qualifies as a fragility fracture giving her the diagnosis of osteoporosis.

Deprescribing Plan for Miriam

A) Discontinue Meclizine

B) Stop Aspirin

C) Decrease Omeprazole

D) Other



Case 5: Robert

76 years old, community-dwelling. Formerly robustly healthy retired physicist with metastatic prostate cancer diagnosed several months ago.

Admitted from SNF with pneumonia and volume overload. This is his 3rd admission in the past 4 months following a fall with vertebral burst fracture and repeat episodes of pneumonia.

He had a functional decline following chemotherapy and his SNF stay and now requires 24 hour assistance from family. Fasting lipid panel shows dyslipidemia.

Case 5: Robert

- Ca Carbonate (Ca-D-Mg) 2 tablets
BID with meals
- Lorazepam 0.5 mg TID PRN
- Omega 3 Fatty Acids 1 cap daily
- Tylenol 325 mg Q4H PRN pain
- Baclofen 20 mg QID PRN muscle spasms
- Co-Enzyme Q-10 75 mg daily
- Diphenhydramine-Tylenol (25-100 mg) QPM PRN insomnia
- Guaifenesin 100 mg/5 mL
Q4H PRN cough/congestion
- Tamsulosin 0.4 mg daily
- Morphine ER 45 mg TID
- Multivitamin 1 tab daily
- Ondansetron ODT 4 mg
Q8H PRN nausea/vomiting
- Oxycodone 5-20 mg Q6H PRN pain
- Polyethylene glycol 17 grams daily
- Ranitidine 150 mg
BID PRN heartburn/indigestion
- Senna-docusate 8.6-50 mg BID

76 years old, community-dwelling. Formerly robustly healthy retired physicist with metastatic prostate cancer diagnosed several months ago.

Admitted from SNF with pneumonia and volume overload. This is his 3rd admission in the past 4 months following a fall with vertebral burst fracture and repeat episodes of pneumonia.

He had a functional decline following chemotherapy and his SNF stay and now requires 24 hour assistance from family. Fasting lipid panel shows dyslipidemia.

Deprescribing Plan for Robert

A) Discontinue Lorazepam

B) Discontinue Baclofen

C) Taper Morphine ER

D) Other

Case 6: Sarge

84 yo memory care unit dwelling,
retired army
sergeant with advanced dementia,
dyslipidemia, atrial fibrillation,
hypertension and frequent falls
who presented to the hospital
with subarachnoid hemorrhage

He is seeing you in follow-
up after his hospital visit and
family is asking if Sarge should
resume his anticoagulant.



photo by [Donald Teel](#) on [Unsplash](#)

Case 6: Sarge

- Donepezil 23 mg once daily
- Vitamin D 2000 IU once daily
- Atorvastatin 10 mg once nightly
- Furosemide 20 mg once daily
- Fish Oil Omega 3 two capsules daily
- Warfarin 2 mg Tuesday and Thursday, 1 mg once nightly the remainder of the week
- Tylenol PM once nightly
- Oxybutynin ER 10 mg daily

84 yo memory care unit dwelling, retired army sergeant with advanced dementia, dyslipidemia, atrial fibrillation, hypertension and frequent falls who presented to the hospital with subarachnoid hemorrhage

He is seeing you in follow-up after his hospital visit and family is asking if Sarge should resume his anticoagulant.



Deprescribing +

MDCALC

HAS-BLED Score for Major Bleeding Risk

Estimates risk of major bleeding for patients on anticoagulation to assess risk-benefit in atrial fibrillation care.

When to Use ▼

Pearls/Pitfalls ▼

Why Use ▼

Hypertension

Uncontrolled, >160 mmHg systolic

No 0

Yes +1

Renal disease

Dialysis, transplant, Cr >2.26 mg/dL or >200

No 0

Yes +1

2 points

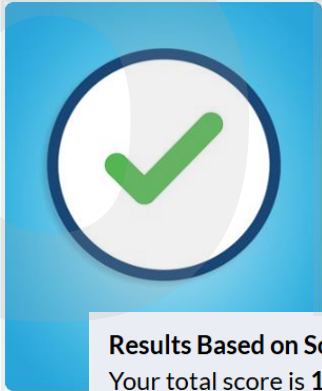
Risk was 4.1% in one validation study (Lip 2011) and 1.88 bleeds per 100 patient-years in another validation study (Pisters 2010).

Anticoagulation can be considered, however patient does have moderate risk for major bleeding (~2/100 patient-years).

Copy Results 📋

Next Steps >>>

Eprognosis-Calculator



Results Based on Score:
Your total score is **12.1**

Mitchell Index

- Population: Nursing home adults aged 65 and older
- Outcome: 6 month survival
- Scroll to the bottom for more detailed information

Risk Calculator

1. Has your patient been admitted to the nursing home in the past 90 days? ☐ Yes ☒ No
2. How old is your patient?
3. What is the sex of your patient? ☐ Male ☐ Female

Six Month Mortality

Points	Risk of 6 month mortality
1.0 - 6.4	7%
6.5 - 7.9	10%
8.0 - 8.9	13%
9.0 - 9.7	14%
9.8 - 10.5	17%
10.6 - 11.5	20%
11.6 - 12.5	23%

Mitchell Index

- Population: Nursing home adults aged 65 and older
- Outcome: 6 month survival
- Scroll to the bottom for more detailed information

Risk calculators cannot predict the future for any one individual; they cannot identify who will live and who will die.

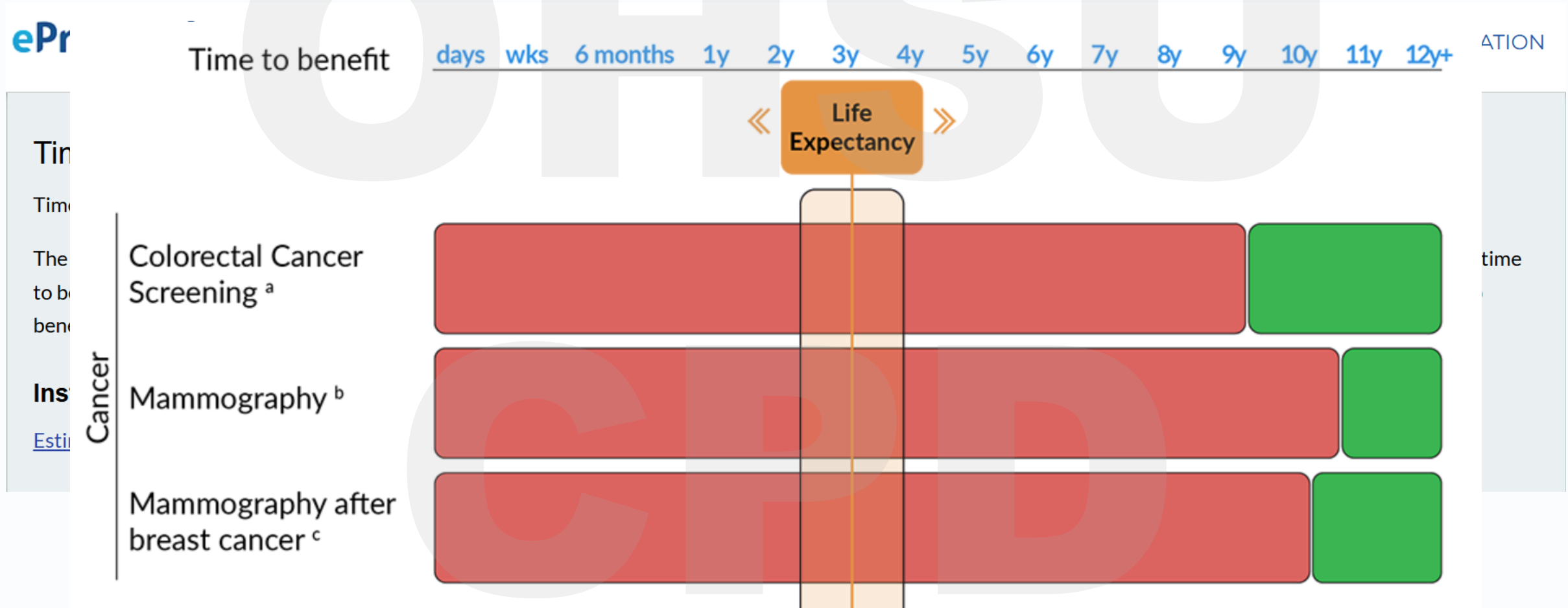
Thank you so much for your time today.

Results Based on Score:
Your total score is **12.1**

Time to benefit

days wks 6 months 1y 2y 3y 4y 5y 6y 7y 8y 9y 10y

Life Expectancy



Final Thoughts.....

- Pick whatever system works for you and then use it.
- Always think about potentially stopping a medication before starting a new one.
- The only wrong way to deprescribe is to not do it.



Questions?

- Thank you to the CME committee for allowing me to speak on this very important topic.
- Contact Information:
Jessica Wright PA-C
Wrighjes@ohsu.edu

