Practical Tips for Deprescribing in Older Adults

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Disclosure Slide

- Dr. Linnebur has the following conflicts of interest related to this presentation:
  - ✓Dr. Linnebur is a member of the Expert Panel for the 2023 Updated AGS Beers Criteria® and was a member of the 2019, 2015, and 2012 expert panels

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Objectives

- Apply shared decision-making principles and strategies when deprescribing
- Incorporate deprescribing pathways into clinical treatment plans
- Utilize online tools to effectively deprescribe

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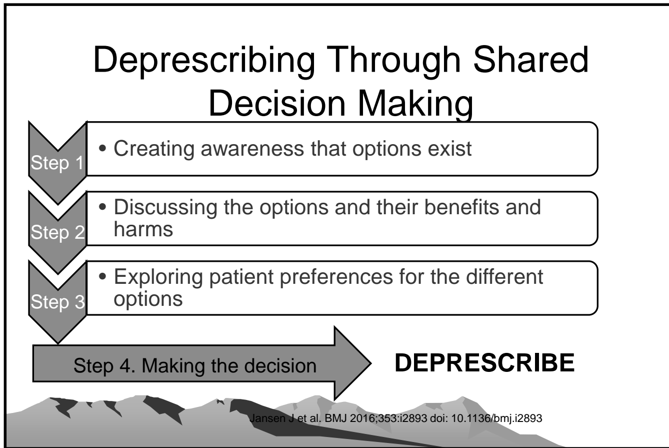

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Treatment Decisions in Older Adults

- Consider goals of care
  - ✓How frail is the patient?
  - ✓Is the patient more interested in palliative care or prevention meds/tx?
  - ✓What are the patient's QOL goals?
- Consider <u>time to benefit</u>: the time between when an intervention is initiated & when improved health outcomes occur
- To identify which patients are more likely to be helped vs harmed
  - ✓Compare time to benefit vs life expectancy

Lee SJ, Leipzid RM, Walter LC. JAMA 2013;310(24):2609-10. **Br J Gen Pract 2017; DOI: https://doi.org/10.3399/bjgp17X690533**

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http://eprognosis.ucsf.edu

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Making Smart Decisions: Time to Benefit vs Time to Harm

- Statins (3 years) vs prostate cancer screening (10 years)
- Immunizations: side effects immediate, benefit at 2 wks
- Pain treatment: side effects immediate, benefit immediately
- HTN treatment: hypotension immediate, benefit 6-12 mo later
- Bisphosphonates: side effects immediate, benefit 12 mo later
- Hypoglycemic agents: hypoglycemia immediate, benefit months to years later
- Aspirin: side effects immediate, reduction in CV events may take several years if it is being used for primary prevention

Lee SJ, LeipziG RM, Walter LC. JAMA 2013;310(24):2609-10.; JAMA Intern Med. 2021;181(2):179-185

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Less Aggressive Treatment: ADA 2023 Standards of Care for Older Adults

Table 13.1—Framework for considering treatment goals for glycemia, blood pressure, and dyslipidemia in older adults with diabetes

Patient characteristics/ health status	Rationale	Reasonable A1C goal‡	Fasting or preprandial glucose	Bedtime glucose	Blood pressure	Lipids
Healthy (few coexisting chronic illnesses, intact cognitive and functional status)	Longer remaining life expectancy	<7.0–7.5% (53–58 mmol/mol)	80–130 mg/dL (4.4–7.2 mmol/L)	80–180 mg/dL (4.4–10.0 mmol/L)	<130/80 mmHg	Statin, unless contraindicated or not tolerated
Complex/intermediate (multiple coexisting chronic illnesses* or two or more instrumental ADL impairments or mild-to-moderate cognitive impairment)	Intermediate remaining life expectancy, high treatment burden, hypoglycemia vulnerability, fall risk	<8.0% (64 mmol/mol)	90–150 mg/dL (5.0–8.3 mmol/L)	100–180 mg/dL (5.6–10.0 mmol/L)	<130/80 mmHg	Statin, unless contraindicated or not tolerated
Very complex/poor health (LTC or end-stage chronic illnesses** or moderate-to-severe cognitive impairment or two or more ADL impairments)	Limited remaining life expectancy makes benefit uncertain	Avoid reliance on A1C; glucose control decisions should be based on avoiding hypoglycemia and symptomatic hyperglycemia	100–180 mg/dL (5.6–10.0 mmol/L)	110–200 mg/dL (6.1–11.1 mmol/L)	<140/90 mmHg	Consider likelihood of benefit with statin

https://diabetesjournals.org/care/article/46/Supplement_1/S216/148044/13-Older-Adults-Standards-of-Care-in-Diabetes-2023

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ADA Algorithm: Simplification of Complex Insulin Therapy

- Change timing of basal insulin from evening to morning
- Stop sliding scale insulin
- How to titrate basal insulin based on fasting blood glucose
- How to stop mealtime insulin and start non-insulin options to replace it
  - ✓ Examples: metformin, GLP-1 agonists, DPP4-inhibitors, SGLT-2 inhibitors, pioglitazone
- Make changes to insulin regimen every 1-2 weeks

https://care.diabetesjournals.org/content/44/Supplement_1/S168

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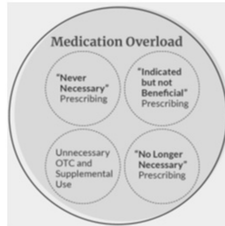
Drugs to Consider Deprescribing

- Never necessary medications
- Indicated but not beneficial medications
- No longer necessary medications
- Unnecessary OTC meds and supplements
- Drugs causing side effects
- Drugs that the patient is interested in stopping
- Trade drugs for non-pharmacologic approaches



www.lowninstitute.org/pills

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"Never Necessary Prescribing"

- **Drugs with a <u>high risk</u> and <u>low benefit</u> or with safer alternatives**
  - ✓ Example: Drugs on the AGS Updated Beers Criteria®
- **Drugs that are intended to be <u>short-term</u> but are continued long-term**
  - ✓ Examples: PPIs for ulcer ppx or treatment; Albuterol inhaler for an acute respiratory infection
- **Drugs initiated as part of the <u>prescribing cascade</u>**

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2023 Updated AGS Beers Criteria®…Coming Soon

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The Prescribing Cascade

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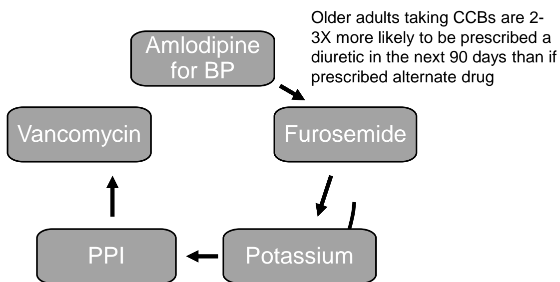
Prescribing Cascade Example



Older adults taking CCBs are 2-3X more likely to be prescribed a diuretic in the next 90 days than if prescribed alternate drug

JAMA Intern Med. 2020;180(5):643-651. doi:10.1001/jamainternmed.2019.7087

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Avoiding the Prescribing Cascade

- For any new symptoms, if reasonable investigate drug causes 1st!
  - ✓ Ask your pharmacist to review drug databases and 1° literature
  - ✓ Many side effects are predictable and easy to identify
  - ✓ Rare side effects often occur in older adults
- Review for temporal relationship
- Laboratory measurements may be helpful
- Discontinue the drug or reduce the dose and monitor for symptom resolution
- If necessary, consider drug rechallenge

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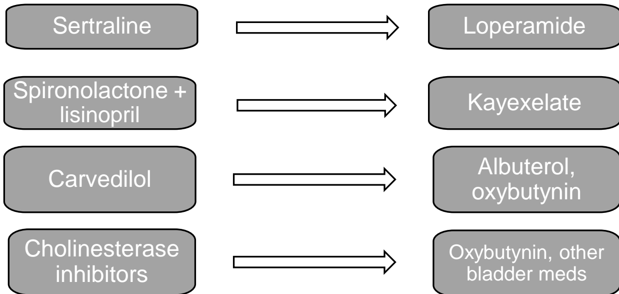
Other Prescribing Cascade Examples



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"Indicated but Not Beneficial Prescribing"

- **Drugs that have lost their effects or only provide modest benefit**
  - ✓Example: dementia meds, sulfonylureas, antimuscarinics for UI
- **Drugs that will not be effective or show benefit in the remaining life span of the patient**
  - ✓Example: statin for primary prevention
- **Drugs that have drug-drug interactions so they are not absorbed**
  - ✓Examples: PPI + calcium carbonate/bisacodyl/clopidogrel

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"No Longer Necessary Prescribing"

- **Drugs indicated for a certain time frame but never stopped**
  - ✓Examples: bisphosphonates, anticoagulants, antiplatelets, PPIs, antidepressants, metoclopramide, estrogen
- **Drugs no longer necessary due to changes in goals of care**
  - ✓Examples: bisphosphonates, statins, ASA, dementia meds, vitamins and minerals (e.g. calcium, vit D, vit B12)
- **Drugs used to treat a condition too aggressively**
  - ✓Examples: DM or HTN treatment

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"Unnecessary OTC and Supplement Use"

Can cause harm	Often no long-term indication or data
Aspirin	Multivitamins
Ibuprofen and naproxen	Fish oil
Diphenhydramine	Probiotics
Pseudoephedrine	Vitamin C
Omeprazole/PPIs	Almost everything else

EXCEPTIONS: vitamin D and B12, folate, calcium, iron, melatonin, diclofenac gel, acetaminophen, and AREDS2

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781119

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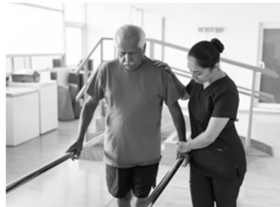
Trade Drugs for Non-Pharmacologic Approaches

- Counseling/cognitive behavioral therapy/virtual reality
- Facility activities/social events
- Music therapy
- Physical therapy
- Exercise
- Heat/ice



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Deprescribing Tips and Tools

Starting medications is like the bliss of marriage and stopping them is like the agony of divorce…

--Doug Danforth

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General Tips to Overcome Barriers to Deprescribing

- Add in prescription drug checkups to visits
  - ✓Perform after hospitalizations as well
- View discontinuation of drugs as part of the normal prescribing process and use shared decision making
  - ✓Discuss options with patient/family and rationale for deprescribing, consider discussion of side effects and changes associated with aging
    - Continuation may cause harm
    - Discontinuation may cause harm
  - ✓Educate patient/family and monitor for harm

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Common Drugs To Consider Deprescribing

- ✓Proton pump inhibitors
- ✓Benzodiazepines
- ✓NSAIDs
- ✓Anticholinergics
- ✓Insulin
- ✓Sulfonylureas
- ✓Sedative hypnotics
- ✓Antipsychotics
- ✓Statins
- ✓ASA
- ✓Cholinesterase inhibitors
- ✓Memantine
- ✓OTCs/supplements

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To Taper or Not to Taper?

Best to Taper

- Beta-blockers
- Clonidine
- Benzodiazepines
- Antidepressants
- Antipsychotics
- Opioids
- Pregabalin/gabapentin
- Proton pump inhibitors
- Estrogen

Generally No Taper Needed

- ACE-Is, ARBs, diuretics
- Statins
- Anticholinergics
- NSAIDs and aspirin
- Insulin, sulfonylureas, metformin
- Cholinesterase inhibitors
- OTCs and supplements

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www.deprescribing.org
www.deprescribingnetwork.ca

- Deprescribing educational tools for patients and caregivers
- Deprescribing algorithms and videos for clinicians
- Deprescribing patient decision aids
- Non-drug advice

- PPIs, benzodiazepines, Z-drugs, antihyperglycemic agents, antipsychotics, cholinesterase inhibitors/memantine
- Studies: JAMA Intern Med. 2014;174(6):890-898. J Am Geriatr Soc 2018;66:1186–1189

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Sedative-hypnotics

You May Be at Risk

You are taking one of the following sedative-hypnotic medications:

- Alprazolam (Xanax®)
- Bromazepam (Lectopam®)
- Chlorazepate
- Chlordiazepoxide-amitriptyline
- Clidinium-chlordiazepoxide
- Clobazam
- Clonazepam (Rivotril®, Klonopin®)
- Diazepam (Valium®)
- Estazolam
- Flurazepam
- Loprazolam
- Lorazepam (Ativan®)
- Lormetazepam
- Nitrazepam
- Oxazepam (Serax®)
- Quazepam
- Temazepam (Restoril®)
- Triazolam (Halcion®)
- Eszopiclone (Lunesta®)
- Zaleplon (Sonata®)
- Zolpidem (Ambien®, Intermezzo®, Edluar®, Sublinox®, Zolpimist®)
- Zopiclone (Imovane®, Rhovane®)

CaDeN

SO ASK YOURSELF:

YES OR NO?

Have you been taking this sedative-hypnotic drug for a while?	○Y ○N
Are you often tired and groggy during the day?	○Y ○N
Do you ever feel hungover in the morning, even though you have not been drinking?	○Y ○N
Do you ever have problems with your memory or your balance?	○Y ○N

AS YOU AGE

Age-related changes take place in your body and modify the way you process medications. Drugs stay in your body longer and diminished liver function and poor blood flow to your kidneys may increase side effects. The chances you will take more than one medication increases as you age, as does your likelihood of having multiple chronic illnesses.

Unfortunately, this important information is often not passed on to patients who are taking this drug. Please consult your doctor, nurse or pharmacist to discuss this further. Alternative therapies could relieve your anxiety or improve your sleep with fewer side effects and improved quality of life.

www.deprescribingnetwork.ca.

You May Be at Risk 7

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DEPRESCRIBING: REDUCING MEDICATIONS SAFELY TO MEET LIFE'S CHANGES

WHAT ARE BENZODIAZEPINE RECEPTOR AGONISTS & Z-DRUGS?

WHY CONSIDER REDUCING OR STOPPING A BZRA BEING USED FOR INSOMNIA?

HOW TO SAFELY REDUCE OR STOP A BZRA

Ask questions, stay informed and be proactive.

6 STEPS TO ENSURE A GOOD NIGHT'S SLEEP

STEP 1 - Start a sleep diary
Familiarize yourself with your baseline sleep profile to help you determine the best strategy to implement.

STEP 2 - Develop good sleep habits
Developing good sleep habits will improve your sleep.

STEP 3 - Dispel myths
Correct any false beliefs you may have concerning sleep.

STEP 4 - Manage daily stress
Various issues have an impact on sleep as you age: medical and psychological issues, medications, lifestyle changes (retirement for example), biological factors, or pain.

STEP 5 - Benefit from good sleep hygiene
Avoid caffeine, nicotine, alcohol and exercises before going to bed. The bedroom should be sleep-inducing: dark, quiet and at a comfortable temperature.

STEP 6 - Taper off sleeping pills
Follow the tapering-off program provided on page 19 under the supervision of your doctor or your pharmacist, if you are currently taking sleeping pills.

www.deprescribingnetwork.ca

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deprescribing.org | Benzodiazepine & Z-Drug (BZRA) Deprescribing Algorithm

Why is patient taking a BZRA?

Engage patients

Recommend Deprescribing

Continue BZRA

Taper and then stop BZRA

- For those ≥ 65 years of age
- For those 18-64 years of age
- Offer behavioural sleeping advice; consider CBT if available (see reverse)

Monitor every 1-2 weeks for duration of tapering

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US Deprescribing Research Network (USDeN)

- https://deprescribingresearch.org/
- Links to Canadian, Australian, and UK deprescribing tools
- Links to articles discussing deprescribing and potentially inappropriate medications
- Webinars for researchers and clinicians

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MedStopper.Com

- Provides guidance for deprescribing with risk/benefit for each drug
- Medications can be arranged by either stopping priority or by condition
- For some medications/indications, just below the faces, there are CALC and NNT links for more information.
- Includes suggested tapering approach if applicable
- If the medication is listed in either the Beers or STOPP criteria, click the details button and the specific criteria form these tools will be provided in a popup

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MEDSTOPPER.COM

MedStopper Plan

Arrange medications by: Stopping Priority | CLEAR ALL MEDICATIONS | PRINT PLAN

Stopping Priority RED=Highest GREEN=Lowest	Medication/ Category/ Condition	May Improve Symptoms?	May Reduce Risk for Future Illness?	May Cause Harm?	Suggested Taper Approach	Possible Symptoms when Stopping or Tapering	Beers/STOPP Criteria
	pregabalin (Lyrica) / Antiepileptic / **pain**				If used daily for more than 3-4 weeks. Reduce dose by 25% every week (i.e. week 1-75%, week 2-50%, week 3-25%) and this can be extended or decreased (10% dose reductions) if needed. If intolerable withdrawal symptoms occur (usually 1-3 days after a dose change), go back to the previously tolerated dose until symptoms resolve and plan for a more gradual taper with the patient. Dose reduction may need to slow down as one gets to smaller doses (i.e. 25% of the original dose). Overall, the rate of discontinuation needs to be controlled by the person taking the medication.	return of symptoms, pain	None

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TaperMD (taperMD.com)

- Medication Therapy Management and Drug Review Tool (for a fee)
  - ✓Dashboard with EHR integration with PointClickCare
  - ✓Tracking and exporting of reports related to patient progress, recommendations, and monitoring plan
- Deprescribing resources: guidelines, algorithms, guides for many drugs (free)
- Taper guidance, withdrawal symptoms and monitoring guidance for many drugs (free)

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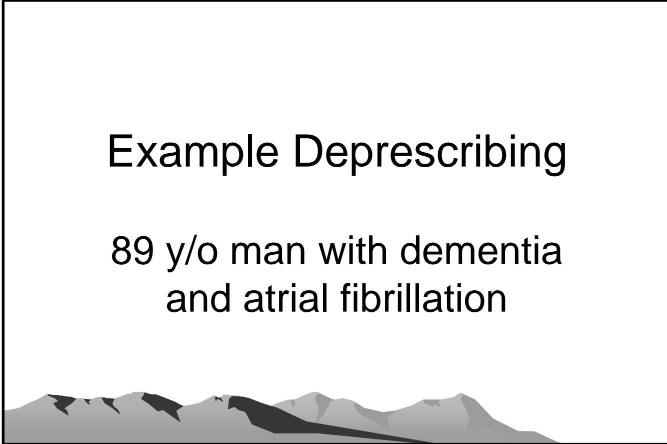

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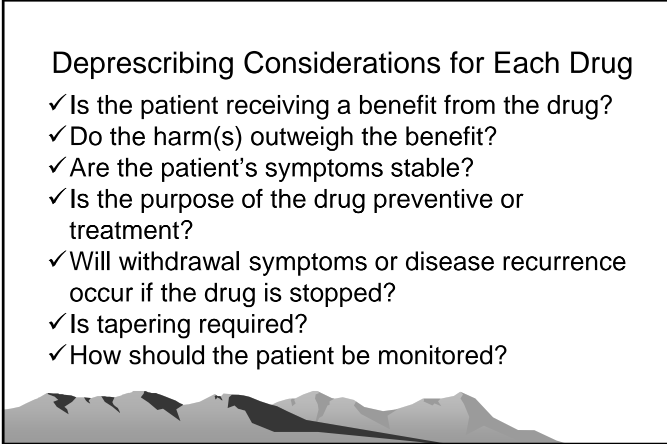

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Deprescribing Process

- 1. Review medications for opportunities to deprescribe. You identify simvastatin 40 mg and omeprazole 20 mg daily.
  - ✓Statin indication: primary prevention of CV events, no stroke history
  - ✓PPI indication: GERD, patient currently asymptomatic
- 2. Consider life expectancy and using eprognosis

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Deprescribing Process

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. Risk calculators give an estimate of how many people with similar risk factors will live and die, but 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 **13.7**

Six Month Mortality

Points	Risk of 6 month mortality
1.0 - 6.4	7%
6.5 - 7.9	10%
8.0 - 8.9	12%
9.0 - 9.7	14%
9.8 - 10.5	17%
10.6 - 11.5	20%
11.6 - 12.5	22%
12.6 - 14.0	28%
14.1 - 16.1	34 - 43%
> 16.1	49 - 62%

Finish

- The index was developed and internally validated in 218,088 nursing home residents (49% of subjects were between 80 and 90 years, 22% were male, 84% were white).
- The index was externally validated in 606 nursing home residents with advanced dementia in 21 nursing homes in Boston, Massachusetts between 2007 and 2009 (39% were 85 and younger, 82% female)
- Discrimination: This risk calculator sorts patients who died from patients who lived correctly 67% of the time (c-statistic, 95% CI, 0.62-0.72).

- Calibration: There is no evidence of poor calibration with a Hosmer-Lemeshow goodness-of-fit test.
- Citation: Mitchell SL, Miller SC, Teno JM, Kiely DK, Davis RB, Shaffer ML. Prediction of 6-Month Survival of Nursing Home Residents With Advanced Dementia Using ADEPT vs Hospice Eligibility Guidelines. JAMA. 2010;304(17):1929-1935. doi:10.1001/jama.2010.1572. (https://www.ncbi.nlm.nih.gov/pubmed/21045099)

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Deprescribing Process

- 3. Consider benefits
  - ✓Less pill burden, less muscle pain, less GI side effects, less DDIs, lower risk of C. diff/PNA/Mg and B12 deficiency
- Consider risks
  - ✓Return of GI symptoms; potential increased GI bleed risk if patient is taking a DOAC or ASA
  - ✓CV events—3 retrospective studies of older adults show ↑ CV risk 2-5 yrs after discontinuation, no increased risk if at end of life
- 4. Do the meds need tapered?
  - ✓PPI: ideally, yes
  - ✓Statin: no

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Deprescribing Process

- 5. Discontinue simvastatin
- 6. Consider omeprazole taper https://tapermd.com/tapering-resources/proton-pump-inhibitors/
  - ✓ Reduce dose by 50% every 1-2 weeks. Once at 25% of the original dose and no withdrawal symptoms have been seen, stop the drug
  - ✓ If any withdrawal symptoms occur, go back to approximately 75% of the previously tolerated dose
- 7. Construct and document a follow-up plan
  - ✓ Monitor for CV events?: no
  - ✓ Monitor for side effect (GI/muscle pain) resolution: yes
  - ✓ Monitor for return of GERD/heartburn: yes

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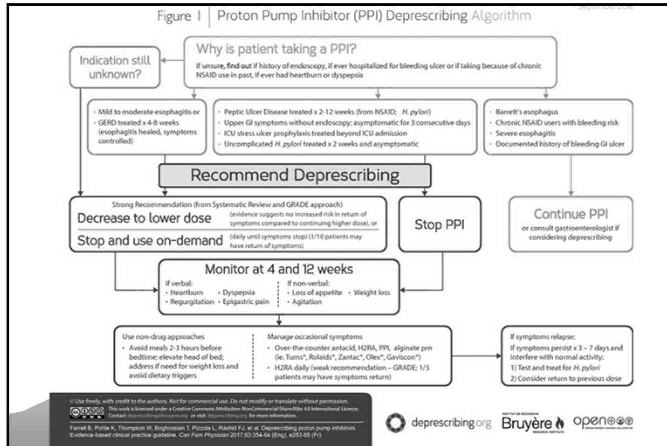

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THANK YOU! QUESTIONS?

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