DEPRESCRIBING AND MENTORING

JOEL BORDMAN, MD

OLTCC 2018

Faculty/Presenter Disclosure

- **Faculty: JOEL BORDMAN**

- **Relationships with financial sponsors:**
  - **Grants/Research Support:** 0
  - **Speakers Bureau/Honoraria:** PURDUE, INDIVIOR,CPSO, SEA COURSES, OCFP
  - **Consulting Fees:** OCFP, CMPA, MEDPLAN
  - **Patents**: 0
  - **Other:** 0

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- **This program has received financial support from** N/A **in the form of** [N/A
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- **<u>Potential for conflict(s) of interest</u>:**
  - JOEL BORDMAN has received N/Afrom N/A
  - [N/A a product that will be discussed in this program

Mitigating Potential Bias

- DR BORDMAN WILL MAKE RECCOMENDATIONS BASED ON GUIDELINES AND BEST PRACTICES AVAILABLE AT THE TIME

Thank you to…

- Dr. Cara Tannenbaum and the Deprescribing Network

Learning Objectives

- *To identify which drugs to deprescribe in older adults.*
- *To apply evidence-based tools and deprescribing algorithms to successfully discontinue medications in the long-term care setting.*
- *To effectively use communication techniques to engage patients, their families, and the entire healthcare team in the deprescribing process and the substitution of non-drug therapies.*

What is deprescribing?

- Deprescribing is a planned process of reducing or stopping medications that may no longer be of benefit or may be causing harm.

- The goal is to reduce medication burden while improving QoL.

Is there a need for Deprescribing?

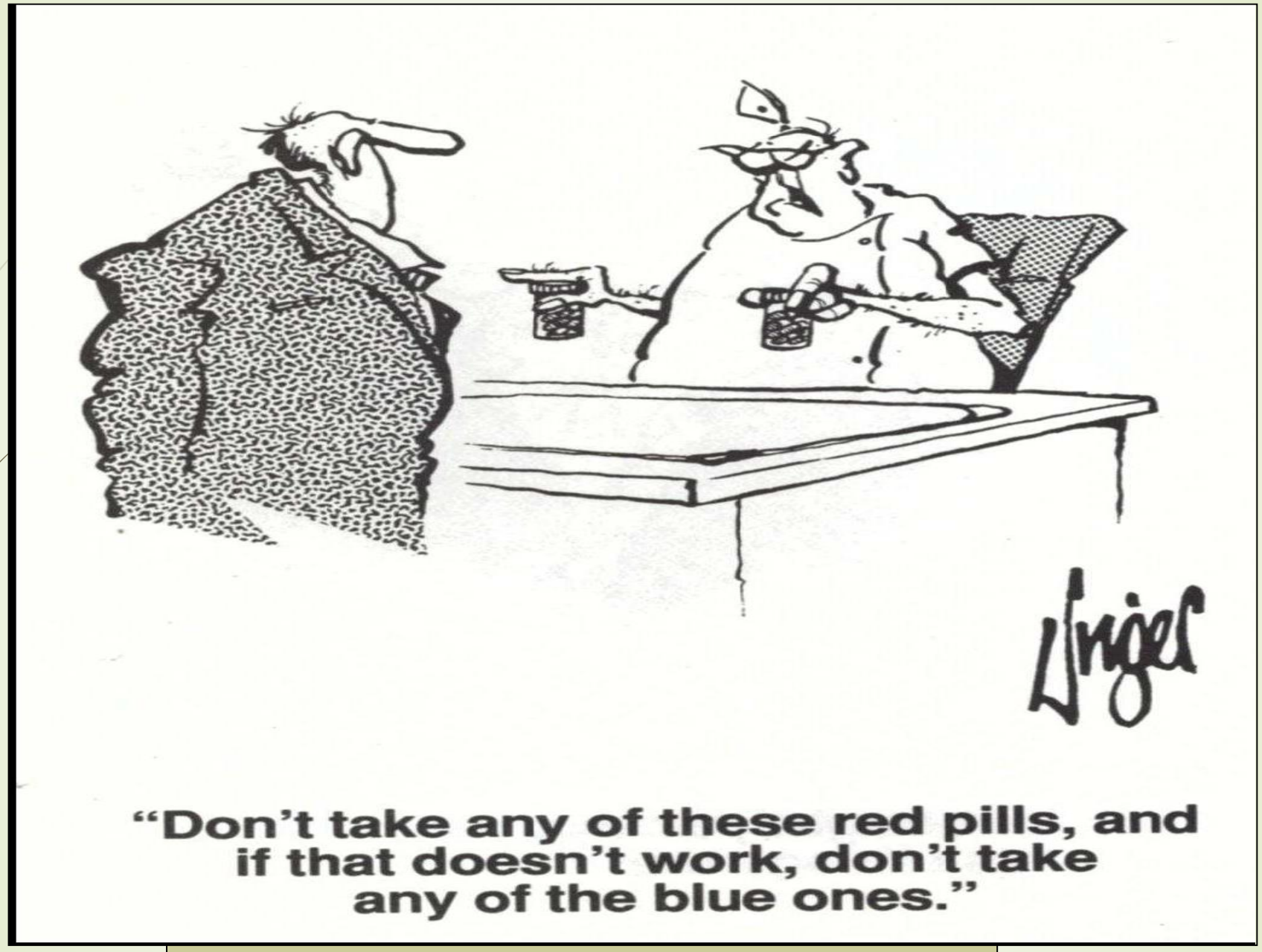
- What factors influence us to possibly underestimate the potential side effects and toxicity of medications?

Drug development and approval processes

- Historically, drug development research was only conducted in male animals
  - Females "too complicated"
- For ethical reasons, women were excluded from drug trials
  - Pregnancy risks, e.g. thalidomide
- Health Canada has a "guidance document" for the pharmaceutical industry on the inclusion of women, but it is "guidance" only, not obligatory

An example of Toxicity:

- In 2014, the FDA and Health Canada recommended cutting the suggested dose of the sleeping pill **zolpidem** in half for women
  - Women metabolize zolpidem differently, reaching maximum blood levels 45% higher than those of men
  - Women are more likely to be left the next morning with levels of the drug in their bodies that impair driving an automobile


"Don't take any of these red pills, and if that doesn't work, don't take any of the blue ones."

What are some reasons to NOT deprescribe?

- Benefits > Risks to stay on medication
- Resident / POA provided informed consent and accepts risks
- ‘Lack of trust’ in ‘new doctor’
- Resistance from LTC staff
- Medical-legal liability to medical consequences when a treatment is discontinued rather than maintaining ‘status quo’
- Its ‘more work’

When is a good time to deprescribe?

- On admission?
- At first care conference?
- On 3 month med reviews?
- At annual conference?
- After an ‘event’ (fall?, confusion?)

Hilda-89 year old female new admission

- Living with daughter for last 2 years.
- Increased dementia and behaviours more difficult to handle in the home
- Was on waiting list
- 2 months ago fell and fractured hip
- Currently ambulating with a walker

Hilda - Medications

- Tylenol #3 ® 2 qid prn
- Lorazepam 1mg qhs, & BID prn
- Quetiapine 50mg qhs and TID prn
- Atorvastatin 80mg daily
- Alendronate 70mg weekly
- Pantaprazole 40mg daily
- Levothyroxine 0.125 daily
- Hydroxyzine 25mg tid prn itchy skin
- Senekot 2 qhs

- Any thoughts on possible deprescribing in Hilda?

3 easy steps to become deprescriber

1. **IDENTIFY** which drugs to deprescribe

2. Use **EVIDENCE-BASED** deprescribing algorithms

3. **ENGAGE** your patients and other health care providers in the deprescribing process using effective communication tools and techniques

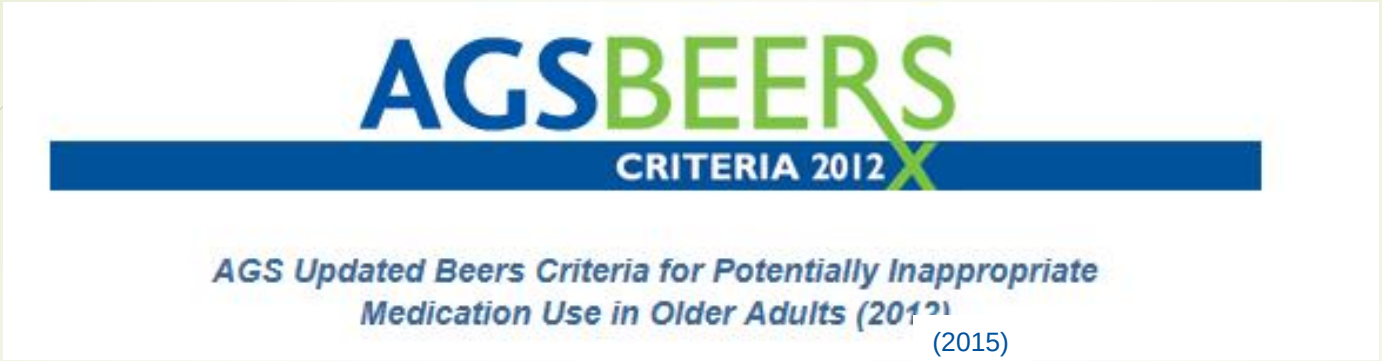
How do YOU identify which drugs to deprescribe?

- Explicit criteria (i.e. consensus list of drugs to avoid)
- Lack of evidence to *continue* a drug (based on indication or duration)
- Providing no or little benefit
- Moderate to high probability of harm
- Drug-drug interaction
- Causing a prescribing cascade
- Availability of safer drug or non-drug alternatives

Inappropriate Prescriptions

- 1980's - Mark Beers reports observations linking the use of psychoactive medication (**benzodiazepines**, tricyclic antidepressants, antihistamines) to the potential for harm (confusion, sedation) in American nursing home patients (JAMA 1988)

Mark H. Beers
1954-2009



(2015)

Benzodiazepines

Temazepam

Oxazepam

Lorazepam

Alprazolam

Clonazepam

Diazepam

Flurazepam

Clorazepam

All antipsychotics

Non-benzodiazepine sedative hypnotics

Zolpidem

Zopiclone

Zaleplon

Sulfonylurea oral hypoglycemics

Glyburide

Glipizide

Chlorpropamide

Tricyclic antidepressants

Amitriptyline

Imipramine

1st generation antihistamines

Hydroxyzine

Diphenhydramine

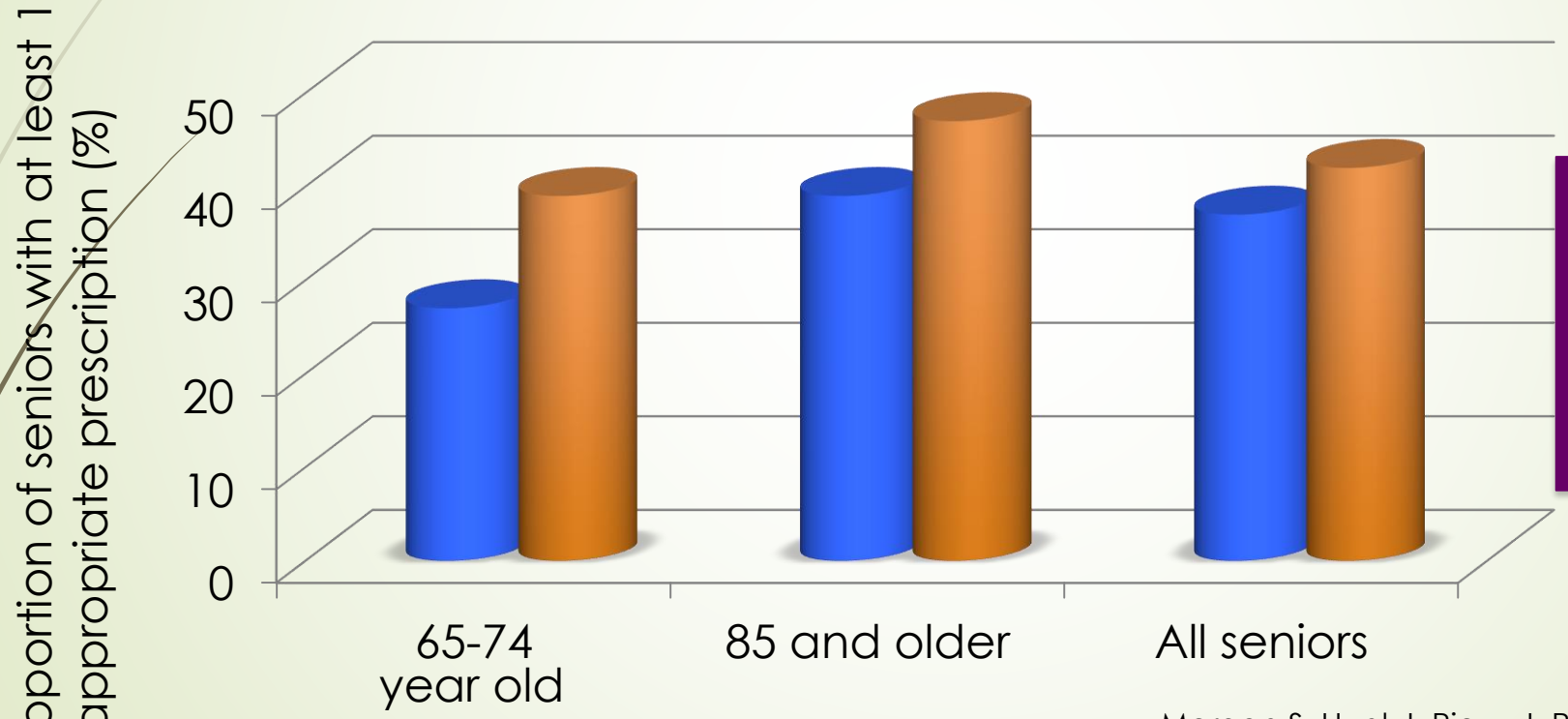
Cardiovascular/diuretic agents

Amiodarone

Digoxin > 0.125 mg/day

http://www.americangeriatrics.org/health_care_professionals/clinical_practice/clinical_guidelines_recommendations/2012

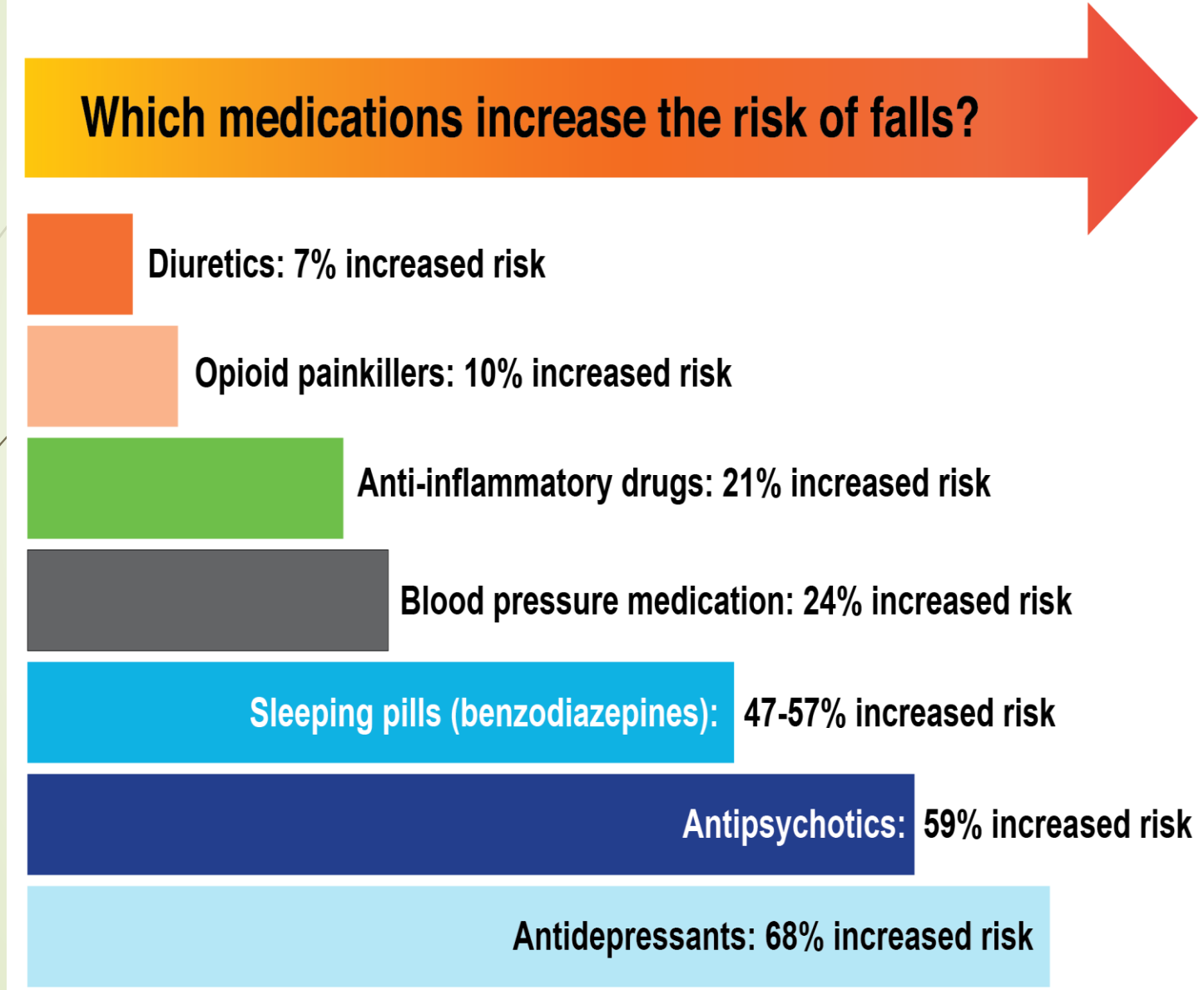
Frequency of Inappropriate Prescriptions in Canada (Beers criteria)



Lorazepam #1 Drug
11% of women
6% of men

Morgan S, Hunt J, Rioux J, Proulx J, Weymann D, Tannenbaum C. Frequency and cost of potentially inappropriate prescribing for older adults: a cross-sectional study. CMAJ Open 2016 DOI:10.9778/cmajo.20150131

Medications and Falls



de Jong et al. 2013
& Huang et al. 2012

Risk of Benefit /Risk of Harm

Atorvastatin (BMJ 2009)

- Estimated NNT/NNH for primary prevention:
  - NNT: heart attack/stroke

    ~60 / ~268
  - NNH: myalgia

    ~10

Lorazepam (BMJ 2005)

- For insomnia:
  - NNT: improved sleep quality

    ~13 /decreases total wake time by 25 min (95% CI 13-38)
  - NNH: for impaired attention, memory, reaction time

    ~6

Dose and duration of sedative-hypnotic use affect the risk of hip fracture

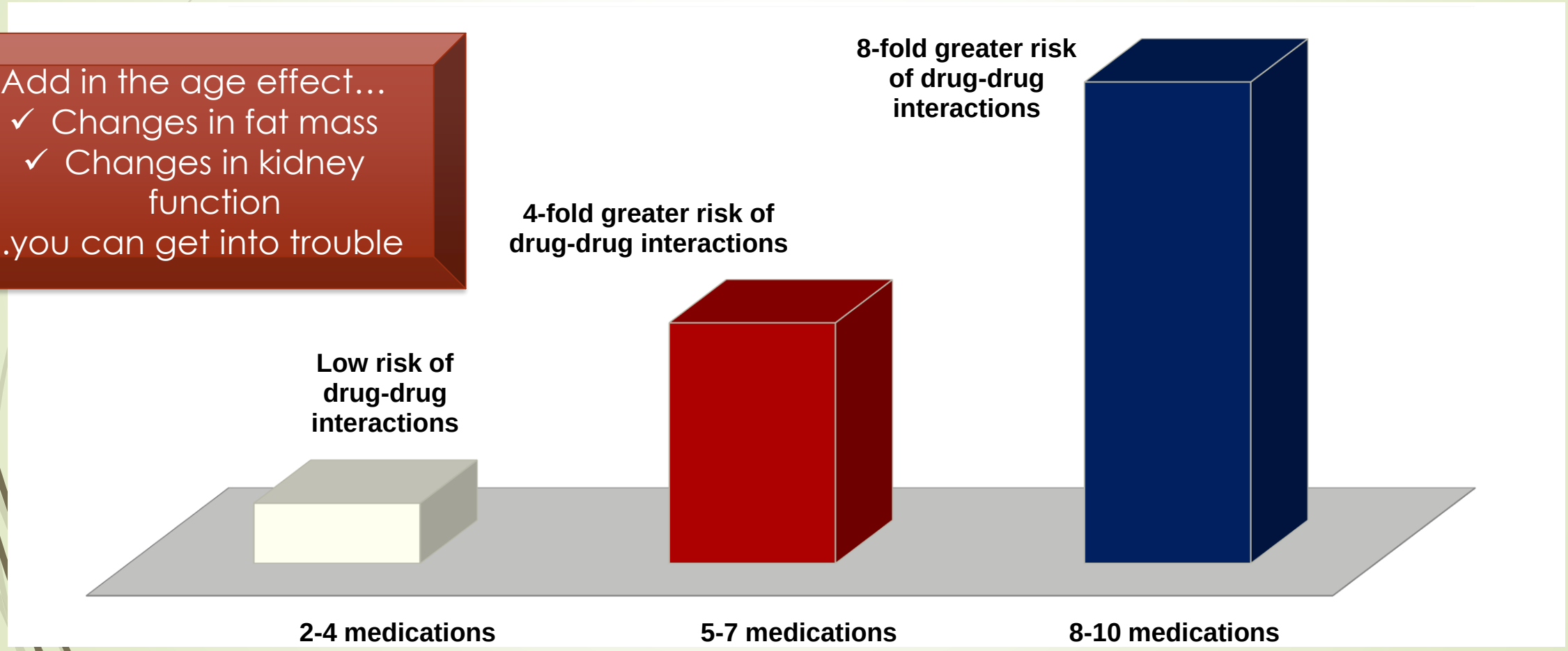
	Relative risk of hip fracture adjusted for age, sex, comorbidity RR (95% CI)
Dose	
Low (≤ 0.5 DDD)	1.09 (1.02 – 1.17)
Medium	1.21 (1.11 – 1.31)
High (> 1.0 DDD)	1.32 (1.17 – 1.48)
Duration (date of first prescription in relation to the hip fracture)	
0-14 days (new users)	2.05 (1.52 – 2.77)
15-30 days	1.42 (1.03 – 1.96)
31-60 days	1.34 (1.02 – 1.77)
180-270 days	1.53 (1.31 – 1.78)
271-365 days	1.10 (1.04 – 1.17)

Zint et al. Pharmacoepidemiol Drug Safety 2010;19:1248-1255


"I feel a lot better since I ran
out of those pills you gave me."

More medications = More interactions

Add in the age effect…
✓ Changes in fat mass
✓ Changes in kidney function
…you can get into trouble



Johnell & Klarin. Drug Safety 2007

3 easy steps to become a deprescriber

1. **IDENTIFY** which drugs to deprescribe

2. Use **EVIDENCE-BASED** deprescribing algorithms

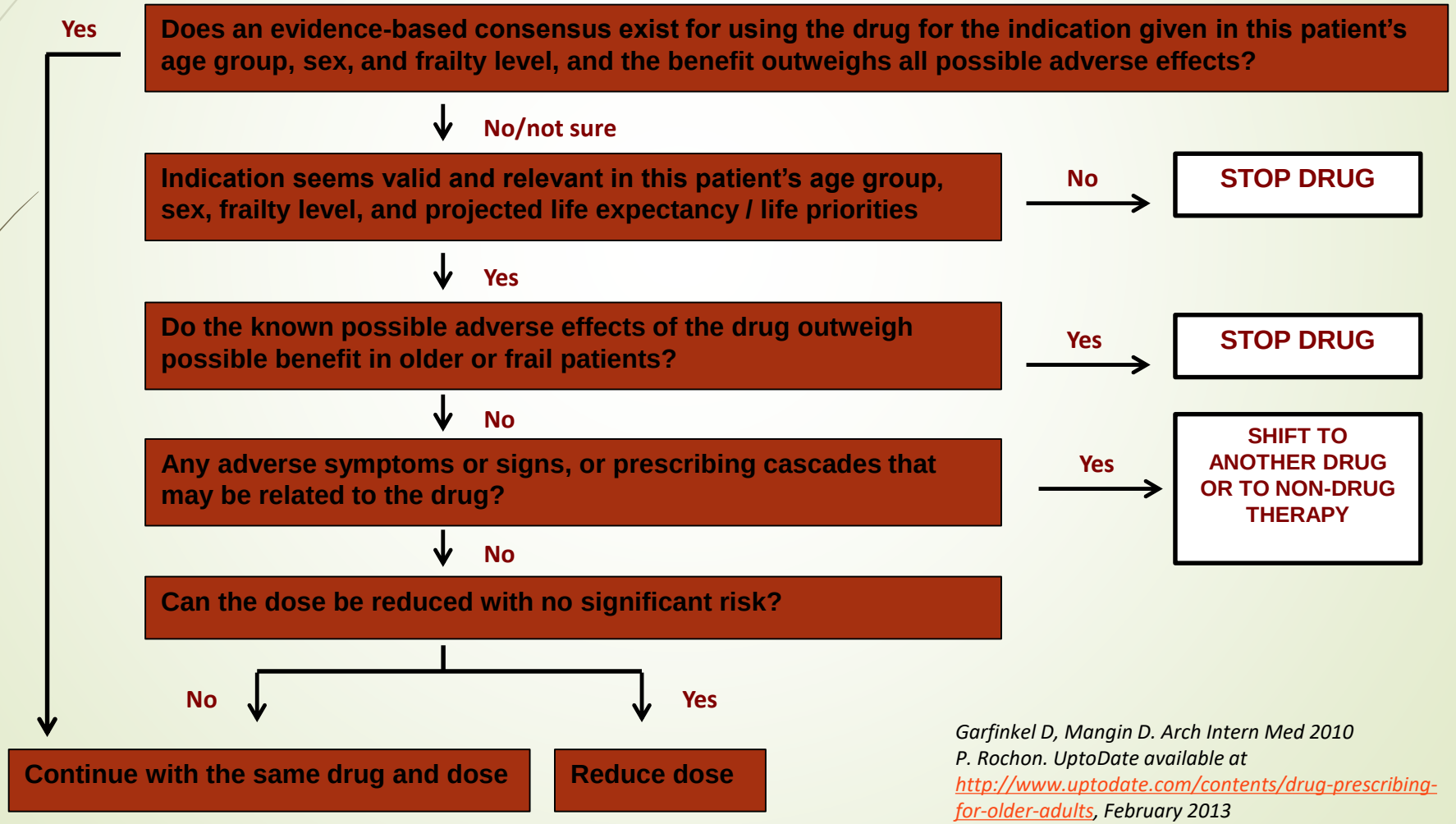
Step 2: Using Deprescribing guidelines if possible

- Evidence-based
  - PPIs, Benzos/Z-drugs, Antipsychotics, Antihyperglycemics
  - GRADE and AGREE II
  - Systematic reviews of deprescribing evidence; recommendations incorporate harms, patient perspectives, costs
- Interprofessional guideline development teams
- Decision-support algorithms developed
- Available for download at deprescribing.org

PLOS ONE: Methodology for developing deprescribing guidelines: August 2016

Medication review algorithm

Discuss the following with the patient or their caregiver



Garfinkel D, Mangin D. Arch Intern Med 2010
P. Rochon. UptoDate available at http://www.uptodate.com/contents/drug-prescribing-for-older-adults, February 2013

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

September 2016

Why is patient taking a BZRA?

If unsure, find out if history of anxiety, past psychiatrist consult, whether may have been started in hospital for sleep, or for grief reaction.

- Insomnia on its own OR insomnia where underlying comorbidities managed
  For those ≥ 65 years of age: taking BZRA regardless of duration (avoid as first line therapy in older people)
  For those 18-64 years of age: taking BZRA > 4 weeks

- Other sleeping disorders (e.g. restless legs)
- Unmanaged anxiety, depression, physical or mental condition that may be causing or aggravating insomnia
- Benzodiazepine effective specifically for anxiety
- Alcohol withdrawal

Engage patients (discuss potential risks, benefits, withdrawal plan, symptoms and duration)

Recommend Deprescribing

Continue BZRA

- Minimize use of drugs that worsen insomnia (e.g. caffeine, alcohol etc.)
- Treat underlying condition
- Consider consulting psychologist or psychiatrist or sleep specialist

Taper and then stop BZRA

(taper slowly in collaboration with patient, for example ~25% every two weeks, and if possible, 12.5% reductions near end and/or planned drug-free days)

- For those ≥ 65 years of age (strong recommendation from systematic review and GRADE approach)
- For those 18-64 years of age (weak recommendation from systematic review and GRADE approach)
- Offer behavioural sleeping advice; consider CBT if available (see reverse)

Monitor every 1-2 weeks for duration of tapering

Expected benefits:

- May improve alertness, cognition, daytime sedation and reduce falls

Withdrawal symptoms:

- Insomnia, anxiety, irritability, sweating, gastrointestinal symptoms (all usually mild and last for days to a few weeks)

Use non-drug approaches to manage insomnia

Use behavioral approaches and/or CBT (see reverse)

If symptoms relapse:

Consider

- Maintaining current BZRA dose for 1-2 weeks, then continue to taper at slow rate

Alternate drugs

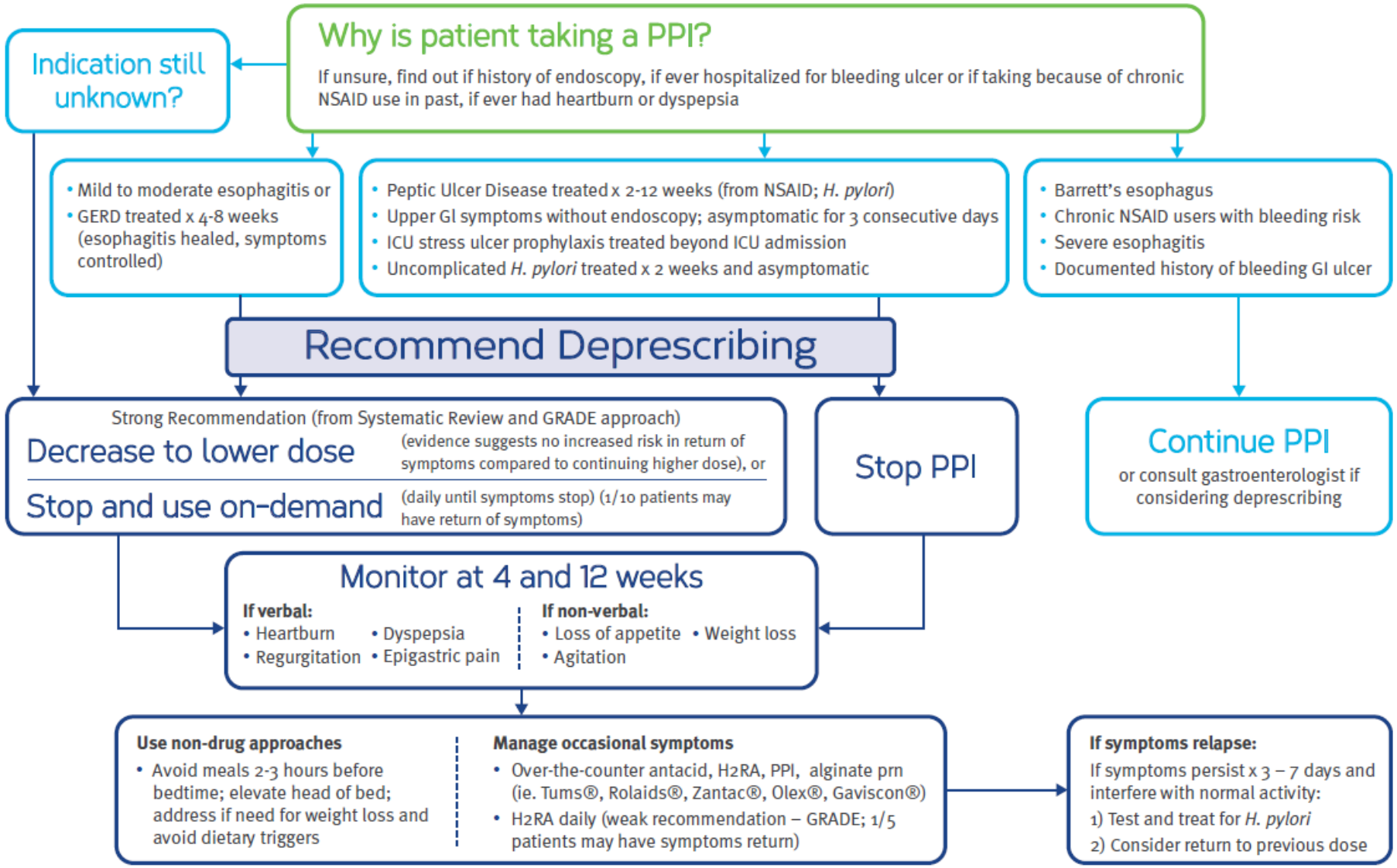
- Other medications have been used to manage insomnia. Assessment of their safety and effectiveness is beyond the scope of this algorithm. See BZRA deprescribing guideline for details.

Pottie K, Thompson W, Davies S, Grenier J, Sadowski C, Welch V, Holbrook A, Boyd C, Swenson JR, Ma A, Farrell B (2016). Evidence-based clinical practice guideline for deprescribing benzodiazepine receptor agonists. Unpublished manuscript.

deprescribing.org | Bruyère Research Institute | OPEN

deprescribing.org | Proton Pump Inhibitor (PPI) Deprescribing Algorithm

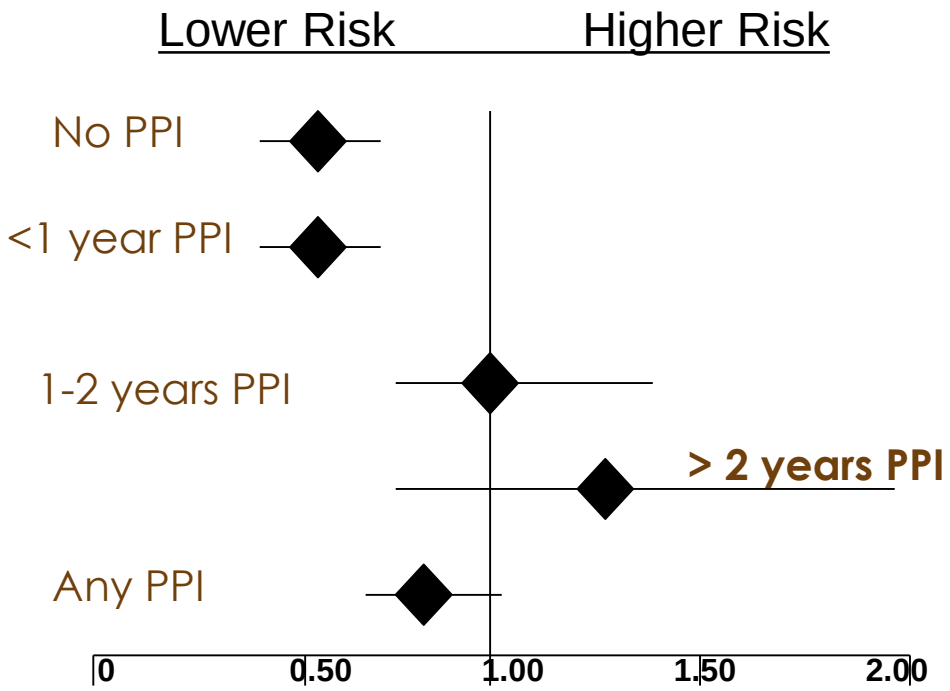
September 2015

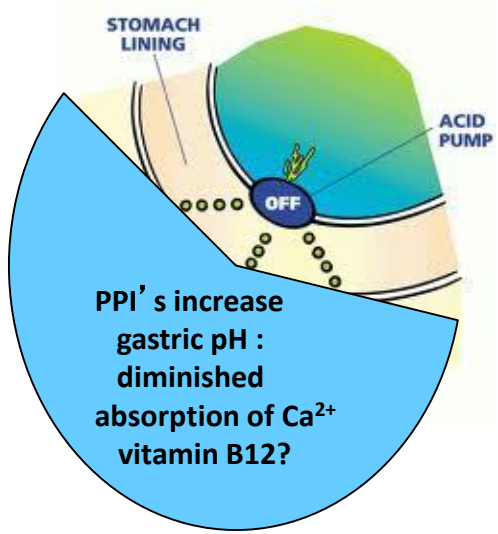


Farrell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid J, Rojas-Fernandez C, Walsh K, Welch V, Moayyedi P. (2015). Evidence-based clinical practice guideline for deprescribing proton pump inhibitors. Unpublished manuscript.

deprescribing.org | Institut de recherche Bruyère Research Institute | open

Interaction: Proton pump inhibitors reduce antifracture efficacy of bisphosphonates





Risk of Hip Fracture with Alendronate in Adults > 70 years old

Abrahamsen et al. Arch Int Med 2011;171:998-1004

**17% of the population studied was male*

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4 ways to start the deprescribing conversation:

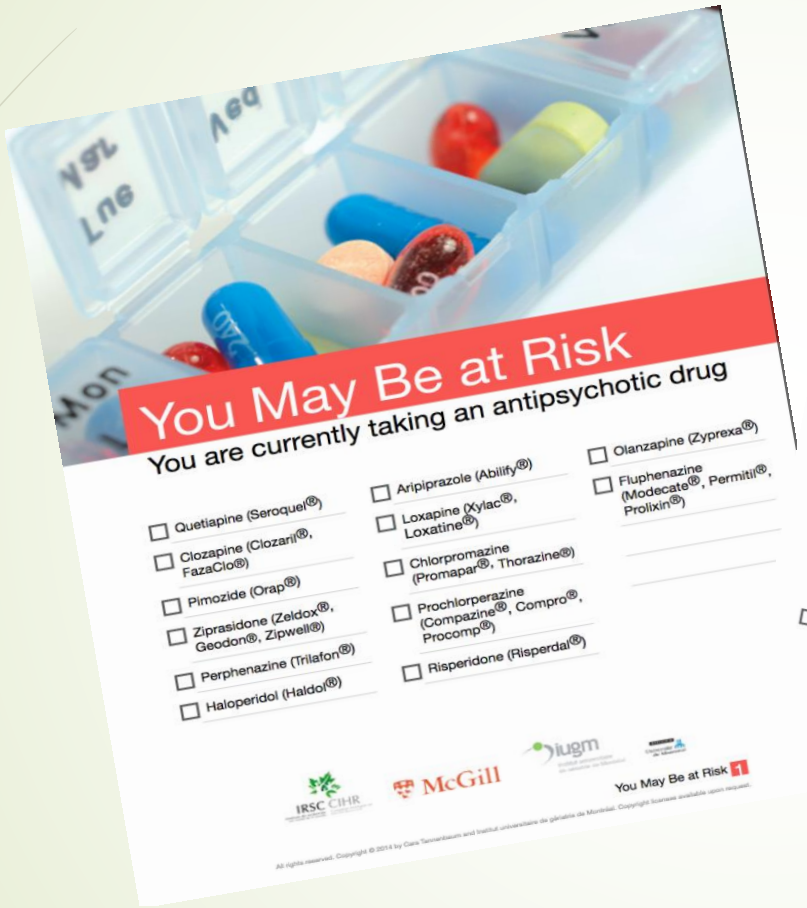
1. Direct deprescribing method: *"I see you are taking a lot of pills, I want to discuss getting you off some of them"*
2. Indirect method: *"How's your sleep?....There is some new research about sleeping pills that I want to discuss with you"*
3. Emotional, authoritative method *"About your memory problems, falls, etc….I'm **worried** that..."*
4. Use the EMPOWER brochure: *"Read this for next time"*

Canadian Deprescribing Network | Réseau canadien pour la déprescription

FRANÇAIS ENGLISH

www.deprescribingnetwork.ca

More EMPOWER brochures



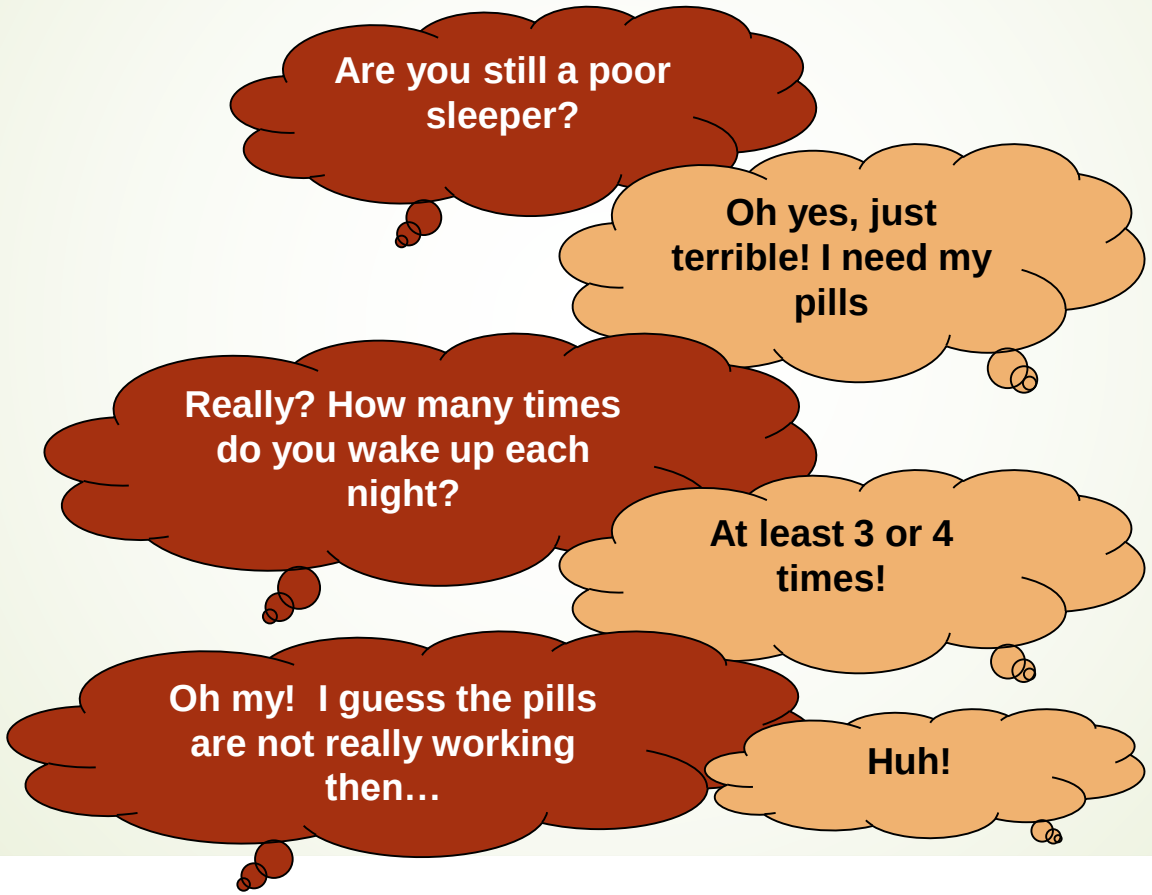
www.deprescribingnetwork.ca

Try and Develop some Cognitive Dissonance

- **If I am at risk for falls, memory impairment, death, maybe I should do something about it…I think I will!**

- **Sleeping pills are safe…My doctor prescribed them…But now I'm hearing about new research, and changes in my health condition that may not be compatible with these. Maybe my situation has changed?…**

How can you elicit cognitive dissonance?



- 89 year old: But I've been on these medications for 50 years,
- MD: I know, however when you were put on these medications, your liver and kidneys were 39.
- Now that your liver and kidneys are 39, I'm concerned that they can't clean out the medication as well as they used to.

The Canadian Deprescribing Network (CaDeN)

- The Canadian Deprescribing Network (CaDeN) is a group of individuals who are committed to improving the health of Canadians seniors by:
  - **Reducing the use of potentially inappropriate medicines by 50% by the year 2020**
  - **Enhancing access to non-drug alternatives**
- Fairly new movement, established in January 2016
- CaDeN promotes **deprescribing** in general, but has prioritized **inappropriate prescriptions**. Such as:
  - Sleeping pills
  - Use of glyburide
  - Proton pump inhibitors

CaDeN
Canadian Deprescribing Network

ReCaD
Réseau canadien pour la déprescription

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Hilda - Medications

- Tylenol #3 ® 2 qid prn
- Lorazepam 1mg qhs, & BID prn
- Quetiapine 50mg qhs and TID prn
- Atorvastatin 80mg daily
- Alendronate 70mg weekly
- Pantaprazole 40mg daily
- Levothyroxine 0.125 daily
- Hydroxyzine 25mg tid prn itchy skin
- Senekot 2 qhs

STEP-BY-STEP TAPERING-OFF PROGRAM

We recommend that you follow this schedule under the supervision of your doctor or pharmacist to taper off **your sedative-hypnotic medication**.

WEEKS	TAPERING SCHEDULE							✓
	MO	TU	WE	TH	FR	SA	SU	
1 and 2	◓	●	●	●	◓	●	●	
3 and 4	◓	●	◓	◓	●	◓	◓	
5 and 6	◓	◓	◓	◓	◓	◓	◓	
7 and 8	◓	◔	◓	◓	◔	◓	◓	
9 and 10	◓	◔	◓	◔	◓	◔	◓	
11 and 12	◔	◔	◓	◔	◔	◓	◔	
13 and 14	◔	◔	◔	◔	◔	◔	◔	
15 and 16	✕	◔	✕	✕	◔	✕	◔	
17 and 18	✕	✕	✕	✕	✕	✕	✕	

EXPLANATIONS

● Full dose ◓ Half dose ◔ Quarter of a dose ✕ No dose

Hilda – Medications – 5 weeks later

- Tylenol #3 ® 2 qid prn
- Lorazepam 1mg qhs, & BID prn
- Quetiapine 50mg qhs and TID prn
- Atorvastatin 80mg daily
- Alendronate 70mg weekly
- Pantaprazole 40mg daily
- Levothyroxine 0.125 daily
- Diphenhydramine 25mg tid prn itchy skin
- Senekot 2 qhs

- Acetaminophen 500 tid prn
- Lorazepam 0.5mg qhs. No prn
- Quetiapine 25mg qhs & OD prn
- Atorvastatin 20mg daily
- Alendronate 70mg weekly
- Famotidine 40mg daily
- Levothyroxine 0.125 daily
- D/C diphenhydramine and Senekot

Supports

MyPractice
Primary Care
A tailored report for quality care

Mapratique
soins primaires
Un rapport personnalisé pour l'amélioration de la qualité

MMAP

Project ECHO®
Ontario Pain

Academic


PHARMACARE 2020.CA
MD
harrop
I'm going to prescribe this because
I don't have time to explain
why all you really need is fresh air.

Thank you!

- @joelbordman