Medication Deprescribing

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Presenter Disclosure Statement

- I have no relevant financial interest or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services that are discussed in this activity to disclose.

Objectives

- At the conclusion of this presentation, participants should be able to:
  - Define medication deprescribing.
  - Identify factors that should be considered in medication deprescribing.
  - Identify resources available to guide decisions related to deprescribing.
  - Practice deprescribing in older adult patient case scenarios.

Characteristics of Medication Use in Older People

- Patient specific responses to medications become more complex as patients age.
  - Medication response based upon pharmacokinetics (absorption, distribution, metabolism, excretion) and pharmacodynamics can be altered due to physiologic changes.

Hajjar ER, Hersh LR, Gray SL. Prescribing in the Older Adult. In: DiPiro JT, Yee GC, Posey L, Haines ST, Nolin TD, Ellingrod V. eds. *Pharmacotherapy: A Pathophysiologic Approach, 11e*. McGraw Hill; 2020. Accessed October 18, 2021.

Characteristics of Medication Use in Older People

- Older people are at great risk for Adverse Drug Reactions (ADRs)
  - "An appreciably harmful or unpleasant reaction, resulting from an intervention related to the use of a medicinal product, which predicts hazard from future administration and warrants prevention or specific treatment, or alteration of the dosage regimen, or withdrawal of the product." (Edwards & Aronson, p. 1255)
- Older people are also at risk of experiencing inappropriate prescribing, polypharmacy, missing appropriate therapy, and medication nonadherence.

Edwards IR, Aronson JK. Adverse drug reactions: definitions, diagnosis, and management. 2000 *Lancet*; 356: 1255-59.

Shehab N, Lovegrowve MB, Geller AI, Rose K), Weidle NJ, Budnitz DS. US Emergency Department Visits for Outpatient Adverse Drug Events, 2013-2014 2016 *JAMA*;316(20):2115-2125. doi:10.1001/jama.2016.16201

Oscanoa TJ, Lizaraso F, Carvajal A. Hospital admissions due to adverse drug reactions in the elderly. A meta-analysis. 2017 *Eur J Clin Pharmacol;* 73:759-770.

Hajjar ER, Hersh LR, Gray SL. Prescribing in the Older Adult. In: DiPiro JT, Yee GC, Posey L, Haines ST, Nolin TD, Ellingrod V. eds. *Pharmacotherapy: A Pathophysiologic Approach, 11e*. McGraw Hill; 2020. Accessed October 18, 2021.

What is deprescribing?

- “a comprehensive definition of deprescribing should include: 1) an organized process of medication removal or dose reduction; 2) oversight of the deprescribing process by an appropriate member of the health care team; 3) a goal of improving 1 or more specific outcomes; 4) consideration of an individual’s overall physiological status, stage of life, and goals of care.”

Krishnaswami, A., et al. Deprescribing in Older Adults With Cardiovascular Disease. J Am Coll Cardiol. 2019 May, 73 (20) 2584-2595. doi: 10.1016/j.jacc.2019.03.467

In which situations should it be considered?

- Adverse drug reactions
- Polypharmacy
- Prescribing cascades
- End of life/palliative care
- Change in risk vs. benefit since originally prescribed

Krishnaswami, A., et al. Deprescribing in Older Adults With Cardiovascular Disease. J Am Coll Cardiol. 2019 May, 73 (20) 2584-2595. doi: 10.1016/j.jacc.2019.03.467

What instruments are available to guide deprescribing decisions?

- Example Implicit instruments
  - SMOG (Screening Medications in the Older Drug User)
  - MAI (Medication Appropriateness Index)
  - ARMOR (Assess, Review, Minimize, Optimize, Reassess)
  - TIMER (Tool to Improve Medications in the Elderly via Review)
  - ACOVE-3 (Assessing Care of Vulnerable Elders-3)
  - GPGPA (Good Palliative-Geriatric Practice Algorithm)
  - AOU (Assessment of Underutilization)

Bulloch, MN & Olin, JL. Instruments for evaluating medication use and prescribing in older adults. JAPhA. 2014 54 (5) 530-537. doi: 10.1331/JAPhA.2014.13244

Krishnaswami, A., et al. Deprescribing in Older Adults With Cardiovascular Disease. J Am Coll Cardiol. 2019 May, 73 (20) 2584-2595. doi: 10.1016/j.jacc.2019.03.467

What instruments are available to guide deprescribing decisions?

- Explicit instruments
  - AGS Beers criteria (Breaking News: The 2023 Update is Available)
  - STOPP (Screening Tool of Older Persons' Potentially Inappropriate Prescriptions) criteria
  - STOPPFrail (STOPP in Frail Adults with Limited Life Expectancy)

Bulloch, MN & Olin, JL. Instruments for evaluating medication use and prescribing in older adults. JAPhA. 2014 54 (5) 530-537. doi: 10.1331/JAPhA.2014.13244

Krishnaswami, A., et al. Deprescribing in Older Adults With Cardiovascular Disease. J Am Coll Cardiol. 2019 May, 73 (20) 2584-2595. doi: 10.1016/j.jacc.2019.03.467

Primary care clinician and community pharmacist perceptions of deprescribing

- Huffmyer, MJ, Keck, JW, Harrington, NG, et al. Primary care clinician and community pharmacist perceptions of deprescribing. *J Am Geriatr Soc*. 2021; 69: 1686–1689. https://doi.org/10.1111/jgs.17092
- Methods
  - Primary care providers (n= 58) and community pharmacists (n=248) in Kentucky were electronically surveyed between December 2019 through February 2020.
    - "Survey questions addressed deprescribing experiences, beliefs, attitudes, influencing factors, barriers, and facilitators" (Huffmyer, et al. 1686)

Results

Clinician Barriers	Pharmacist Barriers
"Patient attitudes toward the medications they take" (69%)	"Difficulty to communicate directly with other healthcare providers (e.g. subspecialists) about deprescribing recommendations" (56%)
"Insufficient time available to spend with patients and communicate deprescribing recommendations" (58.6%)	"Insufficient time available to spend with patients and communicate deprescribing recommendations" (49.6%)
"Difficulty to communicate directly with other healthcare providers (e.g. subspecialists) about deprescribing recommendations" (46.6%)	"Lack of trust between healthcare providers and pharmacists" (31.9%)

Both pharmacists and clinicians agreed that "Lack of education and training related to deprescribing activities" (21% and 20.7%) as well as "Lack of access to information in electronic health records" (26% and 20.7%) are barriers.

Huffmyer, MJ, Keck, JW, Harrington, NG, et al. Primary care clinician and community pharmacist perceptions of deprescribing. *J Am Geriatr Soc*. 2021; 69: 1686-1689. https://doi.org/10.1111/jgs.17092

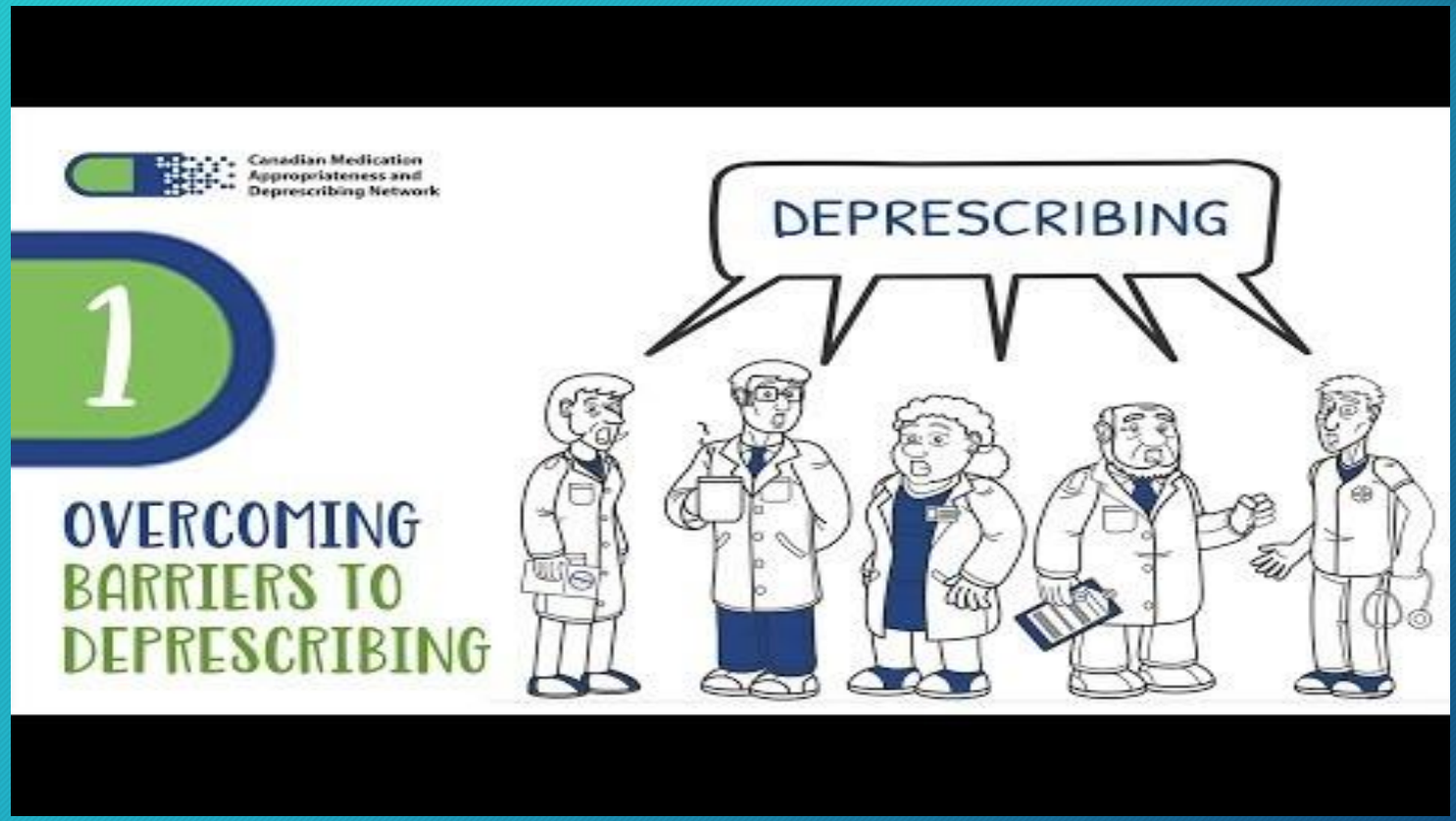
Results

Clinician Facilitators	Pharmacist Facilitators
"Adequate time to spend with patients to discuss deprescribing recommendations" (50%)	"Ability to communicate directly with healthcare providers about deprescribing recommendations" (50%)
"Trust between healthcare providers and patients" (48.3%)	"Adequate time to spend with patients to discuss deprescribing recommendations" (46%)
"Patient attitude toward the medications they take" (46.6%)	"Trust between healthcare providers and pharmacists" (34.7%)

Both pharmacists and clinicians agreed that "Training and experience with deprescribing" (27.4% and 37.9%) as well as "Clinical guideline updates that support deprescribing recommendations" (25.4% and 34.5%) are facilitators.

Huffmyer, MJ, Keck, JW, Harrington, NG, et al. Primary care clinician and community pharmacist perceptions of deprescribing. *J Am Geriatr Soc*. 2021; 69: 1686-1689. https://doi.org/10.1111/jgs.17092

Overcoming barriers to deprescribing Canadian Deprescribing Network



Overcoming barriers to deprescribing - YouTube

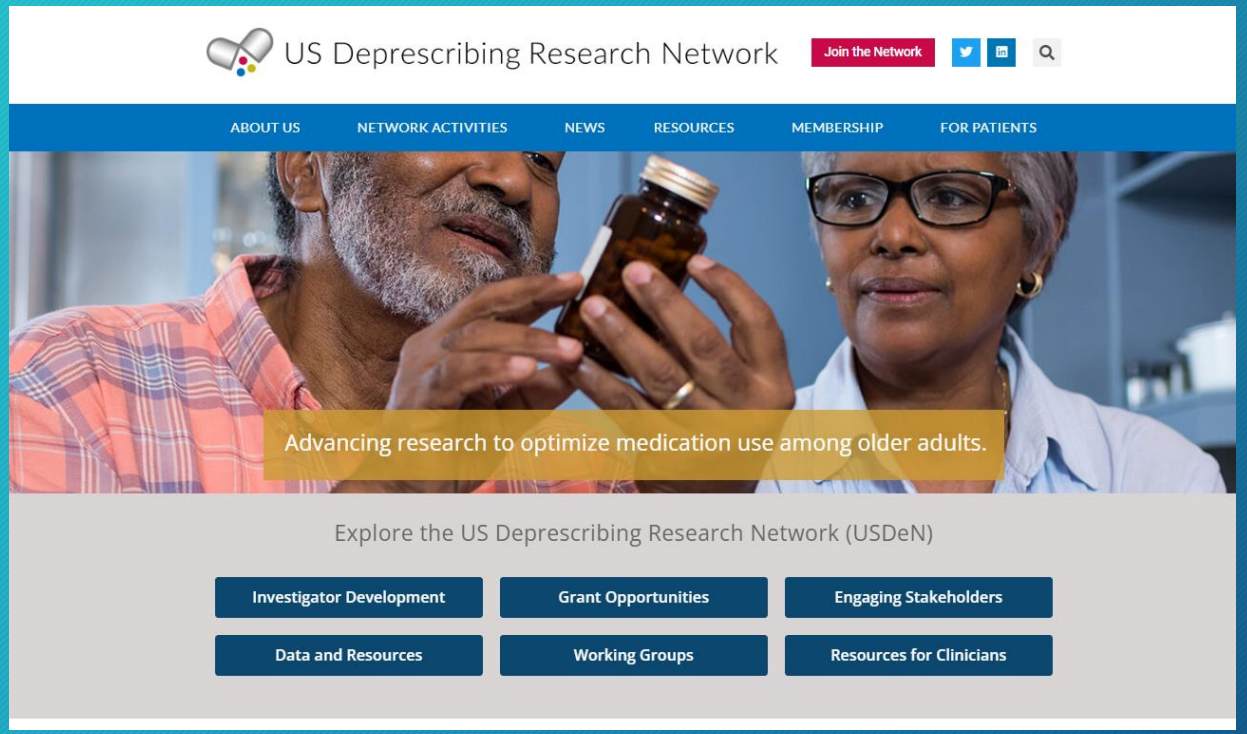
deprescribing.org
Bruyere Research Institute and University of Montreal

- Available Guidelines and Algorithms
  - Proton Pump Inhibitor
  - Antihyperglycemic
  - Antipsychotic
  - Benzodiazepine Receptor Agonist (BZRA)
  - Cholinesterase Inhibitors (ChEIs) and Memantine

- https://deprescribingresearch.org/network-activities/data-and-resources/irb-dsmp-repository/optimal-medication-management-in-alzheimers-disease-and-dementia-optimize/

National Institute on Aging:
US Deprescribing Research Network

- https://deprescribingresearch.org/



National Institute on Aging: US Deprescribing Research Network

General Approach and Stepwise Approach to Deprescribing

Useful, in-depth articles:

- Reducing Inappropriate Polypharmacy: The Process of Deprescribing
- Review of Deprescribing Processes and Development of an Evidence-Based, Patient-Centred Deprescribing Process

Brief overview articles:

- Reducing Polypharmacy: A Logical Approach

Online learning modules and videos

- Polypharmacy and Deprescribing
- Educational Videos for Clinicians

Guidelines on Potentially Inappropriate Medications in Older Adults

- American Geriatrics Society Beers Criteria
- STOPP/START Criteria

Framework for Decision-Making for Older Adults with Multiple Chronic Conditions

American Geriatrics Society consensus report

- Framework
- Executive Summary

OPTIMIZE Trial

- Bayliss EA. Shetterly SM. Drace ML. Norton JD. Maiyani M. Gleason KS. Sawyer JK. Weffald LA. Green AR. Reeve E. Maciejewski ML. Sheehan OC. Wolff JL. Kraus C. & Boyd CM. Deprescribing Education vs Usual Care for Patients With Cognitive Impairment and Primary Care Clinicians: The OPTIMIZE pragmatic cluster randomized trial JAMA Intern Med. Published online March 28. 2022. doi.10.1001/Jamaintemmed.2022.0502
- Sheehan OC, Gleason KS, Bayliss EA, et al. Intervention design in cognitively impaired populations-Lessons learned from the OPTIMIZE deprescribing pragmatic trial. *J Am Geriatr Soc*. 2023;71(3):774-784. doi:10.1111/jgs.18148

Clinical Scenario

Clinical Scenario

- A 76 year old female presents to your clinic to establish care. She currently lives independently in the community in her home. As part of her visit today, her medications are reviewed for appropriateness.
- PMH
  - HTN, diagnosed May 2003, inadequately treated until 2013
  - Dyslipidemia, diagnosed May 2008
  - Type 2 DM, diagnosed May 2010, patient is resistant to injectable medication use
  - Generalized Anxiety Disorder, diagnosed June 2022
  - Insomnia

Clinical Scenario

Vital Signs and Lab Values

- BP 132/82 mmHg (sitting, L arm) BP 128/76 mm Hg (standing, L arm), P 81 bpm, RR 15, T 98.2°F, Wt. 58 kg, Ht 5'6"
- BMP (today):

Na	138 mEq/L
K	4.1 mEq/L
Cl	103 mEq/L
CO_2	27 mEq/L
Glu	130 mg/dL
Calcium, serum	9.1 mg/dL
BUN	16 g/dL
SCr	1.2 mg/dL

- TSH (today): 2.1 mU/L
- Fasting Lipid Panel (today): TC: 202 mg/dL, HDL 35 mg/dL, LDL 102 mg/dL, TG 160 mg/dL
- HbA_1C (today): 7.6%
- Vitamin B12 level (today): 422 pg/mL

Current Medications

- Hydrochlorothiazide 25 mg by mouth daily
- Lisinopril 20 mg by mouth daily
- Atorvastatin 20 mg by mouth daily
- Metformin 1000 mg by mouth BID
- Glyburide 1.25 mg by mouth daily
- Pantoprazole 40 mg by mouth daily
- Escitalopram 10 mg by mouth daily
- Zolpidem 5 mg by mouth daily at bedtime
- APAP 500 mg po as needed for pain
- Vitamin B_{12} 500 mcg by mouth daily

Clinical Scenario

- What should we do with this patient's PPI?
- What does the AGS Beers Criteria say about Proton Pump Inhibitors?

Canadian Deprescribing Network

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

August 2018

Why is patient taking a PPI?

If unsure, find out if history of endoscopy, if ever hospitalized for bleeding ulcer or if taking because of chronic NSAID use in past, if ever had heartburn or dyspepsia

Indication still unknown?

- Mild to moderate esophagitis or
- GERD treated x 4-8 weeks (esophagitis healed, symptoms controlled)

- Peptic Ulcer Disease treated x 2-12 weeks (from NSAID; *H. pylori*)
- Upper GI symptoms without endoscopy; asymptomatic for 3 consecutive days
- ICU stress ulcer prophylaxis treated beyond ICU admission
- Uncomplicated *H. pylori* treated x 2 weeks and asymptomatic

- Barrett's esophagus
- Chronic NSAID users with bleeding risk
- Severe esophagitis
- Documented history of bleeding GI ulcer

Recommend Deprescribing

Strong Recommendation (from Systematic Review and GRADE approach)

Decrease to lower dose (evidence suggests no increased risk in return of symptoms compared to continuing higher dose), or

Stop and use on-demand (daily until symptoms stop) (1/10 patients may have return of symptoms)

Stop PPI

Continue PPI

or consult gastroenterologist if considering deprescribing

Monitor at 4 and 12 weeks

If verbal:
- Heartburn
- Dyspepsia
- Regurgitation
- Epigastric pain

If non-verbal:
- Loss of appetite
- Weight loss
- Agitation

Use non-drug approaches
- Avoid meals 2-3 hours before bedtime; elevate head of bed; address if need for weight loss and avoid dietary triggers

Manage occasional symptoms
- Over-the-counter antacid, H2RA, PPI, alginate prn (ie. Tums®, Rolaids®, Zantac®, Olex®, Gaviscon®)
- H2RA daily (weak recommendation – GRADE; 1/5 patients may have symptoms return)

If symptoms relapse:

If symptoms persist x 3 – 7 days and interfere with normal activity:

1) Test and treat for *H. pylori*

2) Consider return to previous dose

Farrell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid FJ, et al. Deprescribing proton pump inhibitors. Evidence-based clinical practice guideline. *Can Fam Physician* 2017;63:354-64 (Eng), e253-65 (Fr).

deprescribing.org | Bruyère Research Institute | open Ontario Pharmacy Evidence Network

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

August 2018

PPI Availability

PPI	Standard dose (healing) (once daily)*	Low dose (maintenance) (once daily)
Omeprazole (Losec®) - Capsule	20 mg+	10 mg+
Esomeprazole (Nexium®) - Tablet	20[a] or 40[b] mg	20 mg
Lansoprazole (Prevacid®) - Capsule	30 mg+	15 mg+
Dexlansoprazole (Dexilant®) - Tablet	30[c] or 60[d] mg	30 mg
Pantoprazole (Tecta®, Pantoloc®) - Tablet	40 mg	20 mg
Rabeprazole (Pariet®) - Tablet	20 mg	10 mg

Legend

a Non-erosive reflux disease

b Reflux esophagitis

c Symptomatic non-erosive gastroesophageal reflux disease

d Healing of erosive esophagitis

+ Can be sprinkled on food

* Standard dose PPI taken BID only indicated in treatment of peptic ulcer caused by *H. pylori*; PPI should generally be stopped once eradication therapy is complete unless risk factors warrant continuing PPI (see guideline for details)

Key

GERD = gastroesophageal reflux disease

NSAID = nonsteroidal anti-inflammatory drugs

H2RA = H2 receptor antagonist

SR = systematic review

GRADE = Grading of Recommendations Assessment, Development and Evaluation

Engaging patients and caregivers

Patients and/or caregivers may be more likely to engage if they understand the rationale for deprescribing (risks of continued PPI use; long-term therapy may not be necessary), and the deprescribing process

PPI side effects

- When an ongoing indication is unclear, the risk of side effects may outweigh the chance of benefit
- PPIs are associated with higher risk of fractures, *C. difficile* infections and diarrhea, community-acquired pneumonia, vitamin B12 deficiency and hypomagnesemia
- Common side effects include headache, nausea, diarrhea and rash

Tapering doses

- No evidence that one tapering approach is better than another
- Lowering the PPI dose (for example, from twice daily to once daily, or halving the dose, or taking every second day) OR stopping the PPI and using it on-demand are equally recommended strong options
- Choose what is most convenient and acceptable to the patient

On-demand definition

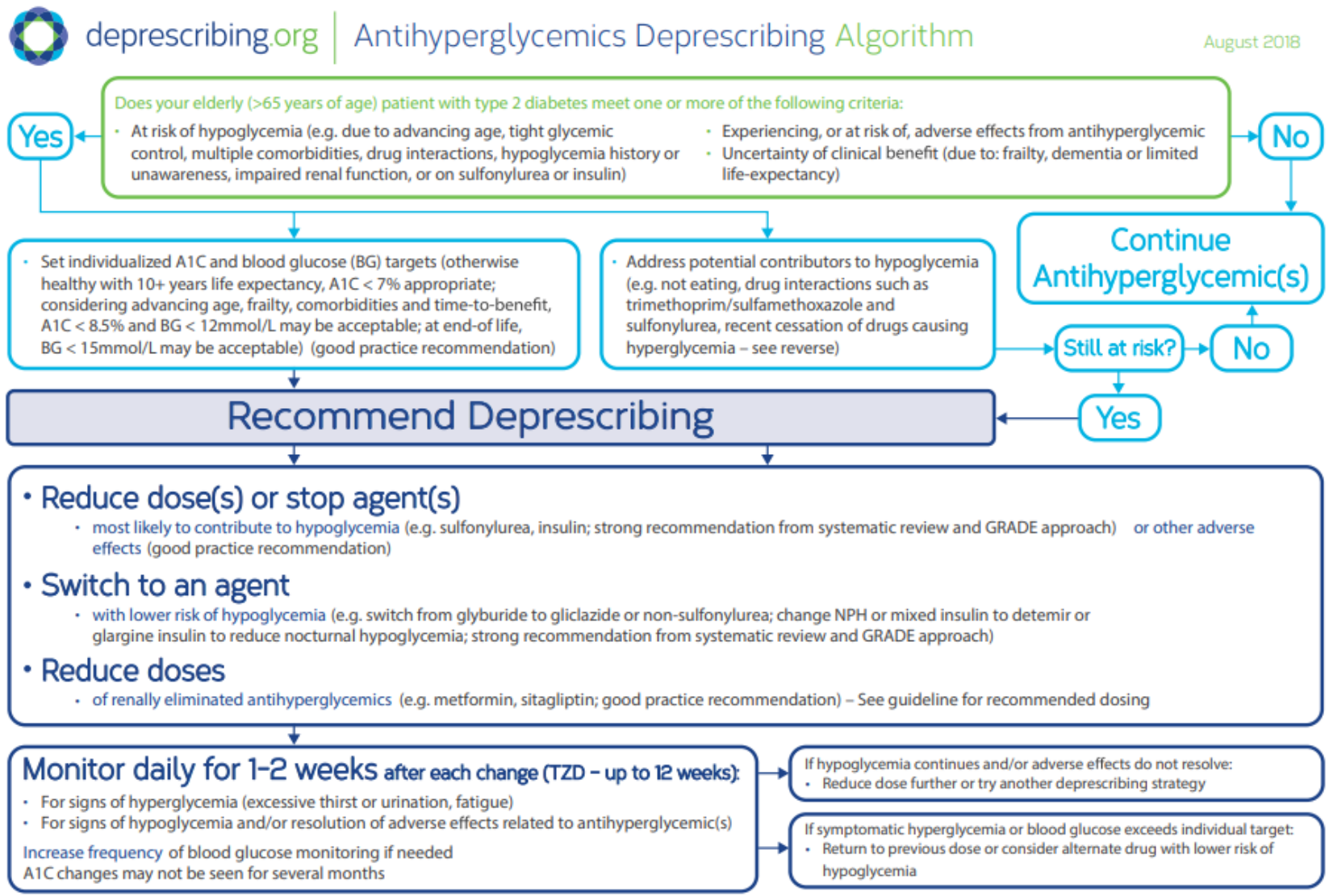
Daily intake of a PPI for a period sufficient to achieve resolution of the individual's reflux-related symptoms; following symptom resolution, the medication is discontinued until the individual's symptoms recur, at which point, medication is again taken daily until the symptoms resolve

Farrell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid FJ, et al. Deprescribing proton pump inhibitors. Evidence-based clinical practice guideline. *Can Fam Physician* 2017;63:354-64 (Eng), e253-65 (Fr).

deprescribing.org | Bruyère Research Institute | open Ontario Pharmacy Evidence Network

Clinical Scenario

- What should we do with this patient's antihyperglycemics?
- What does the AGS Beers Criteria say about antihyperglycemics?



Farrell B, Black C, Thompson W, McCarthy L, Rojas-Fernandez C, Lochnan H, et al. Deprescribing antihyperglycemic agents in older persons. Evidence-based clinical practice guideline. Can Fam Physician 2017;63:832-43 (Engl), e452-65 (Fr).

deprescribing.org Bruyère Research Institute CIHR IRSC

deprescribing.org | Antihyperglycemics Deprescribing Notes

August 2018

Antihyperglycemics and Hypoglycemia Risk

Drug	Causes hypoglycemia?
Alpha-glucosidase inhibitor	No
Dipeptidyl peptidase-4 (DPP-4) inhibitors	No
Glucagon-like peptide-1 (GLP-1) agonists	No
Insulin	Yes (highest risk with regular insulin and NPH insulin)
Meglitinides	Yes (low risk)
Metformin	No
Sodium-glucose linked transporter 2 (SGLT2) inhibitors	No
Sulfonylureas	Yes (highest risk with glyburide and lower risk with gliclazide)
Thiazolidinediones (TZDs)	No

Drugs affecting glycemic control

- Drugs reported to cause hyperglycemia (when these drugs stopped, can result in hypoglycemia from antihyperglycemic drugs) e.g. quinolones (especially gatifloxacin), beta-blockers (except carvedilol), thiazides, atypical antipsychotics (especially olanzapine and clozapine), corticosteroids, calcineurin inhibitors (such as cyclosprine, sirolimus, tacrolimus), protease inhibitors
- Drugs that interact with antihyperglycemics (e.g. trimethoprim/sulfamethoxazole with sulfonylureas)
- Drugs reported to cause hypoglycemia (e.g. alcohol, MAOIs, salicylates, quinolones, quinine, beta-blockers, ACEIs, pentamidine)

Engaging patients and caregivers

- Some older adults prefer less intensive therapy, especially if burdensome or increases risk of hypoglycemia
- Patients and/or caregivers may be more likely to engage in discussion about changing targets or considering deprescribing if they understand the rationale:
  - Risks of hypoglycemia and other side effects
  - Risks of tight glucose control (no benefit and possible harm with A1C < 6%)
  - Time to benefit of tight glucose control
  - Reduced certainty about benefit of treatment with frailty, dementia or at end-of-life
- Goals of care: avoid hyperglycemic symptoms (thirst, dehydration, frequency, falls, fatigue, renal insufficiency) and prevent complications (5-10 years of treatment needed)
- Many countries agree on less aggressive treatment of diabetes in older persons
- Reviewing options for deprescribing, as well as the planned process for monitoring and thresholds for returning to previous doses will help engage patients and caregivers

Hypoglycemia information for patients and caregivers

- Older frail adults are at higher risk of hypoglycemia
- There is a greater risk of hypoglycemia with tight control
- Symptoms of hypoglycemia include: sweating, tachycardia, tremor BUT older patients may not typically have these
- Cognitive or physical impairments may limit older patient's ability to respond to hypoglycemia symptoms
- Some drugs can mask the symptoms of hypoglycemia (e.g. beta blockers)
- Harms of hypoglycemia may be severe and include: impaired cognitive and physical function, falls and fractures, seizures, emergency room visits and hospitalizations

Tapering advice

- Set blood glucose & A1C targets, plus thresholds for returning to previous dose, restarting a drug or maintaining a dose
- Develop tapering plan with patient/caregiver (no evidence for one best tapering approach; can stop oral antihyperglycemics, switch drugs, or lower doses gradually e.g. changes every 1-4 weeks, to the minimum dose available prior to discontinuation, or simply deplete patient's supply)
- Doses may be increased or medication restarted any time if blood glucose persists above individual target (12-15 mmol/L) or symptomatic hyperglycemia returns

Farrell B, Black C, Thompson W, McCarthy L, Rojas-Fernandez C, Lochnan H, et al. Deprescribing antihyperglycemic agents in older persons. Evidence-based clinical practice guideline. Can Fam Physician 2017;63:832-43 (Eng), e452-65 (Fr).

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Clinical Scenario

- What should we do with this patient's zolpidem?
- What does the AGS Beers Criteria say about sedative-hypnotics?

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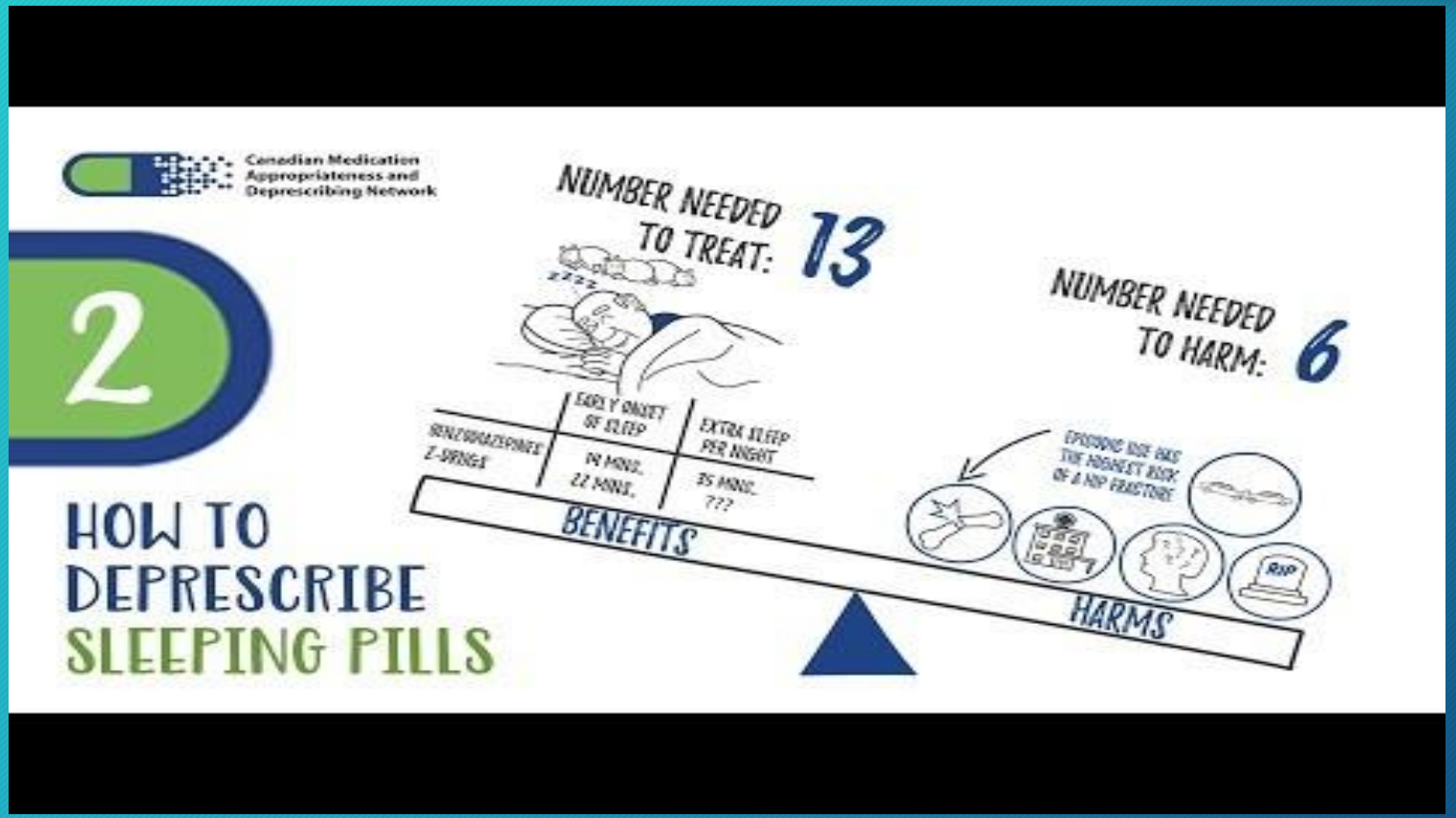

deprescribing.org | Benzodiazepine & Z-Drug (BZRA) Deprescribing Algorithm

February 2019

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. Evidence-based clinical practice guideline for deprescribing benzodiazepine receptor agonists. Can Fam Physician 2018;64:339-51 (Eng), e209-24 (Fr)

This algorithm and accompanying advice support recommendations in the NICE guidance on the use of zaleplon, zolpidem and zopiclone for the short-term management of insomnia, and medicines optimisation. National Institute for Health and Care Excellence, February 2019

deprescribing.org | Bruyère Research Institute | open

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

February 2019

BZRA Availability

BZRA	Strength
Alprazolam (Xanax®) [T]	0.25 mg, 0.5 mg, 1 mg, 2 mg
Bromazepam (Lectopam®) [T]	1.5 mg, 3 mg, 6 mg
Chlordiazepoxide [C]	5 mg, 10 mg, 25 mg
Clonazepam (Rivotril®) [T]	0.25 mg, 0.5 mg, 1 mg, 2 mg
Clorazepate (Tranxene®) [C]	3.75 mg, 7.5 mg, 15 mg
Diazepam (Valium®) [T]	2 mg, 5 mg, 10 mg
Flurazepam (Dalmane®) [C]	15 mg, 30 mg
Lorazepam (Ativan®) [T,S]	0.5 mg, 1 mg, 2 mg
Nitrazepam (Mogadon®) [T]	5 mg, 10 mg
Oxazepam (Serax®) [T]	10 mg, 15 mg, 30 mg
Temazepam (Restoril®) [C]	15 mg, 30 mg
Triazolam (Halcion®) [T]	0.125 mg, 0.25 mg
Zopiclone (Imovane®, Rhovane®) [T]	5mg, 7.5mg
Zolpidem (Sublinox®) [S]	5mg, 10mg

T = tablet, C = capsule, S = sublingual tablet

BZRA Side Effects

- **BZRAs have been associated with:**
  - physical dependence, falls, memory disorder, dementia, functional impairment, daytime sedation and motor vehicle accidents
- **Risks increase in older persons**

Engaging patients and caregivers

Patients should understand:
- The rationale for deprescribing (associated risks of continued BZRA use, reduced long-term efficacy)
- Withdrawal symptoms (insomnia, anxiety) may occur but are usually mild, transient and short-term (days to a few weeks)
- They are part of the tapering plan, and can control tapering rate and duration

Tapering doses

- No published evidence exists to suggest switching to long-acting BZRAs reduces incidence of withdrawal symptoms or is more effective than tapering shorter-acting BZRAs
- If dosage forms do not allow 25% reduction, consider 50% reduction initially using drug-free days during latter part of tapering, or switch to lorazepam or oxazepam for final taper steps

Behavioural management

Primary care:
1. Go to bed only when sleepy
2. Do not use bed or bedroom for anything but sleep (or intimacy)
3. If not asleep within about 20-30 min at the beginning of the night or after an awakening, exit the bedroom
4. If not asleep within 20-30 min on returning to bed, repeat #3
5. Use alarm to awaken at the same time every morning
6. Do not nap
7. Avoid caffeine after noon
8. Avoid exercise, nicotine, alcohol, and big meals within 2 hrs of bedtime

Institutional care:
1. Pull up curtains during the day to obtain bright light exposure
2. Keep alarm noises to a minimum
3. Increase daytime activity & discourage daytime sleeping
4. Reduce number of naps (no more than 30 mins and no naps after 2 pm)
5. Offer warm decaf drink, warm milk at night
6. Restrict food, caffeine, smoking before bedtime
7. Have the resident toilet before going to bed
8. Encourage regular bedtime and rising times
9. Avoid waking at night to provide direct care
10. Offer backrub, gentle massage

Using CBT

What is cognitive behavioural therapy (CBT)?
- CBT includes 5-6 educational sessions about sleep/insomnia, stimulus control, sleep restriction, sleep hygiene, relaxation training and support

Does it work?
- CBT has been shown in trials to improve sleep outcomes with sustained long-term benefits

Who can provide it?
- Clinical psychologists usually deliver CBT, however, others can be trained or can provide aspects of CBT education; self-help programs are available

How can providers and patients find out about it?
- Some resources can be found here: https://mysleepwell.ca/

Pottie K, Thompson W, Davies S, Grenier J, Sadowski C, Welch V, Holbrook A, Boyd C, Swenson JR, Ma A, Farrell B. Evidence-based clinical practice guideline for deprescribing benzodiazepine receptor agonists. Can Fam Physician 2018;64:339-51 (Eng), e209-24 (Fr)

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