DEPRESCRIBING

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DISCLOSURES

- I have no potential conflicts of interest
- Images are from Microsoft Stock Images

MRS JONES

Ms. Jones is a new patient to you. Her family physician retired last year and one of your colleagues who works in the Emergency Department asked if you would accept Ms. Jones as a patient as she has been to the ED a number of times in the last few months, usually with falls and once with acute confusion.

This is your second time meeting her and you asked her to bring all her medications with her. The list is as follows:

MEDICATION LIST

- Candesartan 4 mg PO Daily
- 2. ASA 81 mg PO Daily
- 3. HCTZ 25 mg PO Daily
- 4. Metoprolol 100 mg PO BID
- 5. Melatonin 10 mg PO QHS
- 6. Oxybutynin IR 5 mg PO TID
- 7. Atorvastatin 40 mg PO Daily
- 8. Clonazepam 0.5 mg PO QHS
- Calcium 1 tab PO Daily

- 10. Paxil 20 mg PO Daily
- 11. Donepezil 10 mg PO Daily
- 12. Ibuprofen ES QID
- 13. Vitamin D 1000 IU PO Daily
- 14. Metformin 1000 mg PO BID
- 15. Glyburide 2.5 mg PO Daily
- 16. Pantoprazole 80 mg PO Daily
- 17. Metoclopramide 10 mg BID
- 18. Loperamide daily prn

POLL - HOW DO YOU FEEL WHEN YOU SEE THIS MEDICATION LIST?

- Excited for the challenge
- 2. Defeated
- 3. Hopeless
- 4. Unflustered
- 5. Overwhelmed



OBJECTIVES

By the end of the session participants will be able to:

- Recognize problematic medications commonly used in the elderly
- 2. Identify safer treatment alternatives
- 3. Apply frailty as framework to guide prescribing decisions
- 4. Recognize common pitfalls and challenges in deprescribing



01

Polypharmacy

02

Inappropriate Prescribing

03

Prescribing Cascade

04

Deprescribing

DEPRESCRIBING

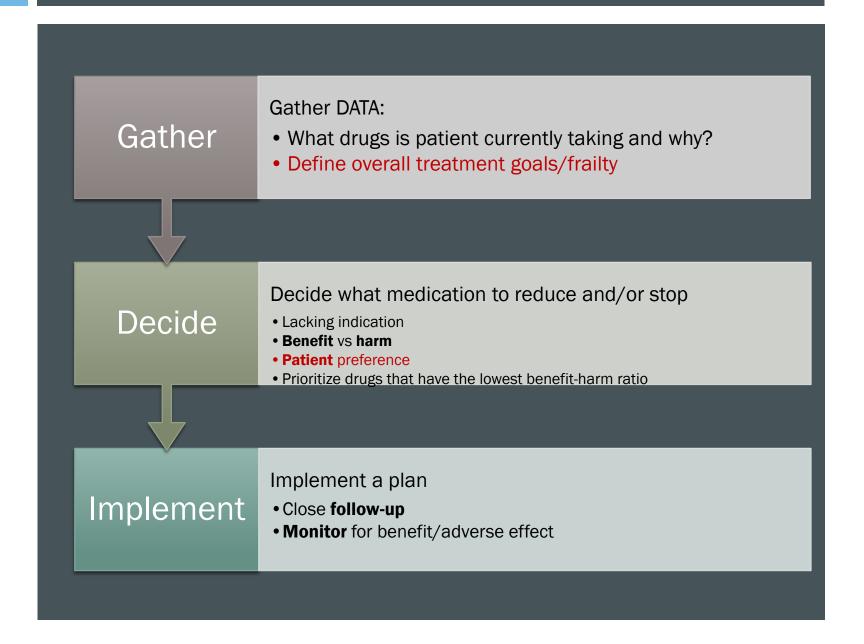
A "clinically supervised process of tapering or stopping drugs, with the goal of minimizing inappropriate polypharmacy and improving patient outcomes."

Scott IA, Hilmer SN, Reeve E, et al. Reducing inappropriate polypharmacy: the process of deprescribing. JAMA Intern Med.2015;175(5):827-834



STEPS TO DEPRESCRIBING

This is a collaborative process



STEP 1 - GATHER DATA

- Match medication to medical problem/diagnosis
- Are they taking all their meds?
- Why are they on the medication?
 - Is it to treat a side effect?
 - Was it started in hospital?
- Is medication effective?
- What is their Frailty Score?



STEP 2 - DECIDE

- Can you eliminate unmatched or duplicates?
- Is it contributing to adverse effect?
- Is there a safer option?
- Is it still indicated?
- What matters most to the patient?

STEP 2 - HELP DECIDING

STOPP/START

criteria for potentially inappropriate prescribing in older people: version 3

BEERS CRITERIA

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

Journal of the American Geriatrics Society

Deprescribing Guidelines and Algorithms

The evidence-based guidelines and algorithms developed by the deprescribing org team and its collaborators are products of quality research and real-world application.

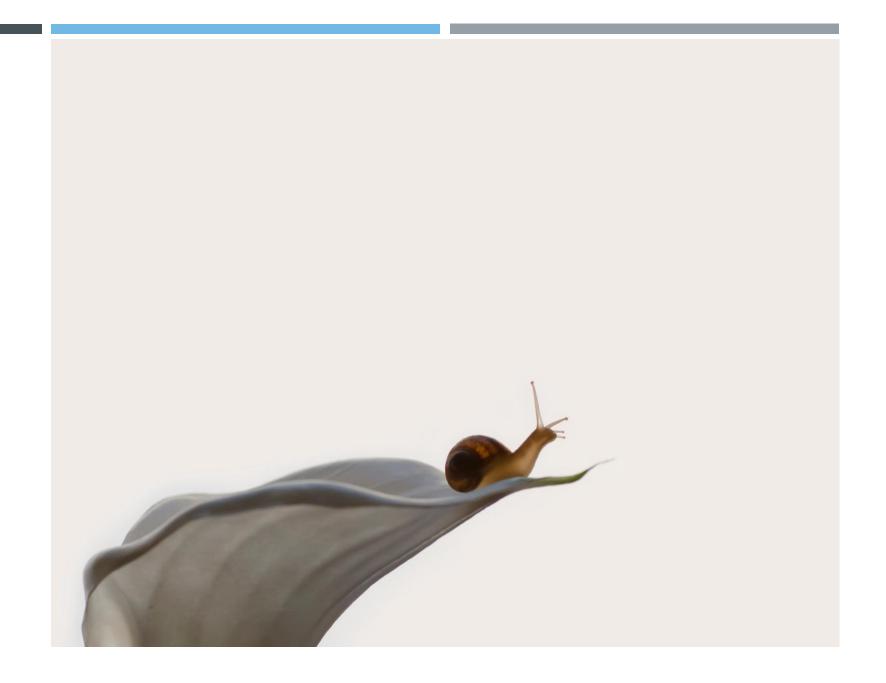
Watch our video to learn how we developed each of the evidence-based deprescribing guidelines.

This video helps viewers understand:

- · The rationale for evidence-based deprescribing guidelines
- The process used for developing the deprescribing guidelines
- The steps that a healthcare professional and patient need to go through to make and carry out safe deprescribing processes

STEP 3 - IMPLEMENT

- Take your time
- Don't make too many changes at once
- Avoid substitutions
- Ask for help



CASE: MRS. T

- 86 yo F who became your patient about 2 months ago
 - This is your first time seeing her after her initial meet and greet
- Came to you on a list of 13 medications (see page)
- Over the last few months has been feeling dizzy and when you question her further admits to falling twice, which she is very embarrassed about
- As part of your initial assessment, you weighed her, and she says that if that weight is correct she has lost 5 kg since she last checked 3 months ago
 - She weighs 48 kg
- She wonders if she is having another UTI she's had them before and is having some symptoms including "foul smelling odour" from her urine

CASE: MRS. T

What else do you want to know on history?

What would you do on physical exam?

MORE INFO

- Thin, fair skinned older woman, walking slowly with a cane from waiting room
- 126/70 -- 95/54 standing
- Weight 48 kg
- PHx: HTN, Knee arthritis, Urinary Incontinence, Depression
- What is her function? She needs help with shopping and housekeeping because she is too fatigued and sore, she stopped driving last year and depends on others to take her out to appointments and she is nervous about getting in and out of the bath so she has been sponge-bathing for the last 3 months.



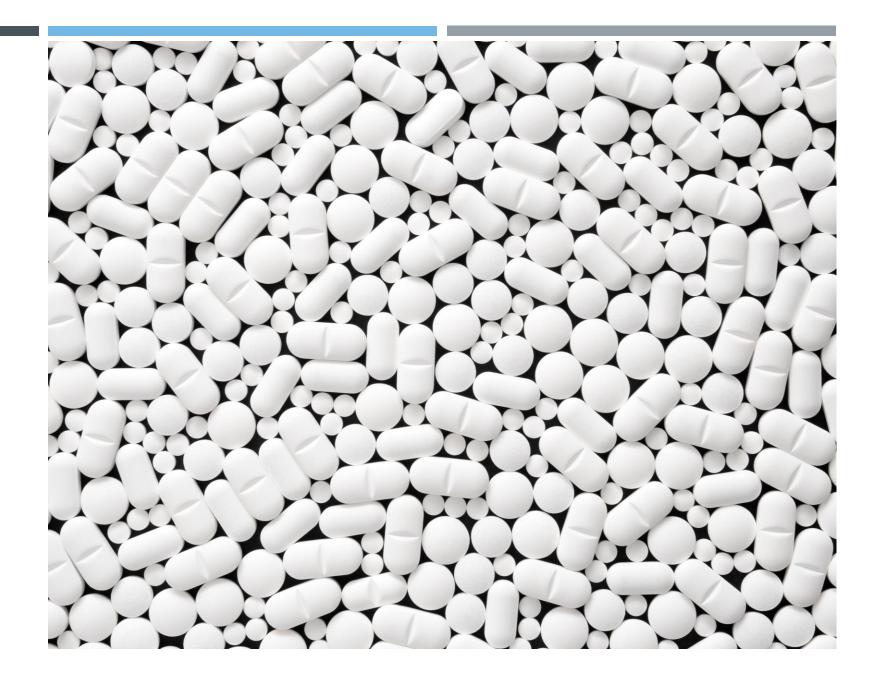
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- 16. Pantoprazole 80 mg PO Daily
- 17. Metoclopramide 10 mg BID
- 18. Loperamide daily prn

WHAT TO PRIORITIZE?

- High Risk Meds
 - Anticholinergic
 - Narrow therapeutic window
 - Cardiac
 - Sedating
- Low Hanging "fruit"
 - No indication
 - Duplicates
 - Patient not taking
- Patient Preference
- Frailty



ANTICHOLINERGIC MEDICATIONS – WHY WORRY?

Increase in risk of cognitive impairment

Association between developing dementia and cumulative anticholinergic drug use

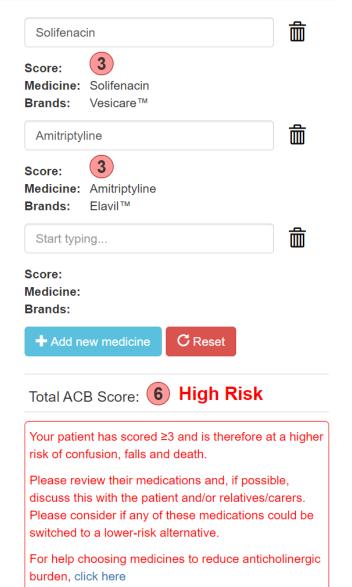
50% odds of dementia with equivalent of 3 years of daily use of single strong anticholinergic medication at minimum effective dose for older adults

| Medicine Group | Minimal Anticholinergic Burden | Mild Anticholinergic Burden | Moderate Anticholinergic Burden | Severe Anticholinergic Burden |
|----------------------|---|--|---|--|
| Antiallergics | | | | |
| | DesloratidineFexofenadine | | CetirizineLoratidine | ChlorphenamineClemastine |
| Antidepressants | | | | |
| | VenlafaxineDuloxetineBuproprionTrazadone | TrazodoneMirtazepineLofepramine | ParoxetineDesipramineTrimepramineSertralineClomipramine | AmitriptylineNortriptylineImipramine |
| Antiparkinson | | | | |
| | | Levodopa/CarbidopaSelegelineEntacaponePramipexole | Amantadine | ProcyclidineBenztropine |
| Antipsychotics | | | | |
| | Avoid Phenothiazines Aripriprazole and Ziprasidone have lower anticholinergic burden | Quetiapine Risperidone Haloperidol | ClozapineLevomepromazinePericyazine | OlanzepineDoxepineChlorpromazinePromethazine |
| H2 blockers | | | | |
| | Consider PPI as alternative | Ranitidine | Cimetidine | |
| Nausea and Vomiting | | | | |
| | Domperidone | Metoclopramide | ProchlorperazineLevomepromazine | |
| Sedatives | | | | |
| | Avoid antihistamine sedation | | | |
| Urinary Incontinence | | | | |
| | Mirabegron | | | OxybutyninFesoteradineTrospiumSolifenacinTolterodine |

ACB CALCULATOR

- Anticholinergic Cognitive Burden Scale (ACB)
- OnlineCalculator <u>www.acbcalc.com</u>





URINARY INCONTINENCE: IS RX REALLY HELPING?

Strong anticholinergic effect

Antimuscarinic agents: cognitive impairment, falls

Alpha Blocker: orthostatic hypotension

Don't forget bowels, toileting schedule, dehydration, diuretics and bladder irritants!



NAUSEA

High **Risk due** to anticholinergic effect:

- Dimenhydrinate
- Metoclopramide
- H2 blockers

Try instead:

- Ginger
- Small Meals
- Is it a side effect from another med?
- Get to root cause
- PPI

HIGH RISK CARDIAC MEDS

Frequent offenders

- Digoxin monitoring + toxicity
- Beta Blockers orthostatic hypotension, fatigue
- Calcium Chanel Blockers prescribing cascade
- Diuretics orthostatic hypotension, urinary incontinence, feeling "dry", electrolytes and creatinine need monitoring

Considerations

- Patient centered decision making
- Goals of therapy
- Burden of monitoring
- Renal function
- Orthostatic hypotension



It's no dream.
Sleep well without sleeping pills.

Get your sleep back with CBTi.

Sleep advice during the COVID-19 pandemic



Recommendations

Resources for clinicians by health specialty

Events

Latest events and other happenings

Make a Change $\,\,\,\,\,\,\,\,\,\,$

Make a change in your setting or interest area

Training & Research
Patient Resources
News

About

EN FR

Q

Patient Resources

MENU

- > Why are sleeping pills not helpful?
- > What are the risks?
- > Tips for better sleep

Insomnia and Anxiety in Older People

Sleeping pills are usually not the best solution.

Download PDF



Why are sleeping pills not helpful?

Nearly one third of older people in Canada take sleeping pills. These drugs are called "sedative-hypnotics" or "tranquilizers." They affect the brain and spinal cord.

Health care providers prescribe the drugs for sleep problems. The drugs are also used to treat other conditions, such as anxiety or alcohol withdrawal.

Usually older adults should try non-drug treatments first. There are safer and better ways to improve sleep or reduce anxiety.

choosingwiselycanada.org/pamphlet/sleeping-pills-and-older-adults

Geriatric Gems

Insomnia in older adults

Approaching a clinical challenge systematically

Frank Molnar Msc MD CM FRCPC Chris Frank MD CCFP(COE)(PC) FCFP Soojin Chun Msc MD FRCPC Elliott Kyung Lee MD FRCPC DABSM

https://www.cfp.ca/content/cfp/67/1/25.full.pdf

Table 2. Medications and other substances that can contribute to insomnia

| CLASS | MEDICATION OR SUBSTANCE | | | | |
|------------------|--|--|--|--|--|
| Psychiatric | Selective serotonin reuptake inhibitors Serotonin-norepinephrine reuptake inhibitors Psychostimulants: methylphenidate, modafinil Cholinesterase inhibitors (eg, donepezil) | | | | |
| Cardiovascular | Angiotensin-converting enzyme inhibitors, diuretics, α-blockers, angiotensin receptor blockers, β-blockers, calcium channel blockers, statins | | | | |
| Respiratory | Bronchodilators (eg, salbutamol), theophylline | | | | |
| Neurologic | Dopaminergic agonists (eg, levodopa) | | | | |
| Gastrointestinal | Histamine-2 blockers: ranitidine, cimetidine | | | | |
| Analgesics | Opioids (chronic use) | | | | |
| Others | Caffeine, nicotine, alcohol, glucocorticoids | | | | |

MEDS MAY BE MAKING INSOMNIA WORSE

MEDICATIONS USED FOR SLEEP THAT MAY CAUSE MORE HARM THAN GOOD

All are high-risk medications

- Trazodone
- TCAs
- Z Drugs
- Benzodiazepines

- Melatonin may be effective but at lower doses
 - 3mg or less
- Mirtazapine only indicated if concurrent depression

Stop Sleeping Pills Guide

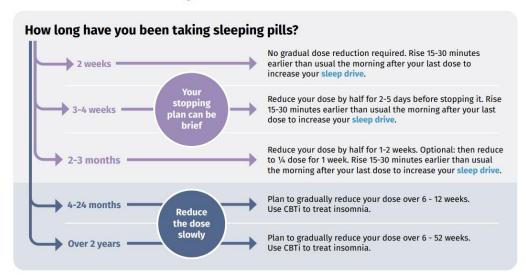


Advice

- Estimate how long it will take to reduce your dose based on how long you have been using sleeping pills.
- Using the **Stop Sleeping Pills Planner**, develop your dose reduction plan with your doctor and pharmacist.
- Aim to reduce your dose on the same day of the week, every 1 or 2 weeks.
- Your plan should be flexible.

 Make adjustments based on how you are feeling.
- Reduce your dose the same amount each time or slow things down by making smaller dose reductions, lengthening the time between dose reductions, or both.
- Monitor your sleep with a sleep diary. Use CBTi to help you sleep as you lower your dose.

Estimate the duration of your dose reduction schedule





DEPRESCRIBING MOOD MEDS

Why are you deprescribing?

- No longer needed?
- Ineffective?
 - Right dose?
 - Right diagnosis?
- Unsafe choice?
 - Cross taper



Appendix D: Switching Antidepressants

Switching antidepressants can be accomplished by the following strategies:

- 1. Direct switch: stop the first antidepressant abruptly and start new antidepressant the next day.
- 2. Taper & switch immediately: gradually taper the first antidepressant, then start the new antidepressant immediately after discontinuation.
- 3. Taper & switch after a washout: gradually withdraw the first antidepressant, then start the new antidepressant after a washout period.
- 4. Cross-tapering: taper the first antidepressant (usually over 1-2 week or longer), and build up the dose of the new antidepressant simultaneously.

The following table is intended for general guidance only. Whichever strategy is used, patients should be closely monitored for symptoms and adverse events. The duration of tapering should be determined individually for each patient. Physicians should balance the risk of discontinuation symptoms versus risk of delay in new treatment. The washout period is mostly dependent on the t_{1/2} of the first drug.

| Switching From | To → | SSRIs (except fluoxetine) | Fluoxetine | SNRIs | NDRI (bupropion) | NaSSA (mirtazapine) | RIMA (moclobemide) | TCA |
|---------------------------|----------|--|---|---|---|---|--|--|
| SSRIs (except fluoxetine) | → | Taper & stop, then start new SSRI at a low dose ^{1,†} | Taper & stop, then start fluoxetine at low dose (10 mg daily) ^{1,†} | Taper & stop ⁵ (or to low dose), ¹ then start low dose SNRI & ↑ very slowly. ^{1,3,5,†} | Taper & stop ⁵ (or to low dose), ² then start bupropion. | Taper & stop ⁵ (or to low dose), ¹ then start mirtazapine cautiously. | Taper & stop, wait 1 week, then start moclobemide. ^{1,5} | Cross-taper cautiously with very low dose TCA. 1,3,5,4,6 |
| Fluoxetine* | → | Stop fluoxetine, wait 4-7 days. Start the new SSRI at low dose & ↑ slowly. 1.2.5 | | Stop fluoxetine, wait 4-7 days. Start with low dose SNRI & ↑ very slowly. ^{3,5} | Stop fluoxetine, wait 4-7 days. Start bupropion. ⁵ | Stop fluoxetine, wait 4-7 days, then start mirtazapine cautiously. ⁵ | Stop fluoxetine, wait 5 weeks, start moclobemide. ^{3,5} | Stop fluoxetine, wait 4-7 days. Start TCA at very low dose & ↑ very slowly. ^{1,5,8,5} |
| SNRIs | 1 | Cross-taper cautiously with low dose of SSRI. ^{1,5} | Cross-taper cautiously with low dose of fluoxetine. ^{1,5} | Taper & stop, then start new SNRI. ¹ | Taper & stop (or to low dose), then start bupropion cautiously. ⁵ | Cross-taper cautiously.1 | Taper & stop, wait 1 week, then start moclobemide. ^{1,5} | Cross-taper cautiously with very low dose of TCA.1.5.5 |
| NDRI (bupropion) | → | Taper & stop, then start SSRI (consider lower starting dose). ^{4,5} | Taper & stop, then start fluoxetine (consider lower starting dose). ^{4,5} | Taper & stop, then start SNRI at low dose & \uparrow slowly. ^{4,5} | | Taper & stop, then start mirtazapine cautiously (consider lower starting dose). ^{4,5} | Taper & stop, wait 1 week, then start moclobemide. ⁵ | Taper & stop, then start TCA at a low dose & ↑ slowly.5 |
| NaSSA (mirtazapine) | → | Taper & stop ⁵ (or to low dose), ¹ then start SSRI cautiously. | Taper & stop ⁵ (or to low dose), ¹ then start fluoxetine cautiously. | Taper & stop ⁵ (or to low dose), ¹ then start SNRI cautiously. | Taper & stop, then start bupropion cautiously. ⁵ | | Taper & stop, wait 1 week, then start moclobemide. ¹ | Taper & stop ⁵ (or to low dose), ¹ then start cautiously with low dose of TCA. |
| RIMA (moclobemide) | → | Taper & stop, wait 24 hours, start SSRI. ^{1,5} | Taper & stop, wait 24 hours, start fluoxetine. ^{1,5} | Taper & stop, wait 24 hours, start SNRI. ^{1,5} | Taper & stop, wait 24 hours, start bupropion. ^{1,5} | Taper & stop, wait 24 hours, start SNRI. ^{1,5} | | Taper & stop, wait 24 hours, start TCA. ^{1,5} |
| TCA | → | Gradually dose by up to 50% & start SSRI at normal starting dose, then slowly withdraw TCA over few weeks. 1.5.6 | Gradually \sqrt dose by up to 50% & start fluoxetine at normal starting dose, then slowly withdraw TCA over few weeks.\(^{1.56}\) | Cross-taper cautiously, start with low dose SNRI. ^{1,5} | Taper & stop ⁴ (or to low dose), ⁵ then start bupropion cautiously. | Taper & stop (or to low dose), ^{1,5} then start mirtazapine cautiously. | Taper & stop, wait 1 week, then start moclobemide. ¹ | Cross-taper cautiously ^{1,5} (switching is of questionable benefit). ⁴ |

https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/bc-guidelines/depress_appd.pdf

MOOD

PREFERRED ANTI-DEPRESSANTS AND ANXIOLYTICS

Sertraline

Monitor sodium

Citalopram or Escitalopram

Monitor QT

Bupropion

May increase anxiety and insomnia

Mirtazapine

• Sedating but this can be a desirable adverse effect

RISKS:

Increase Falls

Confusion

QT Prolongation

Hyponatremia

Urinary Incontinence

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

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

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

Recommend Deprescribing

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)

- 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

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

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.

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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









- Lorazepam or clonazepam "best of the bad"
- **VERY SLOW TAPER**

deprescribing.org

FRAILTY

HOW DOES FRAILTY FIT INTO PRESCRIBING AND DEPRESCRIBING

WHAT IS FRAILTY

"Frailty is a progressive physiological decline in multiple organ systems marked by loss of function, loss of physiological reserve and increased vulnerability to disease and death. Frail older adults are vulnerable to poor health outcomes including an increased risk of disability, social isolation and institutionalisation."

Moorhouse, P., and K. Rockwood. "Frailty and Its Quantitative Clinical Evaluation." The Journal of the Royal College of Physicians of Edinburgh 42.4 (2012): 333-40. Web.

How does frailty show itself?

Frailty may be observed as changes in complex tasks:

- Cognition changes with memory/thinking
- Mobility
- Dexterity (trouble with function)
- Social engagement

Frailty isn't all or nothing, it comes in levels or stages.



CLINICAL FRAILTY SCALE

It is about FUNCTION

Clinical Frailty Scale*



I Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.



3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.



4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.



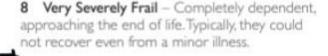
5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.



7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).





9. Terminally III - Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.</p>

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, they cannot do personal care without help.

- * 1. Canadian Study on Health & Aging, Revised 2008.
- K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

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POLL: WHO ROUTINELY ADJUSTS THEIR PRESCRIBING IN PATIENTS WHO ARE MODERATELY OR SEVERELY FRAIL FOR THE FOLLOWING

- 1. Statins
- 2. ASA
- 3. Hypertensives
- 4. Bisphosphonates
- 5. Diabetic medications

FRAILTY AND STATINS

Severely frail elderly patients: No indication

Over 85 years of age:

Likely limited benefit for risks

Over 75 years of age:

Value of statins is controversial

https://www.choosingwisely.org/clinician-lists/amda-lipid-lowering-medications

Ruscica, M., C. Macchi, C. Pavanello, A. Corsini, A. Sahebkar, and C.R Sirtori. "Appropriateness of Statin Prescription in the Elderly." European Journal of Internal Medicine 50 (2018): 33-40. Web.

HTN AND FRAILTY

Target SBP: 140 and 160

Target: No orthostatic drop to less

than 140

Initiate: if SBP over 160

Severe Frailty:

Target SBP: 160 to 190

REVIEW



EDUCATIONAL OBJECTIVE: Readers will consider the frailty of their elderly patients when prescribing antihypertensive treatment

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Promoting higher blood pressure targets for frail older adults: A consensus guideline from Canada

Mallery LH, Allen M, Fleming I, Kelly K, Bowles S, Duncan J, Moorhouse P. Promoting higher blood pressure targets for frail older adults: a consensus guideline from Canada. Cleve Clin J Med. 2014 Jul;81(7):427-37.

FRAILTY AND DIABETES - IT'S THE LOWS WE WORRY ABOUT

- Functionally dependent: 7.1–8.0%
- Frail and/or with dementia: 7.1–8.5%
- End of life: A1C measurement not recommended.

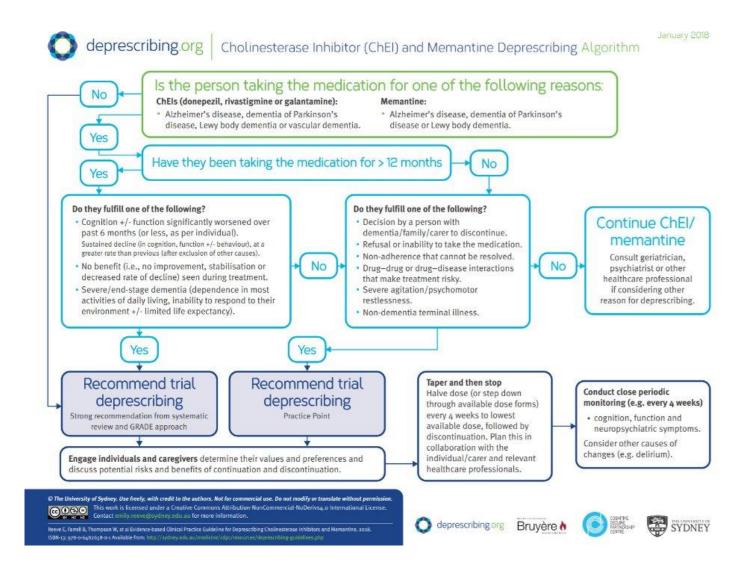
Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. Can J Diabetes. 2018;42(Suppl 1):S1-S325.

https://guidelines.diabetes.ca/cpg/chapter37#sec6



CHOLINESTERASE INHIBITORS – WHEN TO DEPRESCRIBE?

- >12 month use with ongoing progression of dementia
- Severe dementia
- Increased agitation
- Weight loss or low appetite
- Worsening Urinary Incontinence
- Bradykinesia





PITFALLS AND CHALLENGES

OF DEPRESCRIBING





WHAT MAKES PRESCRIBING EASY AND DEPRESCRIBING HARD?

Psychological:

- We want to "do" something
- Act of "taking away" may be seen as lack of attention

Clinical Guidelines

When started by others

Withdrawal side effects

Complex decisions

Takes time!

Think of deprescribing as a procedure

NON-MEDICAL REASONS

- Lack of trust from patient/family
- Perception that by deprescribing we are "giving up"
- Misalignment between family/patient expectations and patient's level of frailty

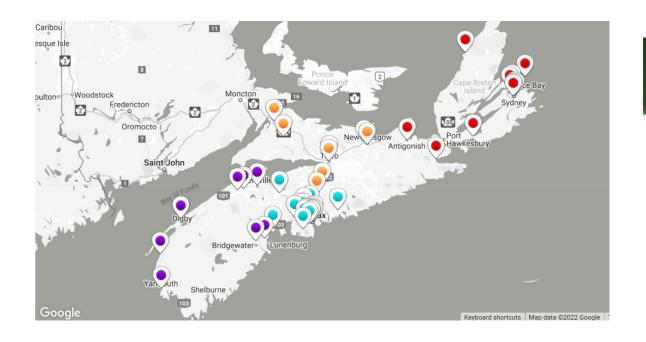
 Underlying all this may be cultural, religious, health literacy, language and/or context of marginalized or racialized groups.



DEPRESCRIBING PITFALLS









BLOOMPROGRAM.CA



MEDSTOPPER. COM

- 1 Frail elderly?
- Generic or Brand Name:

amit Q

3 Select Condition Treated:



| Generic Name | Brand Name | Condition Treated | Add to MedStopper | |
|---------------|------------|-------------------|----------------------|--|
| amitriptyline | Elavil | insomnia | ADD | |

Previous Next



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/STOP Criteria |
|---|---|-----------------------------|---|--------------------|--|---|------------------------|
| | amitriptyline (Elavil) / Tricyclic antidepressant / insomnia | (<u>:</u>) | (): | (;) | 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 | cramping, diarrhea, nausea, sweating, hot or cold flashes, headache, dizziness, flu-like symptoms, fatigue, anxiety, restlessness, trouble sleeping, vivid dreams, tremors, muscle aches, confusion, pounding heart (palpitations), unusual movements, mood changes | Details |





LESS SEDATIVES FOR YOUR OLDER RELATIVES

A toolkit for reducing inappropriate use of benzodiazepines and sedative-hypnotics among older adults in hospitals

RESOURCES

- http://fewerpillslessrisk.ca
- https://deprescribing.org
- http://medstopper.com
- https://choosingwiselycanada.org/toolkit/less-sedatives-foryour-older-relatives
- https://choosingwiselycanada.org/recommendation/pharmacist
- https://www.deprescribingnetwork.ca
- Polypharmacy and Deprescribing module:

https://www.bruyere.org/en/polypharmacy-deprescribing

TAKE HOME POINTS

Patient centered process

Frailty will help focus decisions

Take your time

Don't make too many changes at once

Avoid substitutions

Ask for help/Collaborate

ADDITIONAL CASE

MR S

- 81 yo man
 - His wife, Kat, is your patient and asked if you would take him on since he has not family doctor after his moved away a couple of years ago
 - Comes to you on a list of 11 medications
- He is a proud diabetic because he never had problems with his kidneys
 - Last Cr you can find is from 8 years ago
- Kat is concerned because he gets confused more easily and he is having falls
- He isn't concerned about the falls, but is feeling nauseated more at times... but he's sure it's just a bug
 - Besides he borrowed one of his friend's medications that is helping
- Also feeling more fatigued

MEDICATION LIST

- Metformin 1000 mg PO BID
- Allopurinol 300 mg PO Daily
- Spironolactone 12.5 mg PO Daily
- Levodopa i tab PO TID
- Candesartan 4 mg PO Daily
- Glyburide 2.5 mg PO Daily
- Metoprolol 15 mg PO Daily
- Pantoprazole 80 mg PO Daily
- Mg i tab PO BID
- Clonazepam 0.5 mg PO qHS
- Maxeran 10 mg tabs: taking i tab BID



What else do you want to know on history?



What would you do on physical exam?

CASE: MR. S

MEDICATION LIST

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REFERENCES

- Anderson TS, Steinman MA. Antihypertensive Prescribing Cascades as High-Priority Targets for Deprescribing. JAMA Intern Med. 2020;180(5):651–652. doi:10.1001/jamainternmed.2019.7082
- Anghel, Lucretia, Liliana Baroiu, Corina Risca et al "Benefits and Adverse Events of Melatonin Use in the Elderly." Experimental and Therapeutic Medicine 23.3 (2022): Experimental and Therapeutic Medicine, 2022-03-01, Vol.23 (3). Web.
- Best Practice Journal. A practical guide to stopping medicines in older people. Best Pract J 2010;27:10-23.
- Coupland et al. Anticholinergic Drug Exposure and the Risk of Dementia. JAMA Intern Med. 2019; 179 (8):1084-1093.
- Djatche, L., S. Lee, D. Singer, S. E Hegarty, M. Lombardi, and V. Maio. "How Confident Are Physicians in Deprescribing for the Elderly and What Barriers Prevent Deprescribing?" Journal of Clinical Pharmacy and Therapeutics 43.4 (2018): 550-55.
 Web.
- Farrell, Barbara, Cody Black, Wade Thompson, Lisa McCarthy, Carlos Rojas-Fernandez, Heather Lochnan, Salima Shamji, Ross Upshur, Manon Bouchard, and Vivian Welch. "Deprescribing Antihyperglycemic Agents in Older Persons: Evidence-based Clinical Practice Guideline." Canadian Family Physician 63.11 (2017): 832-43. Web.
- Frank, Christopher, and Erica Weir. "Deprescribing for Older Patients." Canadian Medical Association Journal (CMAJ) 186.18 (2014): 1369-376. Web.
- Frisher M, Gibbons N, Bashford J, Chapman S, Weich S. Melatonin, hypnotics and their association with fracture: a matched cohort study. Age Ageing. 2016;45(6):801-6
- Kahan, Meldon, Angela Mailis-Gagnon, Lynn Wilson, and Anita Srivastava. "Canadian Guideline for Safe and Effective Use of Opioids for Chronic Noncancer Pain Clinical Summary for Family Physicians. Part 1: General Population." Canadian Family Physician 57.11 (2011): 1257-266. Web.
- Kahan, Meldon, Lynn Wilson, Angela Mailis-Gagnon, and Anita Srivastava. "Canadian Guideline for Safe and Effective Use of Opioids for Chronic Noncancer Pain Clinical Summary for Family Physicians. Part 2: Special Populations." Canadian, Robert L, Joseph Hanlon, and Emily R Hajjar. "Clinical Consequences of Polypharmacy in Elderly." Expert Opinion on Drug Safety 13.1 (2014): 57-65. Web.
- MaFamily Physician 57.11 (2011): 1269-276. Web.,
- Mallery LH, Moorhouse P, McLean Veysey P, Allen M, Fleming I. Severely frail elderly patients do not need lipid-lowering drugs. Cleve Clin J Med. 2017 Feb;84(2):131-142. doi: 10.3949/ccjm.84a.15114. PMID: 28198686.
- Maherllery LH, Allen M, Fleming I, Kelly K, Bowles S, Duncan J, Moorhouse P. Promoting higher blood pressure targets for frail older adults: a consensus guideline from Canada. Cleve Clin J Med. 2014 Jul;81(7):427-37. doi: 10.3949/ccjm.81a.13110. PMID: 24987044.
- Mallery, Laurie Herzig, MD, FRCPC, Ransom, Tom, MD, FRCPC, Steeves, Brian, MD, Cook, Brenda, MAdEd, PDt, CDE, Dunbar, Peggy, MEd, PDt, CDE, and Moorhouse, Paige, MD, MPH, FRCPC. "Evidence-Informed Guidelines for Treating Frail Older Adults With Type 2 Diabetes: From the Diabetes Care Program of Nova Scotia (DCPNS) and the Palliative and Therapeutic Harmonization (PATH) Program." Journal of the American Medical Directors Association 14.11 (2013): 801-08. Web.
- Matthew E, Edie Espejo, Bocheng Jing, W John Boscardin, Andrew R Zullo, Kristine Yaffe, Kenneth S Boockvar, and Michael A Steinman. "Attitudes toward Deprescribing among Older Adults with Dementia in the United States." Journal of the American Geriatrics Society (JAGS) (2022): Journal of the American Geriatrics Society (JAGS), 2022-03-10. Web.
- Rossi, Pier Riccardo, Sarah E. Hegarty, Vittorio Maio, Marco Lombardi, Andrea Pizzini, Aldo Mozzone, Marzio Uberti, and Simonetta Miozzo. "General Practitioner Attitudes and Confidence to Deprescribing for Elderly Patients." Geriatric Care (Pavia) 6.1 (2020): Geriatric Care (Pavia), 2020-03-12, Vol.6 (1). Web
- Savage RD, Visentin JD, Bronskill SE, et al. Evaluation of a Common Prescribing Cascade of Calcium Channel Blockers and Diuretics in Older Adults With Hypertension. JAMA Intern Med. 2020;180(5):643-651. doi:10.1001/jamainternmed.2019.7087
- Scott, Ian A, Sarah N Hilmer, Emily Reeve, Kathleen Potter, David Le Couteur, Deborah Rigby, Danijela Gnjidic, Christopher B Del Mar, Elizabeth E Roughead, Amy Page, Jesse Jansen, and Jennifer H Martin. "Reducing Inappropriate Polypharmacy: The Process of Deprescribing." JAMA Internal Medicine 175.5 (2015): 827-34. Web.
- Should Melatonin Be Used as a Sleeping Aid for Elderly People?. Can J Hosp Pharm. 2019;72(4):327-329.

WEBSITES AND PODCASTS

Podcasts:

GeriPal: Polypharmacy and Deprescribing. July 16, 2021

The Curbsiders Internal Medicine Podcast #56 and #57 Polypharmacy and Deprescribing. September 11, 2017

Websites:

http://fewerpillslessrisk.ca

https://deprescribing.org

http://medstopper.com

https://choosingwiselycanada.org/toolkit/less-sedatives-for-your-older-relatives

https://www.deprescribingnetwork.ca

https://pathclinic.ca/education/clinical-practice-guidelines

Polypharmacy and Deprescribing module: https://www.bruyere.org/en/polypharmacy-deprescribing

START/STOPP Toolkit: https://www.cgakit.com/m-2-stopp-start

BEERS Criteria: https://www.guidelinecentral.com/guideline/340784/