

# DEPRESCRIBING IN THE ELDERLY



GERIATRICS REFRESHER DAY  
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BRUYÈRE CONTINUING CARE


# DISCLOSURES

I have no conflicts of interest to declare.



# **ACKNOWLEDGEMENTS**

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# DEPRESCRIBING


(WWW.DEPRESCRIBING.ORG)

**“The planned and supervised process of dose reduction or stopping of medication that may be causing harm or no longer be of benefit. The goal of deprescribing is to reduce medication burden and harm, while maintaining or improving quality of life.”**

**“Deprescribing is part of good prescribing – backing off when doses are too high, or stopping medications that are no longer needed.”**




# LEARNING OBJECTIVES

1. Identify factors that motivate deprescribing.
  2. Work through a case that illustrates the development of a deprescribing plan.
  3. Review simple strategies that can help to make deprescribing changes “stick”.
  4. List key resources for future reference.
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# SYSTEM FACTORS DRIVING DEPRESCRIBING

- Rising medication costs (CIHI 2008; 6 provinces)
  - One billion from publicly funded programs (17.4% of health care spending)
- Increased health care utilization
  - Adverse drug events account for 10-17% of elderly patient hospital admissions; as many as 75% are preventable
  - > 1 in 9 ER visits due to drug-related adverse events
  - Those with adverse drug reactions incur more health services

# DEPRESCRIBING TRIGGERS FOR HEALTH CARE PROVIDERS


- Identification of high-risk medications
    - Beers criteria, STOPP/START criteria
  - Medications contributing to geriatric syndromes such as cognitive impairment, falls etc.
  - Prescribing cascades
  - Multiple medications (sometimes > 25)
- 

# PATIENT MOTIVATORS FOR ENGAGING IN DEPRESCRIBING

- Feeling frustrated about taking too many pills...and still not feeling well
  - Seeing their health and well-being priorities acknowledged
  - Having the opportunity to discuss the HCP's concerns about their medications
  - Feeling empowered to participate in setting the deprescribing agenda going forward
- 



# CHALLENGES: MULTIMORBIDITY AND POLYPHARMACY


- Prevalence of chronic illness increases with age:
    - 65-69: men 35%, women 45%
    - 80 yrs +: men 53%, women 70%
  - As comorbidities accumulate, management becomes more challenging:
    - “Guideline Gridlock”
  - One comorbidity can increase the risk of another
    - e.g. dementia and delirium
  - More specialists involved = competing priorities and risk for miscommunication
  - Patient’s priorities often lost
- 

# CHALLENGES: NON-ADHERENCE



- Intentional: Too many! Why bother?
- Nonintentional: Too complex!  
Forgets....

# THE CASE OF MRS. A.

- 84 yr old widow, living alone
  - Severe knee pain limiting mobility
  - Often confused, unable to get out of bed
  - 3 falls in the last year
  - Doesn't want to go out anymore
  - Children think she should no longer be living alone
  - Referred to the Geriatric Day Hospital by her family physician
- 

# MRS. A.'S MEDICATION LIST

## ■ In dosette:

- Ibuprofen 400mg twice daily
- Lorazepam 1mg at bedtime
- Warfarin daily as directed
- Metoprolol 50mg twice daily
- Ramipril 5mg daily
- Furosemide 40mg twice daily
- Atorvastatin 40mg daily
- Lansoprazole 30mg daily
- Oxybutynin XL 10mg daily
- Vitamin B12 1200mcg daily
- Slow-K (potassium) daily
- Calcium/Vitamin D twice daily

## ■ Not in dosette:

- ASA 81mg daily
- Dimenhydrinate 50mg at bedtime
- Lakota capsules four times daily
- Dextromethorphan syrup at bedtime

# IDENTIFYING MEDS TO BE TARGETED

## Explicit approaches

- Screening criteria such as Beers, STOPP/START
- Many limitations:
  - Do not capture all drug-related problems and prescribing cascades
  - May inadvertently identify a useful medication as potentially inappropriate
  - Have limited evidence for reducing morbidity, ADR's, ER visits, mortality
  - Are not patient-specific

## Implicit approaches 😊

- Assess each medication for indication, effectiveness, safety, compliance
- Always ask: “Could this be caused by a drug?”

# MRS. A.'S MEDICATION HISTORY

10 years ago

- Atrial fibrillation – metoprolol and warfarin
- Husband died - lorazepam

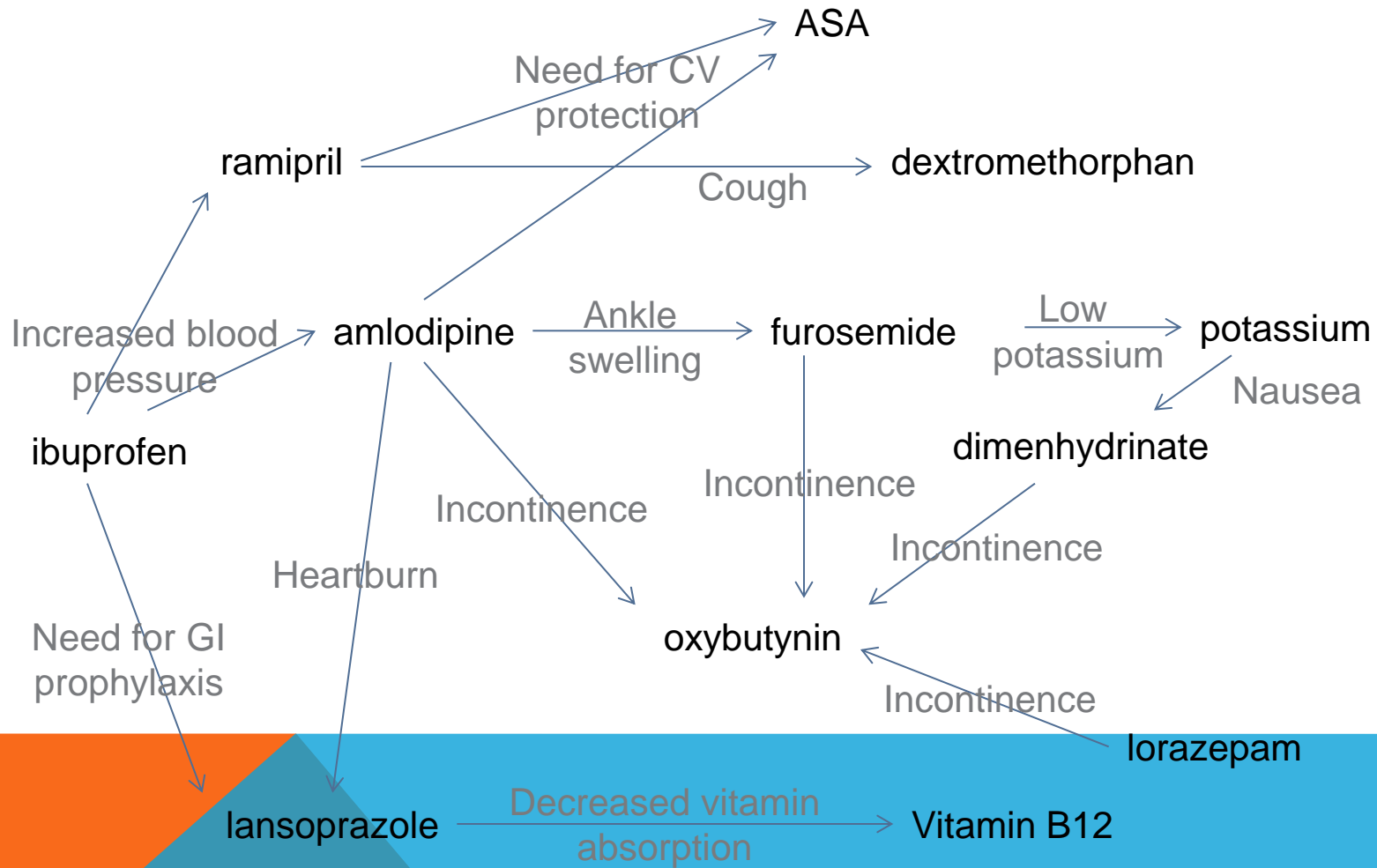
3-5 years ago

- Knee pain – ibuprofen
- Hypertension – ramipril
- Cough – dextromethorphan
- Hypertension – amlodipine
- Daughter told her to take ASA for hypertension

2 years ago

- Ankle swelling – furosemide
- Potassium low – potassium
- Nausea – dimenhydrinate, then lansoprazole (taking ibuprofen)
- B12 levels low – B12 supplement
- Knee pain – Lakota
- Nocturia – oxybutynin
- Osteopenia – calcium/Vitamin D

# MRS. A'S PRESCRIBING WEB



# MRS. A'S DRUG-RELATED PROBLEMS

(\*NOT CAUGHT BY SCREENING)

1. **high risk of bleeding** secondary to combination of warfarin, ASA, ibuprofen and Lakota (has easy bruising and some gum bleeding)
2. states no longer having benefit from ibuprofen for **knee pain**; may be contributing to her hypertension and bleeding risk with warfarin; patient willing to try regular acetaminophen instead\*
3. **high blood pressure** may improve with stopping ibuprofen, in which case (and in order to minimize orthostatic hypotension and ankle swelling), she may no longer need amlodipine\*
4. if **ankle swelling** improves with stopping amlodipine, consider tapering furosemide (which may also help with OH)\*
5. if we taper furosemide, try to stop potassium (at risk of hyperkalemia because of ramipril)\*
6. once ibuprofen, ASA and Lakota stopped, will not likely require ongoing lansoprazole as she does not describe a history of either heartburn or ulcer\*
7. **cough** may be due to ramipril and her use of dextromethorphan is likely contributing to confusion and falls\*
8. high dose and frequent use of dimenhydrinate may be contributing to **fatigue and fall risk**\*
9. **periodic nausea** may be due to potassium\*
10. **urinary urgency and incontinence** may be contributed to by high dose of furosemide and by taking the furosemide in the evening\*
11. **dry mouth** may improve with a lower dose of oxybutynin\*
12. risk of falls and morning fatigue are likely contributed to by lorazepam



# STRATEGIC (DE)PRESCRIBING FOR MRS. A.

- Start with medications with:

- Risk of harm with no known benefit
- Unclear/no indication
- Indication but unknown/minimal benefit
- Little chance of ADWE
- Benefit but side effect or safety issues

\*\*\*involve the patient in choosing where to start

- Adapt guidelines for the frail elderly

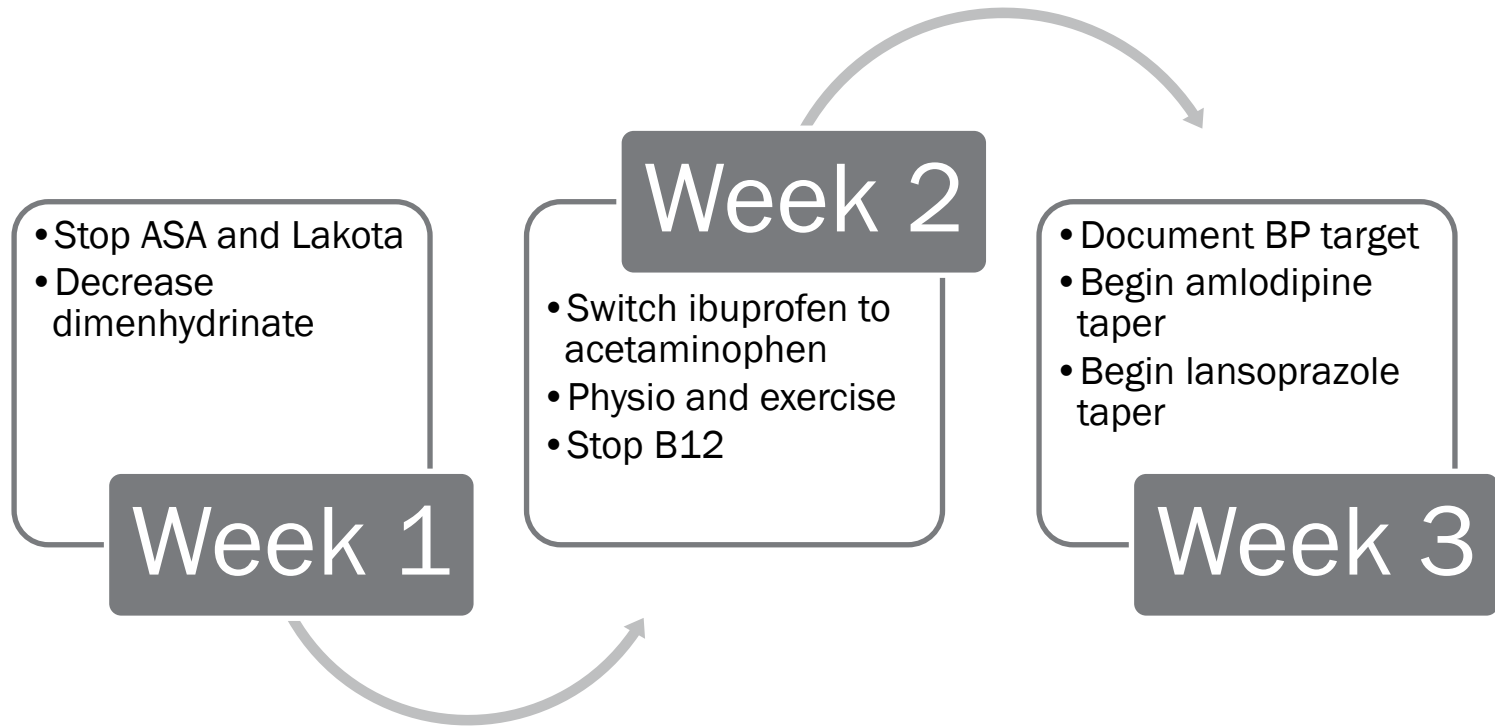
E.g. appropriate BP targets

- Use combination pills when possible

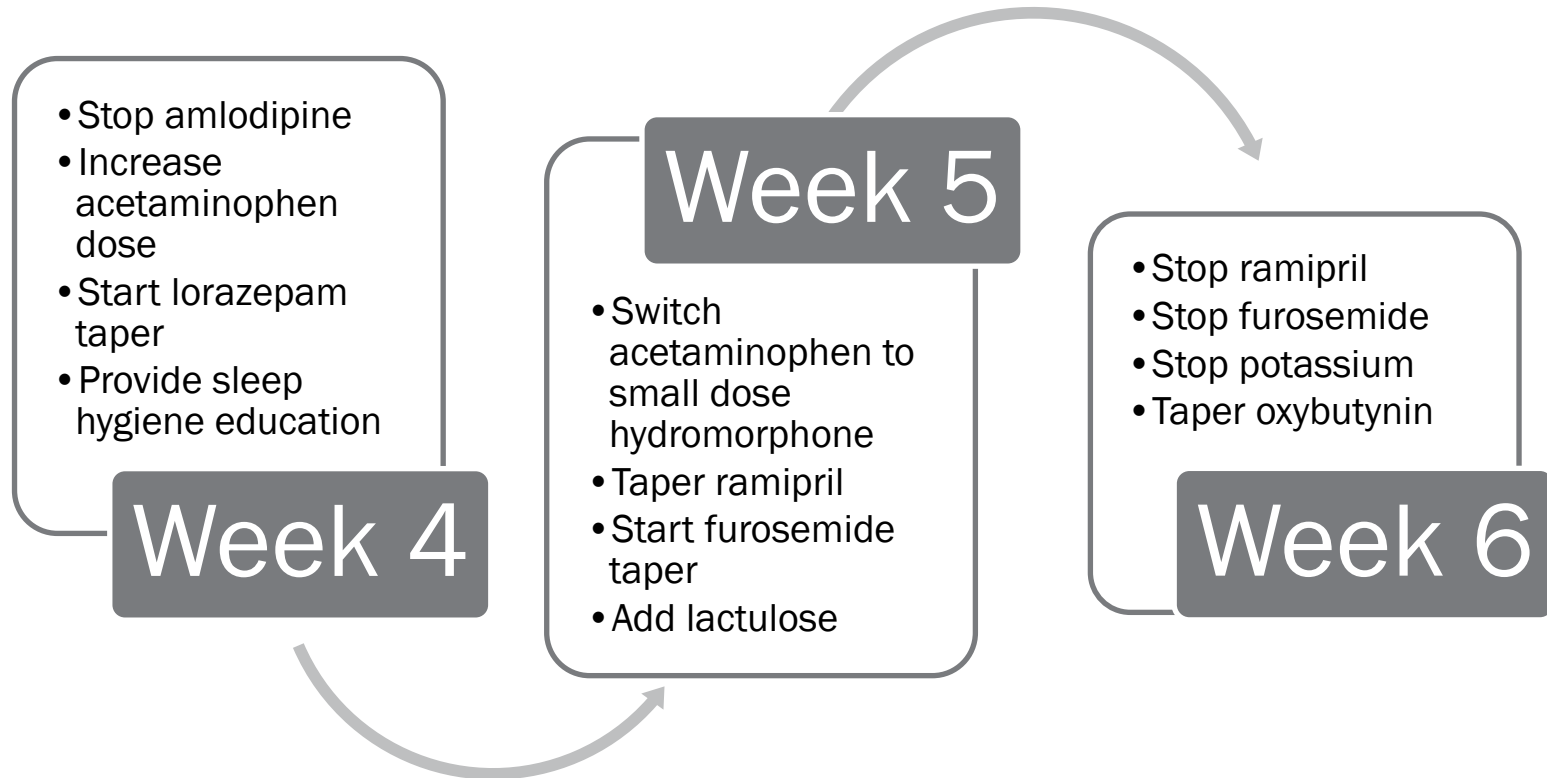
- Reduce medication-taking frequency

- Aim for daily or bid dosing if possible

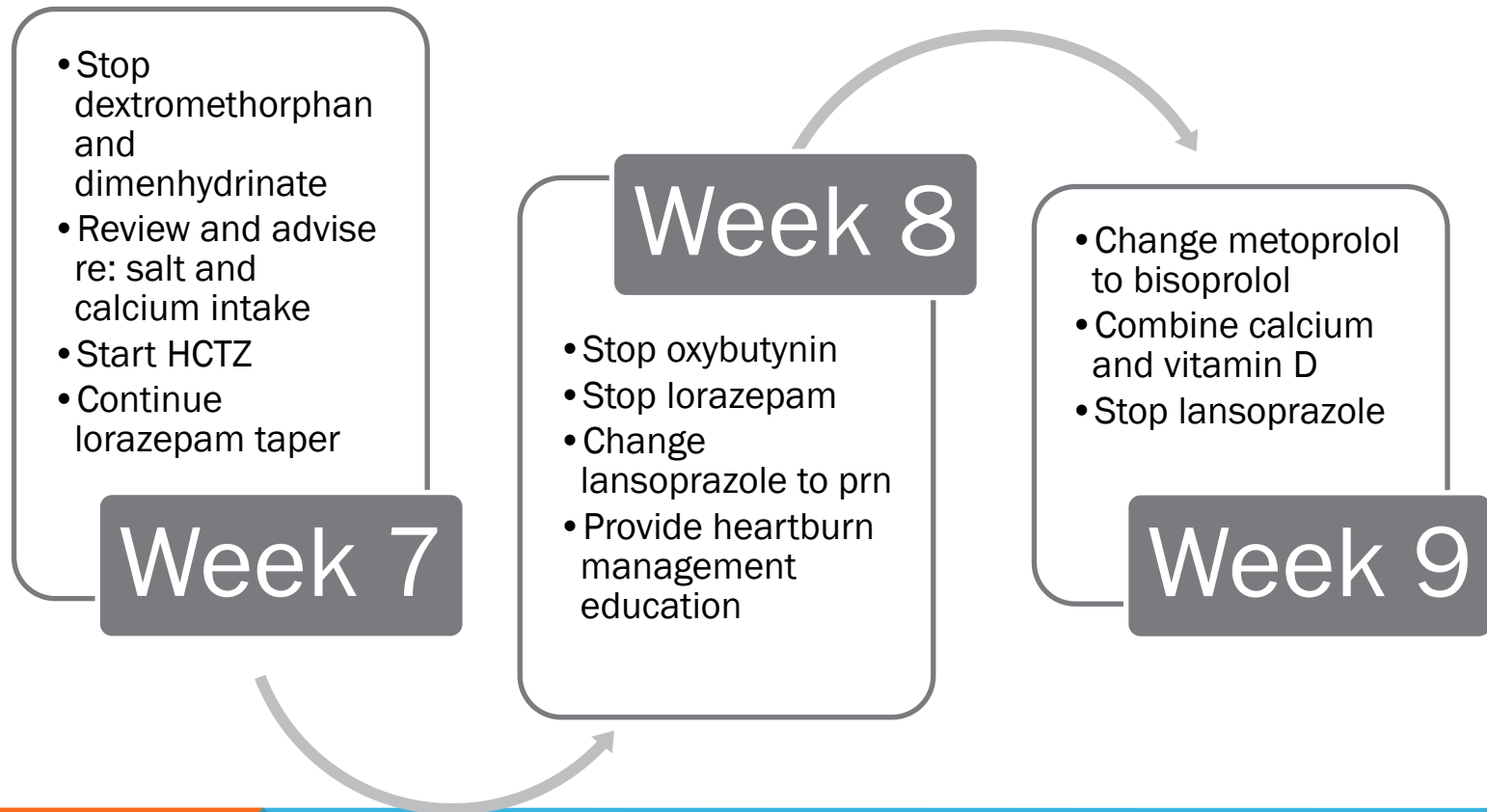
# MRS. A.'S GDH INTERVENTIONS



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## **AFTER A 10-WEEK GDH ADMISSION:**

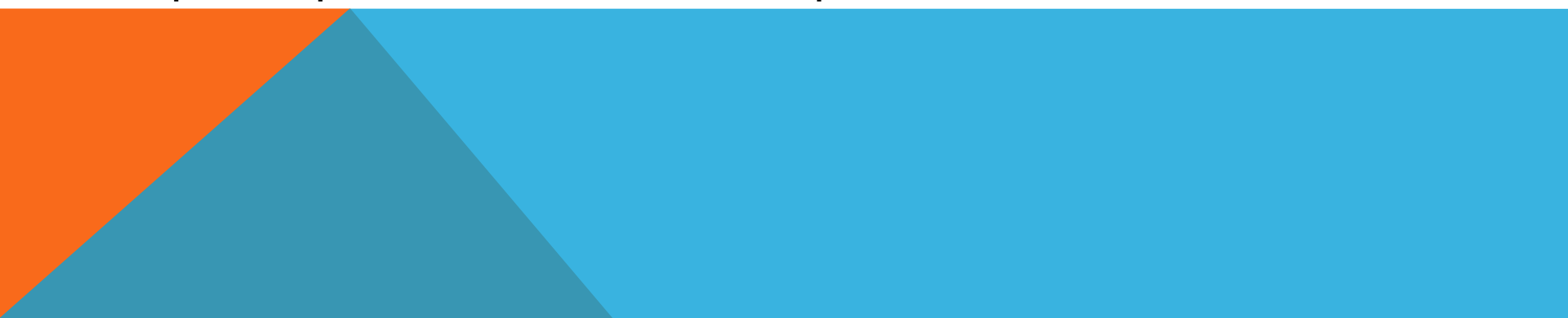
### ▪ Mrs. A's medications

- Hydromorphone 0.5mg q12h
- Hydrochlorothiazide 12.5mg daily
- Bisoprolol 2.5mg daily
- Warfarin as directed
- Caltrate Select with vitamin D twice daily
- Lactulose 15ml daily


### ▪ Mrs. A's life

- Knee pain improved
- Getting out of house now
- Urgency and nocturia better (up 1-2 x/night)
- Sleep improved (to bed 10pm, up about 7am)
- Meal times normal (8, 12, 6)
- Bruising/gum bleeding gone
- No heartburn, nausea, cough or swollen ankles

# STRATEGIES TO HELP DEPRESCRIBING “STICK”

- Involve the patient/family in decisions and monitoring
  - Be up front about how long ADWE’s can last
  - Work with team members to trial non-drug approaches
  - Follow up and document progress
  - Communicate clearly with other involved HCP’s
    - Especially the community pharmacist
  - Use a variety of educational media
    - Verbal, written handouts, medication logs to organize info
  - Empower patients to avoid future problems
- 

# HELPING DEPRESCRIBING “STICK”: THE SPEEDIMEMO

		<b>SPEEDIMEMO</b>	
DATE	<input type="checkbox"/> URGENT	<input type="checkbox"/> RÉPONSE DEMANDÉE REPLY REQUIRED	<input type="checkbox"/> RÉPONSE NON NÉCESSAIRE NO REPLY REQUIRED
ENVOYER À / SEND TO _____ _____ _____		SERVICE / DEPARTMENT Cardiology	
		<input type="checkbox"/> HSV	<input type="checkbox"/> JEP
		<input type="checkbox"/> STW	<input type="checkbox"/> ESH
		<input type="checkbox"/> HSV	<input type="checkbox"/> JEP
		<input type="checkbox"/> STW	<input type="checkbox"/> ESH
Dr. V. French Merkley <small>EXPÉDITEUR / FROM</small> Geriatric Day Hospital		<small>OBJET / SUBJECT</small> Mrs P.	
<small>SERVICE / DEPARTMENT</small> <input type="checkbox"/> HSV <input type="checkbox"/> JEP <input type="checkbox"/> STW <input type="checkbox"/> ESH			
<small>MESSAGE</small> Dear Doctor, Mrs P is currently a pt with us & we are in the midst of reviewing her meds. With this in mind, I have a few questions for you: ① She routinely forgets her nitro patch & has not had any issues with angina during PT & exercise - could we stop it? ② Medication compliance is a challenge, so to simplify her regimen, could we switch from apixaban to rivaroxaban? ③ She often forgets her noon furosemide & only takes it later when she remembers, which triggers nocturia. Could we trial a ↓ from 40mg bid to 60mg qam? Thanks in advance for your input.			
<small>SIGNATURE</small>			
<small>RÉPONSE / REPLY</small>		<small>DATE</small>	
<small>SIGNATURE</small>		<small>TITRE / TITLE</small>	

# HELPING DEPRESCRIBING “STICK”: A DIFFERENT RX

Pharmacie / Pharmacy \_\_\_\_\_ Télécopieur / Fax: \_\_\_\_\_  
FYI Dr. \_\_\_\_\_ Télécopieur / Fax: \_\_\_\_\_  
\_\_\_\_\_ Télécopieur / Fax: \_\_\_\_\_

**ORDONNANCE PRESCRIPTION**

Date \_\_\_\_\_

Mrs. P

100% COMPOSÉS  
**Bruyère**  
PHARMACIENS

**Rx**

- ① Stop Nitropatch (not worn consistently, no angina with exercise)
- ② Stop apixaban & instead start rivaroxaban 15mg po daily, \* 1 month (once daily dosing will improve compliance)
- ③ Decrease furosemide to 60mg po qam, \* 2 weeks (doses later in the day trigger noctur

\* all of these changes have been reviewed & approved by the pt's cardiologist

Répéter \_\_\_\_\_ fois tous les \_\_\_\_\_ Jours  
Refill \_\_\_\_\_ times (s) every \_\_\_\_\_ days

Ne pas répéter / do not refill       Conseiller le patient / Advise patient

Service / Department: Hôpital de jour / Day Hospital      Tél. / Tel: (613) 562-6262 poste / ext. 4010  
43, rue Bruyère St.      Télécopieur / Fax: (613) 562-4265  
Ottawa ON K1N 5C8

Nom du médecin / Physician's name Dr. V. French Merkley.

Signature du médecin / Physician's Signature \_\_\_\_\_ N° d'enr. / Reg. No \_\_\_\_\_



# Helpful Links

Explore these links to find free deprescribing websites and resources. Please note that the links found on this page are not endorsed by deprescribing.org/CaDeN unless otherwise stated. The Helpful Links are listed here as they may address gaps in evidence that deprescribing.org and its affiliates have yet to fill.

## 5 Questions to Ask About Your Medications

The Institute for Safe Medication Practices Canada suggests five questions to ask your health provider about your medications, especially if you are on a number of drugs.

## RxISK


This drug safety website provides resources and access to data on prescription drugs you can't get anywhere else. It includes questions to ask before you take a medication, a side effects checker, a drug interaction checker, and a self-quiz to find out if you may be on too many drugs. You can also look up drugs and safety information and report a side effect.

## Therapeutics Letter (Reducing Polypharmacy: A Logical Approach)

This letter discusses the issues around elders who are on a multitude of drugs and suggests that medication regimes should be challenged routinely. Logical approaches to working with this problem are suggested.

## In this section

- Deprescribing Algorithms
- Deprescribing Information Pamphlets
- Deprescribing Patient Decision Aids
- Helpful Links**
- Patient and Clinician Stories
- Publications



Get Involved  
Learn more

# NEW ONLINE MODULE

[HTTP://WWW.BRUYERE.ORG/EN/POLYPHARMACY-DEPRESCRIBING](http://www.bruyere.org/en/polypharmacy-deprescribing)

The screenshot shows the top navigation bar of the Bruyère website. On the left is the Bruyère logo. In the center is a search bar with the text "Search this site...". On the right are links for "Text Size: a a", "Donate", "Français", "Map & Directions", "Accessibility", and "Contact Us". Below the search bar is a horizontal menu with seven items: "About Bruyère", "Programs and Services", "Patients, Residents and Families", "Careers and Volunteering", "Education", "Research", and "Foundation". Below the menu is a breadcrumb trail: "Home > Quality of Care and Patient Safety Modules > Polypharmacy and Deprescribing".

## Education

- > Education at Bruyère
- > Continuing Education
- ✓ Quality of Care and Patient Safety Modules
  - > How to Use MEDITECH
  - > Common Infections
  - > Creating Effective Consultation Letters
  - > Advance Care Planning
  - > Cognitive Impairment and Driving
  - > End-of-Life Care
  - > Family Conferences
  - ✓ Polypharmacy and Deprescribing
- > Resources

## Polypharmacy and Deprescribing

This module will help improve your understanding of polypharmacy and provide you with an approach for deprescribing. You will learn how polypharmacy develops over time, as well as how to recognize common drug-induced symptoms and prescribing cascades. Throughout the module you will apply an approach for deprescribing to a fictional case.

### Module

We recommend using either Internet Explorer or Safari web browsers on a PC or Mac. This module is not compatible with Firefox.

- > Polypharmacy and Deprescribing

Contact the Learning and Development Team at [learning@bruyere.org](mailto:learning@bruyere.org) to request the script for the above modules.

# MEDSTOPPER

[medstopper.com](http://medstopper.com)

MEDSTOPPER

BETA

*Starting medications is like the bliss of marriage and stopping them is like the agony of divorce. - Doug Danforth*

HOME ABOUT FAQs RESOURCES CONTACT

MedStopper is a deprescribing resource for healthcare professionals and their patients.

1 Frail elderly?

2 Generic or Brand Name:

hydro

3 Select Condition Treated:

Generic Name	Brand Name	Condition Treated	Add to MedStopper
dihydroergotamine	DHE 45	Select Condition <input type="button" value="v"/>	<input type="button" value="ADD"/>
hydrochlorothiazide	Microzide	blood pressure <input type="button" value="v"/>	<input type="button" value="ADD"/>
hydrocodone	Vicodin	Select Condition <input type="button" value="v"/>	<input type="button" value="ADD"/>
hydrocortisone		Select Condition <input type="button" value="v"/>	<input type="button" value="ADD"/>

◀ Previous Next ▶

## MedStopper Plan

Arrange medications by:

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
Red	fluoxetine (Prozac) / SSRI / depression				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.	nausea, diarrhea, abdominal pain, sweating, headache, dizziness, cold and flu-like symptoms, anxiety, irritability, trouble sleeping, unusual sensory experiences (e.g. electric shock-like feelings, visual after images), sound and light sensitivity, muscle aches and pains, chills, confusion, pounding heart (palpitations), unusual movements, mood changes, agitation, distress, restlessness, rarely suicidal ideation	<input type="button" value="Details"/>
Orange	hydrochlorothiazide (Microzide) / Thiazide / blood pressure				If used daily for more than 3-4 weeks. Reduce dose by 50% every 1 to 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.	chest pain, pounding heart, heart rate, blood pressure (re-measure for up to 6 months), anxiety, tremor	<input type="button" value="Details"/>
Yellow	levothyroxine (Synthroid, Levoxyl, Levothroid) / Thyroid / hypothyroid with symptoms				Taper based on TSH and symptoms	return of hypothyroid symptoms (tiredness, weakness, weight gain, hair loss, constipation, depression, coarse dry hair, hair loss)	None
Yellow	psyllium (Metamucil) / Constipation / constipation				If used daily for more than 3-4 weeks. Reduce dose by 50% every 1 to 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.	return of gastrointestinal symptoms	None



**QUESTIONS?**

**THANK YOU!**