DEPRESCRIBING IN THE ELDERLY

GERIATRICS REFRESHER DAY
WEDNESDAY, APRIL 5TH, 2017
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BRUYÈRE CONTINUING CARE
DISCLOSURES

I have no conflicts of interest to declare.
ACKNOWLEDGEMENTS

Many thanks to Dr. Barbara Farrell for her pioneering work in this field, for her input on this presentation, and for sharing her expertise and enthusiasm with us every day in the Geriatric Day Hospital at Bruyère Continuing Care.
“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.
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

ibuprofen

ramipril

Need for CV protection

ASA

Cough

dextromethorphan

Increased blood pressure

amlopidine

Need for GI prophylaxis

Heartburn

Incontinence

furosemide

Ankle swelling

Incontinence

Dimenhydrinate

Low potassium

Nausea

potassium

oxybutynin

Incontinence

Vitamin B12

Decreased vitamin absorption

lansoprazole

Incontinence

Vitamin B12

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

  ***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

Week 1
- Stop ASA and Lakota
- Decrease dimenhydrinate

Week 2
- Switch ibuprofen to acetaminophen
- Physio and exercise
- Stop B12

Week 3
- Document BP target
- Begin amlodipine taper
- Begin lansoprazole taper
MRS. A.'S GDH INTERVENTIONS

Week 4
- Stop amlodipine
- Increase acetaminophen dose
- Start lorazepam taper
- Provide sleep hygiene education

Week 5
- Switch acetaminophen to small dose hydromorphone
- Taper ramipril
- Start furosemide taper
- Add lactulose

Week 6
- Stop ramipril
- Stop furosemide
- Stop potassium
- Taper oxybutynin
MRS. A.’S GDH INTERVENTIONS

Week 7
- Stop dextromethorphan and dimenhydrinate
- Review and advise re: salt and calcium intake
- Start HCTZ
- Continue lorazepam taper

Week 8
- Stop oxybutynin
- Stop lorazepam
- Change lansoprazole to prn
- Provide heartburn management education

Week 9
- Change metoprolol to bisoprolol
- Combine calcium and vitamin D
- Stop lansoprazole
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

Message:

Dear Doctor,

Mrs P is currently a pt with us. We are in the midst of reviewing her medications. With this in mind, I have a few questions for you:

1. She routinely forgets her nitroglycerin. Has not had any issues with angina during pt & exercise. Could we drop it?
2. Medication compliance is a challenge. Go 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 edema. Could we trial a or from morning bed to evening again?

Thanks in advance for your input.

Signature:

[Signature]

Date: [Date]
HELPING DEPREScribing “STICK”: A DIFFERENT RX

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 furosamide to bang p.o. qam. *2 weeks (doses later in the day trigger natriuretic peptide)

*All of these changes have been reviewed & approved by the pt's cardiologist
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.
NEW ONLINE MODULE
HTTP://WWW.BRUYERE.ORG/EN/POLYPHARMACY-DEPRESCRIBING

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 to request the script for the above modules.
MedStopper is a de-prescribing resource for healthcare professionals and their patients.

1. Frail elderly?  
2. Generic or Brand Name: [ ] hydro  
3. Select Condition Treated: [ ] Add to MedStopper

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
<th>Condition Treated</th>
<th>Add to MedStopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meloxicam</td>
<td>Mobic</td>
<td>Select Condition</td>
<td>Add</td>
</tr>
<tr>
<td>Hydrocortisone</td>
<td>Vicodin</td>
<td>Select Condition</td>
<td>Add</td>
</tr>
<tr>
<td>Alprazolam</td>
<td>Xanax</td>
<td>Select Condition</td>
<td>Add</td>
</tr>
</tbody>
</table>

MedStopper Plan

Arrange medications by: [Stopping Priority]  
[CLEAR ALL MEDICATIONS]  
[PRINT PLAN]

| Stopping Priority: RED=HIGHEST
GREEN=LOWEST |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication/Category/Condition</td>
<td>May Improve Symptoms?</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Fluoxetine (Prozac) / SSRI / depression</td>
<td>[ ]</td>
</tr>
<tr>
<td>Hydrocodone (Hydro / Vicodin) / Opioid / Muscle relaxer</td>
<td>[ ]</td>
</tr>
<tr>
<td>Lithium (Lithobid / Eskalith) / Lithium carbonate</td>
<td>[ ]</td>
</tr>
<tr>
<td>Hydrochlorothiazide (Hydro / Thiazide / diuretic) / Blood pressure</td>
<td>[ ]</td>
</tr>
<tr>
<td>Lithium (Lithobid / Eskalith) / Lithium carbonate</td>
<td>[ ]</td>
</tr>
<tr>
<td>Aspirin (Baby aspirin) / Nonsteroidal anti-inflammatory drug / Blood thinner</td>
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Possible Symptoms when Stopping or Tapering:

- Headaches
- Fatigue
- Nausea
- Diarrhea
- Abdominal pain
- Sweating
- Headache
- Dizziness
- Insomnia
- Irritability
- Trouble sleeping
- Unusual sensory experiences
- Electric shock-like feelings
- Visual changes
- Sound and light sensitivity
- Muscle aches and pains
- Chills
- Confusion
- Pounding heart (palpitations)
- Unusual movements
- Mood changes
- Agitation
- Dismissiveness
- Meltedness
- Sudden suicidal ideation

Beers/STOPP Criteria:

- [ ] Details
- [ ] Details
- [ ] Details
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Beers/STOPP Criteria:
QUESTIONS?

THANK YOU!