Tackling Medication Overload: Practical Tips for Prescribing and Deprescribing in your Older Patients

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Dr. Linnebur has the following conflicts of interest related to this presentation:

✓ Dr. Linnebur is a member of the Expert Panel working on the 2022 Updated AGS Beers Criteria® and was a member of the 2019, 2015, and 2012 expert panels
Objectives

» Recognize consequences of medication overload in older adults living in the United States

» Apply shared decision making principles and strategies when prescribing to avoid adverse drug events

» Incorporate deprescribing evidence and pathways into clinical treatment plans

» Utilize online tools to evaluate medication regimens and effectively deprescribe
Medication Overload and Older Americans

The Threat of Medication Overload and Adverse Drug Events (ADEs)

- 5 million older adults sought medical attention for ADEs in 2018
- 42% of older adults take 5 or more prescription medications
- There was a 200% increase in polypharmacy over 20 years
- 280,000 hospitalizations in 2018 due to ADEs
- $62 billion in preventable hospitalizations over 10 years
- 150,000 premature deaths in next 10 years due to ADEs

www.lowninstitute.org/pills
Medication Overload: Other Consequences

➢ Patient-level
  ✓ Confusion, stress, and anxiety
  ✓ Significant time
  ✓ High drug costs and costs of medication management
  ✓ Additional health consequences: delirium, falls, mortality

➢ Clinician-level
  ✓ Inefficiencies and confusion on what patient is actually taking
  ✓ Significant time to assess and prescribe/deprescribe

➢ Health-systems and society
  ✓ High drug costs and burden of medication management

https://lowninstitute.org/reports/medication-overload-americas-other-drug-problem/
Patient Journey: Meet Gary

➢ He lives with his wife in Akron, Ohio
➢ He’s a retired teacher and loves fishing
➢ At age 65, Gary is prescribed medication for high blood pressure and high cholesterol

➢ Next, at age 72, Gary is diagnosed with type 2 DM and prescribed medication to control his blood sugar
➢ Next, updated guidelines put Gary’s blood pressure in a higher risk category, and he is prescribed another blood pressure medication
Patient Journey: Meet Gary

➢ Gary feels light-headed and falls at the grocery store, breaking his leg. At the hospital, he is prescribed an opioid for his pain.

➢ Gary has trouble sleeping and feels depressed. The primary care doctor, unaware of the opioid prescribing, prescribes meds for sleep and depression.

➢ Gary gets the flu and becomes dehydrated, making him more susceptible to drug side effects.

https://lowninstitute.org/reports/medication-overload-americas-other-drug-problem/
Patient Journey: Meet Gary

➢ Dizzy and confused, Gary rear-ends the car in front of him at a stop light. His family believes he is showing signs of dementia and may not be safe at home.

END RESULT
With his medication overload undetected, Gary is placed in a nursing home and dies 5 years later.

https://lowninstitute.org/reports/medication-overload-americas-other-drug-problem/
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At age 72, Gary is diagnosed with type 2 diabetes and prescribed medication to control his blood sugar.

Intervention
Doctor explains both medication and lifestyle-change options. Gary opts to try lifestyle changes first.

https://lowninstitute.org/reports/medication-overload-americas-other-drug-problem/
Updated guidelines put Gary’s blood pressure in a higher risk category, and he is prescribed another blood pressure medication.

**Intervention**

Doctor notes that older patients like Gary may fall outside the new guidelines. They discuss the risks and benefits of a new medication and decide NOT to prescribe.

Gary feels light-headed and falls at the grocery store, breaking his leg. At the hospital, he is prescribed an opioid for his pain.
Gary has trouble sleeping and feels depressed. The primary care doctor, unaware of the opioid prescription, prescribes **meds for sleep and depression**.

**Intervention**

Doctor understands the risks of opioids and chooses ibuprofen instead. The primary care doctor is informed about the fall and new medication.

**Intervention**

Doctor talks with Gary and learns his brother has died. She refers him to a **grief counselor** and provides **sleep hygiene information**.
Gary gets the flu and becomes **dehydrated**, making him more susceptible to drug side effects.

Gary has trouble sleeping and feels depressed. The primary care doctor, unaware of the opioid prescription, prescribes **meds for sleep and depression**.

**Intervention**

Doctor talks with Gary and learns his brother has died. She refers him to a **grief counselor** and provides **sleep hygiene information**.

Dizzy and confused, Gary rear-ends the car in front of him at a stop light. His family believes he is showing **signs of dementia** and may not be safe at home.

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Dizzy and confused, Gary rear-ends the car in front of him at a stop light. His family believes he is showing signs of dementia and may not be safe at home.

With his medication overload undetected, Gary is placed in a nursing home and dies 5 years later.

Suspecting medication overload, the doctor performs a prescription checkup and deprescribes unnecessary meds. Gary lives 10 more years at home.
Practice Tips for Improving Prescribing and Facilitating Deprescribing in Older Adults
Primum non nocere
First, do no harm
Avoid Never Necessary Prescribing and Utilize the Prescription Checkup
“Never Necessary Prescribing”

➢ Drugs with a **high risk and low benefit** or with safer alternatives
  ✓ Example: Drugs on the AGS Updated Beers Criteria®

➢ Drugs that are intended to be **short-term** but are continued long-term
  ✓ Examples: PPIs for ulcer ppx or treatment; Albuterol inhaler

➢ Drugs initiated as part of the **prescribing cascade**
2019 AGS UPDATED BEERS CRITERIA®

iGeriatrics App
AGS Beers Criteria®: Tables

➢ Table 2: Potentially inappropriate medications that should be avoided
➢ Table 3: Potentially inappropriate medications that should be avoided in certain older adults (e.g. those with a drug-disease/syndrome interaction)
➢ Table 4: Potentially inappropriate medications--use with caution
➢ Table 5: Clinically important drug-drug interactions
➢ Table 6: Meds that should be avoided or have dose reductions in patients with renal impairment

<table>
<thead>
<tr>
<th>Therapeutic Category</th>
<th>Rationale</th>
<th>Recommendation</th>
<th>Quality of Evidence</th>
<th>Strength of Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPIs</td>
<td>Risk of Clostridium difficile infection and bone loss and fractures</td>
<td>Avoid scheduled use for &gt;8 weeks unless for high-risk patients (e.g. oral corticosteroids or chronic NSAID use), erosive esophagitis, Barrett’s esophagitis, pathological hypersecretory condition, or demonstrated need for maintenance treatment (e.g. due to failure of drug discontinuation trial or H2RAs)</td>
<td>High</td>
<td>Strong</td>
</tr>
</tbody>
</table>

J Am Geriatr Soc 2019: [https://doi.org/10.1111/jgs.15767](https://doi.org/10.1111/jgs.15767)
### Table 2

<table>
<thead>
<tr>
<th>Avoidance Category</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotics (all)</td>
<td>Avoid, except for schizophrenia, bipolar disorder, or short-term use as an antiemetic during chemotherapy</td>
</tr>
<tr>
<td>Benzodiazepines (all)</td>
<td>Avoid</td>
</tr>
<tr>
<td>Skeletal muscle relaxants</td>
<td>Avoid</td>
</tr>
<tr>
<td>Nonbenzodiazepine hypnotics (Z-drugs)</td>
<td>Avoid use due to adverse effects similar to benzodiazepines</td>
</tr>
</tbody>
</table>

Excerpts from the AGS 2019 Updated Beers Criteria®

J Am Geriatr Soc 2019: [https://doi.org/10.1111/jgs.15767](https://doi.org/10.1111/jgs.15767)
### Table 3: AVOID/Use with Caution in certain patients (Drug-Disease/Syndrome Interaction)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Avoid/Use with Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Failure</td>
<td>Cilostazol, Non-DHP CCBs (HFrEF), NSAIDs, COX-2 inhibitors, TZDs, dronedarone</td>
</tr>
<tr>
<td>Dementia/cognitive impairment</td>
<td>Anticholinergics, benzodiazeepines, Z-drug hypnotics, antipsychotics</td>
</tr>
<tr>
<td>Falls</td>
<td>Antiepileptics, antipsychotics, benzodiazeepines, Z-drug hypnotics, TCAs, SSRIs, SNRIs, opioids</td>
</tr>
<tr>
<td>Women with urinary incontinence</td>
<td>Oral and transdermal estrogen, peripheral alpha-1 blockers</td>
</tr>
<tr>
<td>Parkinson Disease</td>
<td>Metoclopramide, prochlorperazine, promethazine, all antipsychotics (except quetiapine, clozapine, and <em>pimavanserin</em>)</td>
</tr>
</tbody>
</table>

J Am Geriatr Soc 2019: [https://doi.org/10.1111/jgs.15767](https://doi.org/10.1111/jgs.15767)
6 months after the death of his brother, Gary still has trouble sleeping and feels increasingly depressed. He has been working on sleep hygiene and speaking regularly with a grief counselor. Despite this, he is not caring for himself, he has stopped cleaning his house and is increasingly withdrawn.

Which of the following medications would you consider prescribing for Gary?

A. Quetiapine
B. Zolpidem
C. Citalopram
D. Amitriptyline
Which of the following medications would you consider prescribing for Gary?

- Quetiapine (A)
- Zolpidem (B)
- Citalopram (C)
- Amitriptyline (D)
PRACTICE TIP #2

Avoid the Prescribing Cascade
Prescribing Cascade Example

Older adults taking CCBs are 2-3X more likely to be prescribed a diuretic in the next 90 days than if prescribed alternate drug.
Avoiding the Prescribing Cascade

➢ For any new symptoms, if reasonable investigate drug causes 1\textsuperscript{st}!
  ✓ Ask your pharmacist to review drug databases and 1\textdegree{} literature
  ✓ Many side effects are predictable and easy to identify
  ✓ Rare side effects often occur in older adults

➢ Review for temporal relationship

➢ Laboratory measurements may be helpful

➢ Discontinue the drug or reduce the dose and monitor for symptom resolution

➢ If necessary, consider drug rechallenge
Other Prescribing Cascade Examples

Sertraline → Loperamide
Spironolactone + lisinopril → Kayexelate
Carvedilol → Albuterol, oxybutynin
Cholinesterase inhibitors → Oxybutynin, other bladder meds
Patient Case: June

➢ She’s 85 and a retired librarian who loves reading
➢ She is widowed and lives with her daughter in Denver
➢ List of medical problems and meds is long

✓ Mild cognitive impairment
✓ Type 2 DM
✓ HTN
✓ CKD
✓ Dyslipidemia
✓ Hypothyroidism
✓ Anxiety
✓ Constipation
✓ Atrial fibrillation
✓ Osteoarthritis of L hip
Patient Case: June

- Amlodipine 10 mg daily
- Metoprolol ER 50 mg daily
- Levothyroxine 75 mcg daily
- Simvastatin 40 mg daily
- Gemfibrozil 600 mg BID
- Metformin 1000 mg BID
- Glyburide 10 mg BID
- Apixaban 5 mg BID
- Citalopram 40 mg daily
- Insulin glargine 22 units QHS
- Insulin aspart 4 units TID
- Omeprazole 20 mg daily
- Ibuprofen 400 mg BID
- APAP 500 mg 1-2x/wk
- Tylenol PM PRN
- Docusate 100 mg BID
- Aspirin 81 mg daily
- Multivitamin daily
June’s MCI seems to be progressing and she is worried about dementia and wants to start a treatment.

Which of the following should be assessed prior to starting donepezil?

A. TSH
B. Hgb A1c
C. Vitamin B12
D. Tylenol PM use
Which of the following should be assessed prior to starting donepezil?

- TSH (A)
- TSH (B)
- Vitamin B12 (C)
- Tylenol PM use (D)
 Audience Response Question

- Everything comes back normal and June’s MMSE shows mild dementia. She wants to start donepezil. Her vitals/labs include:
  - BP: 152/78 mmHg
  - HR: 68 bpm
  - SCr: 1.4 mg/dL
  - K: 3.5 mmol/L

What should be monitored to prevent another prescribing cascade from occurring due to donepezil?

A. Potassium  
B. Heart rate  
C. Blood pressure  
D. Serum creatinine
What should be monitored to prevent another prescribing cascade from occurring due to donepezil?

- **Potassium** (A)
- **Heart rate** (B)
- **Blood pressure** (C)
- **Serum creatinine** (D)
Areas to Target When Prescribing....
and Annually with a Prescription Checkup

www.lowninstitute.org/pills
“Indicated but Not Beneficial Prescribing”

- Drugs that have lost their effects or only provide modest benefit
  - Example: dementia meds, sulfonylureas, antimuscarinics for UI

- Drugs for which patients are often non-adherent
  - Example: metformin, bisphosphonates, COPD inhalers

- Drugs that have drug-drug interactions so they are not absorbed
  - Examples: PPI and calcium carbonate/bisacodyl/clopidogrel

- Drugs that will not be effective or show benefit in the remaining life span of the patient
  - Example: statin for primary prevention
PRACTICE TIP #3

When initiating drugs, consider goals of care and time to benefit
Treatment Decisions in Older Adults

- Consider goals of care
  - How frail is the patient?
  - Is the patient more interested in palliative care or prevention meds/tx?
  - What are the patient’s QOL goals?

- Consider **time to benefit**: the time between when an intervention is initiated & when improved health outcomes occur

- To identify which patients are more likely to be helped vs harmed

- Compare time to benefit vs life expectancy

http://eprognosis.ucsf.edu

Making Smart Decisions: Time to Benefit vs Time to Harm

- Statins (3 years) vs prostate cancer screening (10 years)
- Immunizations: side effects immediate, benefit at 2 wks
- Pain treatment: side effects immediate, benefit immediately
- HTN treatment: hypotension immediate, benefit 6-12 mo later
- Bisphosphonates: side effects immediate, benefit 12 mo later
- Hypoglycemic agents: hypoglycemia immediate, benefit months to years later
- Aspirin (in those <70): side effects immediate, CV protection 1-2 years later***

Areas to Target When Prescribing….
and annually with a Prescription Checkup.

www.lowninstitute.org/pills
“No Longer Necessary Prescribing”

➢ Drugs indicated for a certain time frame but never stopped
  ✓ Examples: bisphosphonates, anticoagulants, antiplatelets, PPIs, antidepressants, metoclopramide, estrogen

➢ Drugs no longer necessary due to changes in goals of care
  ✓ Examples: bisphosphonates, statins, ASA, dementia meds, vitamins and minerals (e.g. calcium, vit D, vit B12)

➢ Drugs used to treat a condition too aggressively
  ✓ Examples: DM or HTN treatment
Patient Case: June

- Amlodipine 10 mg daily
- Metoprolol ER 50 mg daily
- Levothyroxine 75 mcg daily
- Simvastatin 40 mg daily
- Gemfibrozil 600 mg BID
- Metformin 1000 mg BID
- Glyburide 10 mg BID
- Apixaban 5 mg BID
- Citalopram 40 mg daily
- Insulin glargine 22 units QHS
- Insulin aspart 4 units TID
- Omeprazole 20 mg daily
- Ibuprofen 400 mg BID
- APAP 500 mg 1-2x/wk
- Docusate 100 mg BID
- Aspirin 81 mg daily
- Multivitamin daily
- Donepezil 5 mg daily
June returns for follow-up and is tolerating the donepezil well. You check more labs and find:

- LDL: 58 mg/dL
- HDL: 79 mg/dL
- TG: 50 mg/dL
- Hgb/HCT: 14.0 g/dL, 40%
- Mg: 1.7 mg/dL
- LFTs: WNL

Which drug is likely no longer necessary for the patient?

A. Apixaban
B. Gemfibrozil
C. Omeprazole
D. Acetaminophen
Which drug is likely no longer necessary for the patient?

- Apixaban (A)
- Gemfibrozil (B)
- Omeprazole (C)
- Acetaminophen (D)
PRACTICE TIP #4

Adjust Treatment Goals based on Comorbidities & Frailty
Table 12.1—Framework for considering treatment goals for glycemia, blood pressure, and dyslipidemia in older adults with diabetes

<table>
<thead>
<tr>
<th>Patient characteristics/health status</th>
<th>Rationale</th>
<th>Reasonable A1C goal$</th>
<th>Fasting or preprandial glucose</th>
<th>Bedtime glucose</th>
<th>Blood pressure</th>
<th>Lipids</th>
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<tr>
<td>Healthy (few coexisting chronic illnesses, intact cognitive and functional status)</td>
<td>Longer remaining life expectancy</td>
<td>$&lt; 7.0–7.5%$ (53–58 mmol/mol)</td>
<td>$80–130 \text{ mg/dL}$ (4.4–7.2 mmol/L)</td>
<td>$80–180 \text{ mg/dL}$ (4.4–10.0 mmol/L)</td>
<td>$&lt; 140/90 \text{ mmHg}$</td>
<td>Statin unless contraindicated or not tolerated</td>
</tr>
<tr>
<td>Complex/intermediate (multiple coexisting chronic illnesses* or 2+ instrumental ADL impairments or mild-to-moderate cognitive impairment)</td>
<td>Intermediate remaining life expectancy, high treatment burden, hypoglycemia vulnerability, fall risk</td>
<td>$&lt; 8.0%$ (64 mmol/mol)</td>
<td>$90–150 \text{ mg/dL}$ (5.0–8.3 mmol/L)</td>
<td>$100–180 \text{ mg/dL}$ (5.6–10.0 mmol/L)</td>
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<td>Very complex/poor health (LTC or end-stage chronic illnesses** or moderate-to-severe cognitive impairment or 2+ ADL impairments)</td>
<td>Limited remaining life expectancy makes benefit uncertain</td>
<td>Avoid reliance on A1C; glucose control decisions should be based on avoiding hypoglycemia and symptomatic hyperglycemia</td>
<td>$100–180 \text{ mg/dL}$ (5.5–10.0 mmol/L)</td>
<td>$110–200 \text{ mg/dL}$ (6.1–11.1 mmol/L)</td>
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https://care.diabetesjournals.org/content/44/Supplement_1/S168
## ADA 2021 Standards of Care for Older Adults

### Table 12.1—Framework for considering treatment goals for glycemia, blood pressure, and dyslipidemia in older adults with diabetes

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<td>(multiple coexisting chronic illnesses* or 2+ instrumental ADL impairments or mild-to-moderate cognitive impairment)</td>
<td>Intermediate remaining life expectancy, high treatment burden, hypoglycemia vulnerability, fall risk</td>
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</table>

Most applicable to June!

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*A1C goal: American Diabetes Association 2018 Standards of Medical Care in Diabetes

**LTC: Long-term care
Simplification of Complex Insulin Therapy: ADA Algorithm

- Change timing of basal insulin from evening to morning
- Stop sliding scale insulin
- How to titrate basal insulin based on fasting blood glucose
- How to stop mealtime insulin and start non-insulin options to replace it
  - Examples: metformin, GLP-1 agonists, DPP4-inhibitors, SGLT-2 inhibitors, sulfonylureas
- Make changes to insulin regimen every 1-2 weeks
A year has gone by and you check labs. June’s CrCl is now 28 mL/min and her A1c comes back at 5.8%. In addition to stopping metformin, which of the following drugs would be the most appropriate to stop at this time?

A. Glyburide 10 mg BID
B. Insulin aspart 4 units TID
C. Insulin glargine 22 units QHS
D. Glyburide and insulin aspart
In addition to stopping metformin, which of the following drugs would be the most appropriate to stop at this time?

- Glyburide 10 mg BID
- Insulin aspart 4 units TID
- Insulin glargine 22 units QHS
- Glyburide and insulin aspart
Areas to Target When Prescribing.... and annually with a Prescription Checkup

www.lowninstitute.org/pills
“Unnecessary OTC and Supplement Use”

May cause harm
- Aspirin
- Ibuprofen and naproxen
- Diphenhydramine
- Pseudoephedrine
- Omeprazole/PPIs

No indication or data
- Multivitamins
- Fish oil
- Probiotics
- Vitamin C
- Almost everything else EXCEPT: vitamin D and B12, folate, calcium, iron, melatonin, diclofenac gel, acetaminophen, and AREDS2

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781119
At the same appointment, you bring up June’s use of low-dose ASA. What outcomes (from the ASPREE trial) are worsened with low-dose ASA use in older adults, and should be discussed with June?

A. GERD
B. CV events
C. Kidney impairment
D. Major bleeding and death
What outcomes (from the ASPREE trial) are worsened with low-dose ASA use in older adults, and should be discussed with June?

- GERD
- CV events
- Kidney impairment
- Major bleeding and death
PRACTICE TIP #5

Deprescribe!

“This prescription won’t make you feel better but it will stop your whining and make everyone else feel better.”
Starting medications is like the bliss of marriage and stopping them is like the agony of divorce...

--Doug Danforth
General Tips to Overcome Barriers to Deprescribing

➢ Take one visit per year to perform a prescription drug checkup
  ✓ Consider the Medicare Wellness Visit
  ✓ Perform the drug review after hospitalizations
  ✓ Have patients bring drugs from home

➢ View discontinuation of drugs as part of the normal prescribing process and use shared decision making
  ✓ Discuss options with patient/family and rationale for deprescribing
  ✓ Continuation may cause harm
  ✓ Discontinuation may cause harm
  ✓ Educate patient/family and monitor for harm
### Common Drugs To Consider Deprescribing

<table>
<thead>
<tr>
<th>Inpatient @ discharge</th>
<th>Outpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Proton pump inhibitors</td>
<td>✓ Proton pump inhibitors</td>
</tr>
<tr>
<td>✓ Antipsychotics</td>
<td>✓ Benzodiazepines</td>
</tr>
<tr>
<td>✓ Analgesics</td>
<td>✓ NSAIDs</td>
</tr>
<tr>
<td>✓ Laxatives</td>
<td>✓ Anticholinergics</td>
</tr>
<tr>
<td>✓ Bronchodilators</td>
<td>✓ Insulin</td>
</tr>
<tr>
<td>✓ Sleep agents</td>
<td>✓ Sedative hypnotics</td>
</tr>
<tr>
<td></td>
<td>✓ Antipsychotics</td>
</tr>
<tr>
<td></td>
<td>✓ Statins</td>
</tr>
</tbody>
</table>
Deprescribing Tools


➢ Deprescribing educational tools for patients and caregivers
➢ Deprescribing algorithms and videos for clinicians
➢ Deprescribing patient decision aids

➢ PPIs, benzodiazepines, Z-drugs, antihyperglycemic agents, antipsychotics, antihistamines, NSAIDs, cholinesterase inhibitors/memantine

US Deprescribing Research Network (USDeN)

- https://deprescribingresearch.org/
- Links to Canadian, Australian, and UK deprescribing tools
- Links to articles discussing deprescribing and potentially inappropriate medications
- Webinars for researchers and clinicians
Other Deprescribing Resources/Evidence

- Deprescribing RCTs/reviews
  - CAD-drug deprescribing: J Am Coll Cardiol 2019;73:2584–95

- Goal-directed Medication review Electronic Decision Support System (G-MEDSS)©
  - https://gmedss.com/landing

- Safer Meds NL
  - https://safermedsnl.ca/

- Comparing Treatment Options for Pain: the C-TOP Tool
  - https://pain-calculator.com/calculators/back-pain/
Tapering some drugs is necessary when deprescribing.
# To Taper or Not to Taper?

<table>
<thead>
<tr>
<th>Taper Needed</th>
<th>Generally No Taper Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Beta-blockers</td>
<td>➢ ACE-Is, ARBs, diuretics</td>
</tr>
<tr>
<td>➢ Clonidine</td>
<td>➢ Statins</td>
</tr>
<tr>
<td>➢ Benzodiazepines</td>
<td>➢ Anticholinergics</td>
</tr>
<tr>
<td>➢ Antidepressants</td>
<td>➢ NSAIDs and aspirin</td>
</tr>
<tr>
<td>➢ Antipsychotics</td>
<td>➢ Insulin, sulfonylureas, metformin</td>
</tr>
<tr>
<td>➢ Opioids</td>
<td>➢ Cholinesterase inhibitors</td>
</tr>
<tr>
<td>➢ Pregabalin/gabapentin</td>
<td>➢ OTCs and supplements</td>
</tr>
<tr>
<td>➢ Proton pump inhibitors</td>
<td></td>
</tr>
<tr>
<td>➢ Estrogen</td>
<td></td>
</tr>
</tbody>
</table>
Audience Response Question

You and June agree to deprescribe other medications from her list, including ASA, ibuprofen and omeprazole. What may occur if June does not taper her omeprazole?

A. *C. difficile* infection
B. Dizziness and orthostasis
C. Severe heartburn
D. Headache and anxiety
What may occur if June does not taper her omeprazole?

C. difficile infection  A
D. dizziness and orthostasis  B
Severe heartburn  C
D. headache and anxiety  D
PRACTICE TIP #7

Remember to discontinue drugs @ the pharmacy and encourage proper disposal.
Cancelling Prescriptions

➢ D/C medication from the EMR
  ✓ May be helped by CancelRx in future

➢ Make sure the patient/family understands the plan and has their questions answered
  ✓ Write it down and provide updated med list

➢ Communicate with the pharmacy
  ✓ Ask pharmacy to stop automatic refills and deactivate prescription if applicable
Safe Disposal

✓ Offer to properly dispose of the medication or encourage patients to find take-back locations
  ✓ https://cdphe.colorado.gov/colorado-medication-take-back-program

✓ DEA drug take back locations:
  https://www.deadiversion.usdoj.gov/drug_disposal/takeback/

✓ Drug disposal locator:
  https://nabp.pharmacy/initiatives/awarxe/%20drug-disposal-locator/

✓ Drug disposal locator: https://safe.pharmacy/drug-disposal/
PRACTICE TIP #8

Utilize Non-Pharmacologic Approaches
Prescribing Non-Pharmacologic Treatments

➢ Example: Loneliness

✓ Older adults with loneliness have higher prescription rates for benzodiazepines, sedatives, pain relievers, and antidepressants (without relief)

It’s easier to prescribe a pill than to ask “Why are you lonely?” And to listen to the answer…

--Dr. Carla Perissinotto, UCSF

https://lowninstitute.org/are-we-overmedicating-loneliness/
Prescribing Non-Pharmacologic Treatments

➢ Social interventions through referrals to community-based support programs

➢ Adult daycare

➢ Physical therapy

➢ Exercise

➢ Heat/ice

➢ Counseling/cognitive behavioral therapy/virtual reality
Key Resources/Websites

➢ http://eprognosis.ucsf.edu
➢ https://care.diabetesjournals.org/content/44/Supplement_1/S168
➢ www.deprescribing.org
➢ www.deprescribingnetwork.ca
➢ https://deprescribingresearch.org/
➢ www.Medstopper.com
➢ https://cdphe.colorado.gov/colorado-medication-take-back-program
QUESTIONS?

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