WEBINAR SERIES

Webinar #1

Deprescribing

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SeniorPharmAssist
Disclosures

- Verification of participation will be noted by signing in via the Question and Answer box.

- No influential financial relationships have been disclosed by planners or presenters which would influence the planning of the activity. If any arise, an announcement will be made at the beginning of the session.

- No commercial support has influenced the planning of the educational objectives and content of the activity. Any commercial support will be used for events that are not CE related.
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This program is supported by a Geriatric Workforce Enhancement Program (GWEP) grant (U1QHP28708) from the U.S. Bureau of Health Professions Health Resources and Services Administration (HRSA).
Objectives

- Review a case example
- Explain the process of deprescribing
- Assess a patient’s need for deprescribing
- List at least two services provided by Senior PharmAssist
Mrs. P is a 66 year-old female with multiple medical problems including:

- Chronic kidney disease (Stage III)
- History of breast cancer (s/p surgery, XRT, chemo in 2007)
- Hypothyroidism
- Paroxysmal atrial fibrillation (CHADS2VASC 3) – on Coumadin
- Type II DM (diet controlled, HbA1c 5.6%)
- Diastolic Heart Failure
- Depression
- Ongoing tobacco use
- Osteoarthritis
Social Background

- Lives alone at JFK Towers
- Ambulates with walker
- Manages own medications
Reason for Visit

- Recently admitted to hospital for right arm/axilla abscess and cellulitis
- Completed two week course of doxycycline + cephalexin after discharge
- Now presents to Duke Outpatient Clinic (DOC) as a new patient
<table>
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Challenges for Mrs. P

- Medication compliance
  - Comes to visit with multiple pill bottles, pills in bags, redundant/missing bottles
  - Changes to anticoagulation plan (labile INR)
- Affordability
- Hospital admissions
- Multiple providers (PCP, nephrology, cardiology, inpatient)
- Where do we start?
Why is Geriatric Pharmacotherapy Important?

Figure 1.
Population Aged 65 and Over for the United States: 2012 to 2050

Challenges of Prescribing for Older Adults

- Multiple medical conditions
- Multiple medications
- Multiple prescribers
- Adherence
- Supplements, herbals, and OTC drugs
- Pharmacokinetic and pharmacodynamic changes
- Adverse Drug Events
Prescribing Cascade

- Arthritis (NSAID)
- Hypertension (Calcium channel blocker)
- Ankle swelling (Diuretic)
- Gout (Allopurinol)

GWEP - Communities Caring for Seniors
Medication Appropriateness Index

1. Is there an indication for the drug?
2. Is the medication effective for the condition?
3. Is the dosage correct?
4. Are the directions correct?
5. Are the directions practical?
6. Are there clinically significant drug-drug interactions?
7. Are there clinically significant drug-disease/condition interactions?
8. Is there unnecessary duplication with other drugs?
9. Is the duration of therapy acceptable?
10. Is this drug the least expensive alternative compared with others of equal usefulness?
What is deprescribing?

- Defined as:
  - The systematic process of identifying and discontinuing drugs in instances in which existing or potential harms outweigh existing or potential benefits within the context of an individual patient’s care goals, current level of functioning, life expectancy, values and preferences.

JAMA Intern Med. 2015;175(5):827-834
Potential Benefits of Deprescribing

- Fewer falls and hospital admissions
- Improved cognition
- Decreased risk of adverse drug events and drug interactions
- Improved adherence
- Reduced costs
Deprescribing Barriers

- Physicians
  - Ethical dilemma between standard of practice and clinical situation
  - Lack of evidence based approach/RCTs for deprescribing
  - Resistance to change
  - Work load issue, lack of resources
  - Fear of Liability

- Patient/Family
  - Fear of abandonment, reality check
  - Medication dependence
  - Resistance to change
Who is a Candidate?

- Multimorbidity
- Nearer to end of life
- Frailty
- Goals of care change
- Vulnerable brain
- Adverse reactions suspected/identified
- New conditions develop
- Adherence issues
- Patient request
Deprescribing

• Ascertain all drugs the patient is currently taking and the reasons for each one

• Consider overall risk of drug induced harm in individual patients in determining the required intensity of deprescribing intervention

• Assess each drug for its eligibility to be discontinued

• Prioritize drugs for discontinuation

• Implement and monitor drug discontinuation regimen

JAMA Intern Med. 2015;175(5):827-834
Deciding what to stop

1. **No benefit**
   - Significant toxicity OR no indication OR obvious contraindication OR cascade prescribing?
     - No
     - Yes

2. **Harm outweighs benefit**
   - Adverse effects outweigh symptomatic effect or potential future benefits?
     - Yes
     - No

3. **Symptom or disease drugs**
   - Symptoms stable or nonexistent?
     - Yes
     - No

4. **Preventive drugs**
   - Potential benefit unlikely to be realized because of limited life expectancy?
     - Yes
     - No

- **Withdrawal symptoms or disease recurrence likely if drug therapy discontinued?**
  - Yes
  - No

- **Taper dose and monitor for adverse drug withdrawal effects**
  - Yes
  - No

- **Symptoms stable or nonexistent?**
  - Yes
  - No

- **Restart drug therapy**
  - Yes
  - No

- **Continue drug therapy**
  - Yes
  - No

- **Discontinue drug therapy**
Beers Criteria

- To identify *potentially* inappropriate medications that should be avoided in many older adults
- To reduce adverse drug events and drug related problems, and to improve medication selection and medication use in older adults
- Designed for use in any clinical setting; also used as an educational, quality, and research tool

Examples of tools to assist with deprescribing

- STOPP
- START
- Anticholinergic Risk Scale
- ARMOR

Evid Based Med 2013;18:121-124
## Medication List

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Benzodiazepines

- If used daily for more than 3-4 weeks then:

- **Reduce dose by 25% every week** (i.e. week 1-75%, week 2-50%, week 3-25%)

- 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)

- The rate of discontinuation needs to be controlled by the person taking the medication.

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Proton Pump Inhibitors

- Taper over 4-6 weeks
- Reduce dose every week or two.
- Once lowest dose is reached, take every other day for a week or more. Can further increase the interval to every third day, etc.
- Consider stepping down to an H2 blocker

Gabapentin

- Taper over at least one week
  - Some patients (i.e., those with seizures) may need to be tapered over weeks or months

- Migraine prophylaxis - consider 25% dose reduction weekly or monthly

- Bipolar disorder - taper over at least two to four weeks

Opioids

- **If used daily for more than 3-4 weeks then:**
  - Reduce the dose by 25% every 3 to 4 days.
  - 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.

## Alternative Medications

<table>
<thead>
<tr>
<th>Condition</th>
<th>Medication</th>
<th>Side Effects or Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parkinson disease</td>
<td>Triprolidine</td>
<td>Carbidopa/levodopa 14-17</td>
</tr>
<tr>
<td></td>
<td>Benztrapine (oral)</td>
<td>Antithrombotic therapy for the secondary prevention of noncardioembolic stroke 47</td>
</tr>
<tr>
<td></td>
<td>Trihexyphenidyl</td>
<td>Clopidogrel, aspirin 25 mg with extended-release dipyridamole 200 mg</td>
</tr>
<tr>
<td>Antplatelets</td>
<td>Dipyridamole (oral immediate release)</td>
<td></td>
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<tr>
<td></td>
<td>Ticlopidine</td>
<td></td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>Guanabenz</td>
<td>Thiazide-type diuretic, ACEI, ARB, long-acting dihydropyridine CCB 48-50</td>
</tr>
<tr>
<td></td>
<td>Guanfacine</td>
<td>In black individuals—thiazide-type diuretic, CCB</td>
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<tr>
<td></td>
<td>Methyldopa</td>
<td>For heart failure, diabetes mellitus, chronic kidney disease—ACEI or ARB preferred</td>
</tr>
<tr>
<td>Other</td>
<td>Disopyramide</td>
<td>Atrial fibrillation: For rate control—nondihydropyridine CCB (e.g., diltiazem), beta-blocker</td>
</tr>
<tr>
<td></td>
<td>Nifedipine (immediate release)</td>
<td>For rhythm control—defetilide flecaïnide, propafenone</td>
</tr>
<tr>
<td>Central nervous system</td>
<td>Amtriptyline</td>
<td>Long-acting dihydropyridine CCB (e.g., amiodipine) 48-50</td>
</tr>
<tr>
<td></td>
<td>Clomipramine</td>
<td></td>
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<tr>
<td></td>
<td>Imipramine</td>
<td></td>
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<tr>
<td></td>
<td>Trimipramine</td>
<td></td>
</tr>
<tr>
<td>Tertiary tricyclic antidepressant</td>
<td>Amobarbital</td>
<td>For depression—SSRI (except paroxetine), SNRI, bupropion (also see Appendix 3) 53-54</td>
</tr>
<tr>
<td></td>
<td>Butabarbital</td>
<td>For neuropathic pain—SNRI, gabapentin, capsaicin topical, pregabalin, lidocaine patch</td>
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<td>Phenoabarbital</td>
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<td>Secobarbital</td>
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<td></td>
<td>Ergot mesylates</td>
<td>Acetylcholinesterase inhibitors, memantine, Vitamin E 59-66</td>
</tr>
<tr>
<td></td>
<td>Lевосерпирис</td>
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*J Am Geriatr Soc 63:e8-e18, 2015*
<table>
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<tr>
<th>Mediation Class</th>
<th>Relevant Medications</th>
<th>References</th>
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<tr>
<td>Antidepressants (tertiary and secondary) SSRI</td>
<td>For neuropathic pain—SNRI, gabapentin, pregabalin, capsaicin topical, lidocaine patch</td>
<td>22, 55</td>
</tr>
<tr>
<td>Antipsychotics</td>
<td>For delirium—short-term use of antipsychotics (e.g., haloperidol, quetiapine) should be restricted to individuals who are distressed or considered a risk to themselves or others and in whom verbal and nonverbal de-escalation techniques are ineffective or inappropriate. For schizophrenia—nonanticholinergic agents may be acceptable (not chlorpromazine, loxapine, olanzapine, perphenazine, trifluoperazine, thioridazine). For behavioral complications of dementia—if nonpharmacological approaches have failed and psychosis and danger to self or others, low-dose nonanticholinergic agent (e.g., risperidone, quetiapine) for shortest duration possible may be acceptable.</td>
<td>24, 74, 90, 91</td>
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<td>Dementia</td>
<td>Tricyclic antidepressants (tertiary and secondary)</td>
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<td>H2 blockers</td>
<td>Proton pump inhibitor</td>
<td>93</td>
</tr>
<tr>
<td>Anticholinergics (see table 7 in 2015 AGS Beers criteria for complete list of classes) (e.g., first-generation antihistamines, and anti-Parkinson agents)</td>
<td>For allergy—second-generation antihistamine, nasal steroid</td>
<td>41-46</td>
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<td>For Parkinson disease—levodopa with carbidopa</td>
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<td>Benzodiazepines</td>
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<td>75, 76</td>
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<td>For sleep—see Appendix 3</td>
<td>67-73</td>
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Senior PharmAssist Commercial

- Help seniors in Durham who are 60+ pay for medicines (up to monthly income of $1,980/s or $2,670/c)
- Comprehensive medication therapy management and preventive health education
- Meet seniors “where they are” – tailored community referrals and care management
- Insurance counseling to any Medicare beneficiary in Durham – regardless of age or income as the SHIIP coordinating site for Durham County
- Education and advocacy
Take Home Message

• Medications can be safely withdrawn, often with significant benefit

• Complex decision making must include thought regarding life expectancy, time until drug benefit, goals of care and aggressiveness of disease targets

• Always assess the risk versus benefit

• Consider any new symptom as a possible ADR or drug interaction

• Adherence issues? – Simplify to once a day or twice a day

• Be the one to initiate the conversation

• Progress slowly
Resources


Beta Blockers

- **If used daily for more than 3 weeks:**
  - Reduce dose by 50% every 1 to 2 weeks (7-10 days)
  - May stop once at 25% if not symptomatic

- **Symptoms to monitor for:**
  - Chest pain
  - Pounding heart
  - Blood pressure – does it need to be re-measured?
  - Anxiety
  - Tremor

Clonidine

- **If used for >1 week:**
  - Reduce dose by 50% every week
  - May taper over 2-4 days
  - If taking a beta blocker and clonidine taper off the beta blocker first

- **Symptoms to monitor for:**
  - Rebound hypertension
  - Headache
  - Insomnia
  - Tachycardia
  - Hiccups
  - Salivation

Antidepressants

- Depends on the agent!
- Taper over several months – reduce the dose by 25% every 4 to 6 weeks
- **Symptoms to monitor for:**
  - Insomnia
  - Flu-like symptoms
  - Imbalance
  - **Sensory experiences (electric shock-like feelings)**
  - Hyperarousal
  - N/V/D
  - Agitation
Antipsychotics

- No more than 50% every 2 weeks
- If switching to a different antipsychotic, most experts recommend a cross taper; reducing the dose of one antipsychotic while up titrating the dose of the other

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  • Add your name to the Q/A box (to verify attendance)
  • Complete a survey. The survey will open automatically at the end of the webinar and the link will be sent in a follow-up email.

• If you did not register for this webinar and would like CE credit, contact gero@duke.edu to receive the link for the survey.