Deprescribing Strategies and Tools

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Disclosures

- No relevant conflicts of interest to disclose
- No off-label indications will be presented

Objectives

1. Apply principles of deprescribing to a patient case

2. Identify strategies and tools to aid in deprescribing

Case

Mr. B is a 72 year old man and presents for diabetes follow-up. You are concerned about polypharmacy and want to know what changes could be made to simplify and optimize his therapy.

- **PMH**: Parkinson's, HTN, T2DM, GERD and hypothyroidism
- **Medications**: ASA 81 mg daily, Atorvastatin 40 mg daily, Metformin ER 500 mg BID, Glipizide 5 mg BID, Pantoprazole 40 mg daily, Levothyroxine 50 mcg daily, Losartan 25 mg daily, Amlodipine 10 mg daily, Carbidopa-levodopa 25-100 mg tablets – 3/2/3 tablets TID, Selegiline 5 mg BID, Vitamin D 1000 IU daily, MTV daily, Glucosamine-Chondroitin BID, Vitamin C 500 mg daily
- **Vitals**: BP 125/80, P 72, RR 18, 02 94%, BMI 24.7 kg/m2 **Labs**: A1c 6.2%

Which medications MAY be considered for deprescribing at this time?

Question

What are some possible risks associated with polypharmacy?

Definition

Deprescribing

- *"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."*

Question

What are the potential barriers or challenges associated with the process of deprescribing?

Challenges to Deprescribing

- Uncertainty about benefits and harms of continuing or discontinuing medications
- Lack of guidelines and decision support
- Patient not interested in stopping medications
- Family perception
- Withdrawal effects and adverse drug effects
- Care among multiple prescribers
- Not enough time

Holmes H, Todd A. Clin Geriatr Med 33 (2017):165-165.

What do patients really think about deprescribing?

2017 survey of patients with life-limiting illness (1-12 month life expectancy) who were asked about their thoughts on discontinuing statins

- Less than 5% felt that statin deprescribing represented physician abandonment of their care. Patients perceived benefits included cost savings, improvement in quality of life, and potentially being able to stop other medications
- Older adults' willingness to discontinue a medicine seems to be influenced by the communication skills and perceived experiences of the clinician and the degree to which the patient trusts them

According to deprescribing.org: "More than 90% of patients are willing to stop a medication if their doctor says it is possible"

Tija J, Kutner J, et al. J Palliative Care. 2017 (20):1098-1103.

2 Sides of a Coin

Meds that may cause harm or are inappropriate

- Meds that were never all that "good," never had an indication, or little patient perceived benefit
- Potential for DDIs, poor compliance, uncertain benefit, potential harm
- Examples: opioids+benzo, PPIs

"Meds that were good *then*, but might not be best now"

- Meds for primary prevention (eg, statins, aspirin, bisphosphonates)
- Meds for tight control of chronic medication conditions (eg, antihyperglycemics)
- Meds that may no longer have a benefit for the individual patient (eg, dementia prevention meds, supplements/vitamins)

Important Considerations

1. What is the patient's life expectancy?
2. What is the time to benefit for the medication?
3. What are the goals of care?
4. What is the treatment target?
5. Harm vs Benefit
6. Adherence
7. Shared-decision making

Shared Decision Making

1. Create awareness that options exist
2. Discuss options and the benefits/harms
3. Explore patient preferences
4. Make the decision and possibly deprescribe
5. Rinse and repeat!

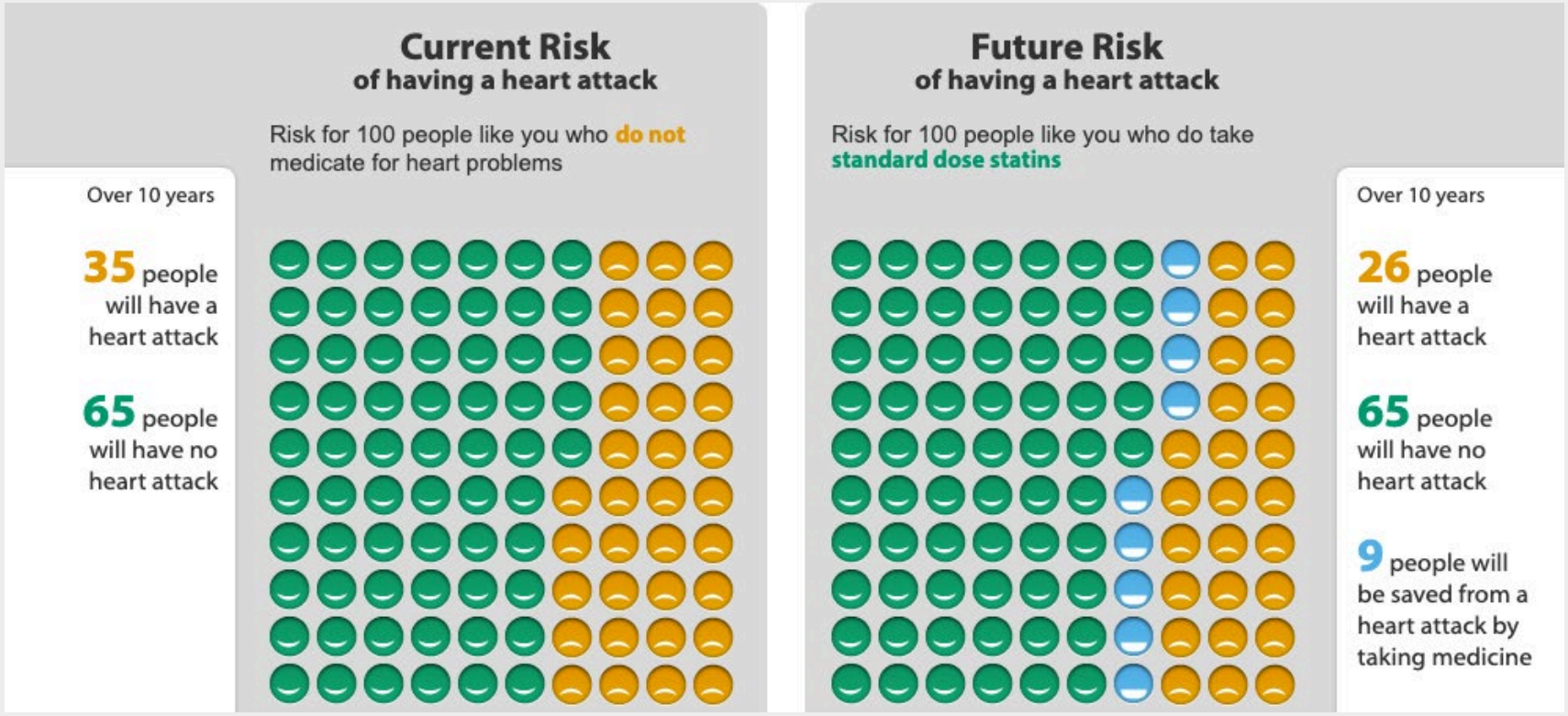
Shared Decision Making

Shareddecisions.mayoclinic.org

- Decision aids for CV prevention, angina, depression, diabetes, osteoporosis, anticoagulation, RA, and more

Shared Decision Making

Shareddecisions.mayoclinic.org



Deprescribing Toolbox

1. Consensus-based guidelines
   a. BEERS criteria
   b. STOPP and START
   c. PRISCUS list
2. Risk-assessment tools
   a. Medication Appropriateness Index
   b. PATD Questionnaire
3. Clinical Decision Support
   a. Comprehensive Medication Management (CMM) framework
   b. Medstopper.com
   c. Deprescribing.org

Deprescribing.org

- Deprescribing algorithms
- Patient communication tactics
- Informational pamphlets
  (clinician and patient focused)
- Links to other references for deprescribing
- Case reports and testimonials

deprescribing.org | Proton Pump Inhibitor (PPI) Deprescribing Algorithm

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Why is patient taking a PPI?

If unsure, find out if history of endoscopy, if ever hospitalized for bleeding ulcer or if taking because of chronic NSAID use in past, if ever had heartburn or dyspepsia

Indication still unknown?

- Mild to moderate esophagitis or
- GERD treated x 4-8 weeks (esophagitis healed, symptoms controlled)

- Peptic Ulcer Disease treated x 2-12 weeks (from NSAID; *H. pylori*)
- Upper GI symptoms without endoscopy; asymptomatic for 3 consecutive days
- ICU stress ulcer prophylaxis treated beyond ICU admission
- Uncomplicated *H. pylori* treated x 2 weeks and asymptomatic

- Barrett's esophagus
- Chronic NSAID users with bleeding risk
- Severe esophagitis
- Documented history of bleeding GI ulcer

Recommend Deprescribing

Strong Recommendation (from Systematic Review and GRADE approach)

Decrease to lower dose (evidence suggests no increased risk in return of symptoms compared to continuing higher dose), or

Stop and use on-demand (daily until symptoms stop) (1/10 patients may have return of symptoms)

Stop PPI

Continue PPI

or consult gastroenterologist if considering deprescribing

Monitor at 4 and 12 weeks

If verbal:
- Heartburn
- Dyspepsia
- Regurgitation
- Epigastric pain

If non-verbal:
- Loss of appetite
- Weight loss
- Agitation

Use non-drug approaches
- Avoid meals 2-3 hours before bedtime; elevate head of bed; address if need for weight loss and avoid dietary triggers

Manage occasional symptoms
- Over-the-counter antacid, H2RA, PPI, alginate prn (ie. Tums®, Rolaids®, Zantac®, Olex®, Gaviscon®)
- H2RA daily (weak recommendation – GRADE; 1/5 patients may have symptoms return)

If symptoms relapse:

If symptoms persist x 3 – 7 days and interfere with normal activity:

1) Test and treat for *H. pylori*
2) Consider return to previous dose

SHOULD I KEEP TAKING MY ACID REFLUX MEDICATION?

A consult decision aid for you to discuss whether to continue your proton pump inhibitor (PPI)

1. Why am I being offered this choice?

YOU HAVE TAKEN A PPI FOR AT LEAST 4 WEEKS (to treat mild/moderate heartburn or acid reflux)	Acid reflux happens when acid from your stomach travels into your esophagus (a tube that connects the mouth to the stomach). The acid causes heartburn, pain in the throat or trouble swallowing. PPIs stop release of acid in the stomach.
YOU HAVE NO SYMPTOMS	PPIs resolve symptoms and heal about 60 to 80% of patients after 4 to 8 weeks. Some people may not need to keep taking PPIs long-term. Guidelines suggest using the lowest effective dose for the shortest duration.
YOU DO NOT HAVE A REASON TO STAY ON A PPI LONG-TERM	Certain people need PPIs long-term (for example, those taking regular NSAIDs*, those with a history of a stomach bleed, Barrett's esophagus or severe inflammation in their esophagus). It is not be suitable for these people to stop their PPI.

*NSAID = non-steroidal anti-inflammatory drugs (e.g. ibuprofen [Advil], naproxen [Aleve])

2. What are your options?

●●● **Continue taking your PPI as you are now**

↘ **Use a lower dose of PPI**

✋ **Stop and use PPI "on-demand"**(only when you have symptoms, for as long as it takes for symptoms to go away, then stop)

3. Rate the importance of benefits and harms of each option

CONTINUE VS. LOWER DOSE

This is the best estimate of what happens to 100 people with mild/moderate acid reflux who use a lower dose of PPI versus those who continue the same dose for **12 months**.

Use stars ★ to show how much each benefit, risk, or reason matters to you. No stars means not at all. Five stars means a great deal. **Circle the number of stars that apply to you.**	**Continue PPI** ●●●	**Use a lower dose of PPI** ↘	**How much does this matter?** ⚖
SYMPTOMS COME BACK 6 **out of 100** more people's[++] symptoms will come back (between 3 less to 19 more people) There may be a slight or no increase in the chance of symptoms coming back if you take a lower dose of your PPI	43 out of 100	49 out of 100	★★★★★
Add other reasons to choose continue your PPI at the same dose:			★★★★★

Thompson W, Farrell B, Welch V, Walsh M, Vanderheyden A, Tugwell P, Bjerre L et al. Last reviewed: August 2017. Outcomes from Boghossian T et al. Cochrane Database Syst Rev 2017;CD011969, Farrell B et al. Can Fam Phys 2017;63(5):354-64; Eom et al. CMAJ 2011;183(3):310; Kwok et al. Am J Gastroenterol 2012;107:1011-19; Yu et al. Am J Med 2011;124(6):519-26. Based on the Ottawa Consult Decision Aid © 2013 Stacey, Légaré, O'Connor. OHRI & uOttawa, Canada. Icons courtesy of Noun Project: Alex S. Lakas, TukTuk Design, Michael Rowe, Shrihari Sankaran, Sergey Novosyolov. Do not change how you are taking your PPI without speaking to your doctor, nurse practitioner or pharmacist.

Deprescribing.org

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So you've decided to deprescribe…

- Discontinue medications in the EHR
- Consider calling the pharmacy to discontinue!
- Make sure the patient/family understands the plan
- Discuss plan for drug disposal
- Follow-up to ensure stop occurred

Case

Magda is an 84 year old female recently admitted to a long-term care facility due to progression of cognitive decline and inability of her ALF memory unit to provide the level of care she needs.

- **PMH**: Alzheimer's disease, type 2 diabetes, COPD, macular degeneration with vision impairment.
- **Medications**: donepezil 5 mg daily, insulin glargine 20 units daily, glipizide 10 mg daily, memantine 5 mg twice daily, tiotropium 1 inhalation daily, albuterol 2 puffs Q4H PRN, omeprazole 20 mg daily
- **Exam**: Alert, oriented only to person, ADAS-Cog 38/70 (32/70 last year) and MMSE 12/30 (15/30 last year)
- **Vitals**: BP 114/78, P 72, RR 22, 02 94%, BMI 22.3 kg/m2 **Labs**: WNL (CrCl ~30s), A1c 6.7%

What medication(s) is/are without an indication on the problem list?

What other medications are/could you consider for deprescribing?

Conclusions

1. Deprescribing is a part of good prescribing

2. Shared decision making is the universal key tool to deprescribing

3. When considering medications, remember the 2 sides to the coin

4. This is hard… use a tool

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