POLYPHARMACY AND DEPRESCRIBING WHEN LESS IS MORE

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1

Disclosure

Alison Knutson and Alex Sharp

have no relevant financial relationships with ineligible companies.

2

OBJECTIVES

WHY to deprescribe	WHAT to deprescribe	HOW to deprescribe
Risks for medication use	Identifying high-risk medications	Step-by-step

3

MTM = Medication Therapy Management

A pharmacist meeting with individual patients to optimize therapeutic outcomes (help patients get the most benefit from their medications) and detect and prevent costly medication problems

- A review of ALL prescription medications, and any over-the-counter and herbal products
- Problems may include: medications not being used correctly, duplication therapy, unnecessary medications, or the need for medication for an untreated condition
- In-depth, medication-related education, consultation, and advice provided to patients, family and/or caregivers to help assure proper use of medications
- Collaboration with the patient, physician, and other health care providers to develop and achieve optimal goals of medication therapy

How can a prescriber refer to an MTM pharmacist?

4

The Scope of Polypharmacy: the WHY for deprescribing

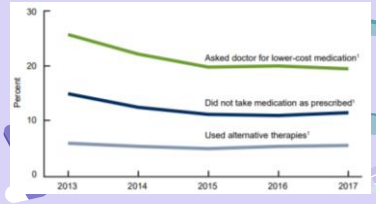
The definition of polypharmacy
Poly = lots
Pharmacy = drugs
Polypharmacy = lots of drugs!

More than 90% of people 65 and older are using at least one prescription and more than 66% using three or more

National Center for Health Statistics. (2018). Table 79. In Health, United States, 2017.

5

When things get complicated (and expensive), compromises are made



Percentage of adults age 18-64 who were prescribed medication in the past 12 months who used selected strategies to reduce prescription drug costs by year.

Strategies Used by Adults Aged 18–64 to Reduce Their Prescription Drug Costs, 2017. https://www.cdc.gov/nchs/data/databriefs/db333-h.pdf

6

Deprescribing IS doing something- it's not just taking away

Fears/Barriers	Opportunities
Resistance from patients or family members	Engage all in health priorities and goals of care
Fear of losing patient-provider relationship	Strengthen the patient-provider relationship
Concern to DC medications started by another provider	Improve communication between primary care and specialists
Time!	Could SAVE time
Fear of drug-withdrawal/side effects	Reduce experience of side effects
Lack of resources (clinical pharmacist, database availability)	Could lead to new interprofessional members of the team!

7

But I've taken this med for YEARS!

What are your goals with your medicines?

Which medicines are the most important to you?

Which medicines cause you the most burden?

Is cost of medicines a barrier?

Have you been worried that your medicine would run out before you would have enough money to get more?

Have you run out of medicine and not had enough money to get more?

Normal aging vs medication side effects

8

"Polypharmacy" Contributing factors beyond the prescriber

Patient-related factors

- Multiple medical conditions
- Multiple specialists
- Chronic mental health conditions
- Residing in a long-term care facility

System-level factors

- Not updated EMR
- Automated refills
- Prescribing to get "credit" (for quality metrics)

Polypharmacy: Evaluating Risks and Deprescribing. Am Fam Physician. 2019; 100(1): 32-38.

9

Now that patients and providers are on the same page...

WHAT should be deprescribed?

10

Clinical Frailty Scale

Others:
FRAIL Scale

PRISMA-7

Edmonton Frail Scale

A global clinical measure of fitness and frailty in elderly people. *CMAJ*. 2005;173(5):489-495.

11

AGS Beers Criteria® of *potentially* inappropriate medications (PIMS)

Includes five lists of medications:

1. Considered as potentially inappropriate in most older adults
2. Potentially inappropriate in patients with certain diseases
3. To be used with caution (risk > benefit)
4. Potentially inappropriate due to drug-drug interactions
5. Whose dose should be adjusted based on renal function.

12

What to de-prescribe- or prescribe? START and STOPP

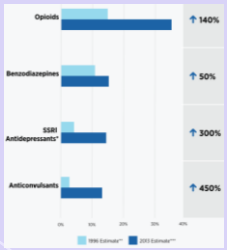
STOPP – Screening Tool of Older Person's Prescriptions
PIM- Potentially Inappropriate Medications
START – Screening Tool to Alert Doctors to Right Treatment
PPO- Potential Prescribing Omissions

In Primary Care, % of patients per STOPP/START:
- PIM: 21.4%
- PPO: 22.7%

Potentially inappropriate prescribing in an Irish elderly population in primary care. Br J Clin Pharmacol. 2009 Dec;68(6):936-47.
STOPP & START criteria: A new approach to detecting potentially inappropriate prescribing in old age. European Geriatric Medicine 1 (2010) 45-51.
STOPP/START criteria for potentially inappropriate prescribing in older people: version 3. Eur Geriatr Med. 2023 Aug;14(4):625-632.

13

FALLS RELATED TO MEDICATIONS



CDC Program: STEADI

- Stopping Elderly Accidents, Deaths and Injuries
- Lots of provider and patient resources available

14

Another list! (But this one is easier?)

Focus on broad categories, rather than remember specific medications

https://www.cdc.gov/steadi/pdf/STEADI-FactSheet-MedsLinkedtoFalls-508.pdf

Medications Linked to Falls

Review medications with all patients 65 and older. Medication management can reduce interactions and side effects that may lead to falls.

STOP medications when possible.
SWITCH to safer alternatives.
REDUCE medications to the lowest effective dose.

Check for psychoactive medications, such as:

- Anticonvulsants
- Antidepressants*
- Antipsychotics
- Benzodiazepines
- Opioids
- Sedatives-hypnotics*

Review prescription drugs, over-the-counter medications, and herbal supplements. Some can cause dizziness, sedation, confusion, blurred vision, or orthostatic hypotension. These include:

- Anticholinergics
- Antihistamines
- Medications affecting blood pressure
- Muscle relaxants

15

16

Beware the cascade!

Prescribing cascade- a medication causing an ADR, that is interpreted as a new medical condition

NSAID → amlodipine → Furosemide → Potassium supplement → MORE NSAID

17

How to de-prescribe

1. Get an accurate medication list/history
2. Consider overall risk for drug induced harm
   Number 1 risk for harm= number of medications!
3. Evaluate each medication for risk vs. benefit
4. Prioritize which medications to stop first
5. Stop one medication at a time (usually…)

Reducing inappropriate polypharmacy: the process of deprescribing.
JAMA Intern Med. 2015 May;175(5):827-34. doi: 10.1001/jamainternmed.2015.0324.

18

Some common deprescribing opportunities

19

To Anticoagulate, or not to anticoagulate

CHADS/CHADS-VASC	HAS-BLED
Age	Age >65
Sex	Liver Disease
CHF History	Renal Disease
Hypertension History	Hypertension (uncontrolled)
Stroke/TIA/thromboembolism History	Stroke History
Vascular Disease History	Prior major bleeding/predisposition to bleeding

*Warfarin added to the PIMs table on the BEERS list in 2023

20

PPIs

Per the American College of Gastroenterology

-PPIs are the most effective medical treatment for GERD. Some studies have identified an association between the long-term use of PPIs and the development of numerous adverse conditions including intestinal infections, pneumonia, stomach cancer, osteoporosis-related bone fractures, chronic kidney disease, deficiencies of certain vitamins and minerals, heart attacks, strokes, dementia, and early death. Those studies do not establish a cause-and-effect relationship between PPIs and the adverse conditions. High-quality studies have found that PPIs do not significantly increase the risk of any of these conditions ***except intestinal infections***. Nevertheless, we cannot exclude the possibility that PPIs might confer a small increase in the risk of developing these adverse conditions. For the treatment of GERD, gastroenterologists generally agree that the well-established benefits of PPIs far outweigh their theoretical risks.

21

What to do with statins…

Per AAFP: "Overuse of Statins in Older Adults"

TAKE-HOME MESSAGES FOR RIGHT CARE
No study has shown an impact of statins on cardiovascular outcomes among older adults without preexisting CAD or significant risk factors.
The U.S. Preventive Services Task Force guideline states that current evidence is insufficient to assess the balance of benefits and harms of statins in people older than 75 years who have no history of stroke or heart attack.
There is no definitive evidence that statins can prevent future CAD or death for people with CAD who are older than 80 years.
Statins may cause muscle pain or weakness and increase fall and fracture risk in older persons.

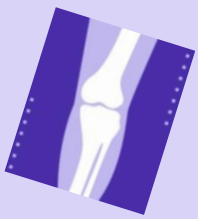
CAD = coronary artery disease.

But from the Lancet: Efficacy and safety of lowering LDL cholesterol in older patients: a systematic review and meta-analysis of randomized controlled trials

In patients aged 75 years and older, lipid lowering was as effective in reducing cardiovascular events as it was in patients younger than 75 years. These results should strengthen guideline recommendations for the use of lipid-lowering therapies, including non-statin treatment, in older patients.

22

OSTEOPOROSIS



What is the goal of treatment?

Prevention of FUTURE fractures

Per USPSTF (below)
- But what about treatment options?
- Risk vs benefit

Recommendation Summary

Population	Recommendation	Grade
Women 65 years and older	The USPSTF recommends screening for osteoporosis with bone measurement testing to prevent osteoporotic fractures in women 65 years and older.	B

Considering the Risks and Benefits of Osteoporosis Treatment in Older Adults. *JAMA Intern Med.* 2019;179(8):1103-1104.

23

Hypothyroid (or subclinical?)

Levothyroxine

- Is it subclinical hypothyroid?
  - Is the dose near 1.4-1.6mcg/kg/day

Thyroid Hormone Therapy for Older Adults with Subclinical Hypothyroidism. N Engl J Med 2017;376:2534-44.

24

STRATEGIES TO IMPROVE ADHERENCE WITH POLYPHARMACY

Maybe there is "polypharmacy" because a patient isn't taking their medication regularly or as prescribed

25

Why pill boxes?

26

Why pill boxes?

14 bottles, once daily x 7 days = 98 times a week

14 bottles, 10 once daily and 4 twice daily x 7 days = 126 times a week

27

OTHER CONSIDERATIONS FOR ADHERENCE

- Vision
  - Writing on the rx bottle, 'tiny' pills
- Swallowing
  - Large pill size, different shape
- Dexterity
  - Inhalers, injectables, splitting pills
- Alcohol use

28

Summary

Get patient buy in first

Review the indication for each medication

Identify the medications to remove

- Lots of lists and resources
- Prioritize and remove based on risk first
- Try to back-track from the cascades

Get started (slowly)!

Have patients help identify their highest priority changes

29

THANKS!

QUESTIONS?

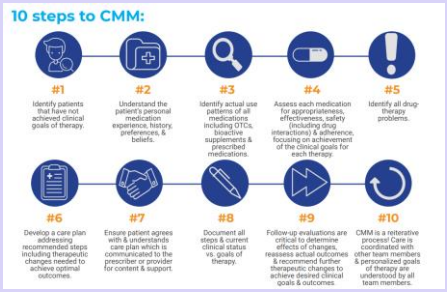
30

Polypharmacy: Evaluating Risks and Deprescribing.

Am Fam Physician 2019;100(1):32-38

31

GTMRx Institute (gtmr.org)



32