

## DRUG USE IN THE ELDERLY

Richard Clarens PharmD  
 UND School of Medicine & Health Sciences  
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## OBJECTIVES

- Define polypharmacy and medication-related adverse effects.
- Discuss factors that increase the risk for adverse drug events, e.g., polypharmacy, comorbidities, age, nonadherence, and situations that alter the pharmacokinetics of medications.
- Discuss tools and approaches to reducing polypharmacy and the risk of adverse effects in the older adult.

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“Medications are critical to the health and well-being of older adults, but medication-related problems remain prevalent.”

Pharmacotherapy 13:33:827-37

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## MEDICATION IN OLDER ADULTS

- “Prescription of medications for older adults is a complex and challenging task”
- “status of older populations varies widely so a ‘one size fits all’ approach to prescribing is inadequate to meet patient needs.”

Drugs Aging 13;30:893-900

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## GERIATRIC 5Ms EVALUATION

- Mind
  - Mentation, dementia, delirium, depression
- Mobility
  - Mobility function, gait & balance, fall prevention
- Medications
  - Polypharmacy deprescribing, optimal prescribing, adverse effects, med burden
- What Matters most
  - Goals and care preferences
- Multicomplexity
  - Multiple health & biopsychosocial needs

Health in Aging Foundation <https://www.healthinaging.org/age-friendly-healthcare-you>  
 Mayo Clin Proc 24:99:1773-84

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## MEDICATION RELATED PROBLEMS

- Appropriateness
  - Unwarranted polypharmacy
    - Drug with no indication, not effective, potentially unsafe, other meds available
  - Suboptimal regimens
    - Clear indication and no contraindications
- Effectiveness – Subtherapeutic
  - Right drug but dose, duration, frequency or administration not optimal

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## MEDICATION RELATED PROBLEMS

- Safety
  - eg, ADR, drug-drug/disease interactions, supratherapeutic doses
  - Monitoring to assess benefits & reduce ADR
- Nonadherence
  - Rx not filled, not taking, not using as directed
  - Misunderstood, cost, transportation, asymptomatic, felt worse, complex, fear of drug, med changes, disbelief in drug benefit, overusing meds, memory
  - Need for patient-centered treatment

Pharmacotherapy 13;33:827-37 Quality and Safety in Pharmacy Practice. McGraw-Hill Medical; 2010  
 JAMA IM 15;175:76-87 OASIS-C Guidance Manual September 2009 for 2010 Implementation. CMS  
 DiPiro's Pharmacotherapy: A Pathophysiologic Approach, 12e. 2023

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## ADRs

- **6<sup>th</sup> leading cause of death in US**  
Clin Geriatr Med. Online 3/1/17 <http://dx.doi.org/10.1016/j.cger.2017.01.006>
- **~11% hospitalization vs. ~5% population**  
J Manag Care Pharm 09;15:568-71
- **~20-30% of hospital admissions due to ADE**  
JAMA 06;296:1858-66 Eur J Clin Pharmacol 17;73:759-70
- **Up to 50% may be PREVENTABLE**  
Clin Geriatr Med. Online 3/1/17 <http://dx.doi.org/10.1016/j.cger.2017.01.009> Pharmacotherapy 13;33(8):827-37
- **~30% are preventable in outpatient setting**  
AFP 13;87:331-6

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## RISK FACTORS FOR ADRs

- **Polypharmacy ( $\geq 5$  medications)**
  - Older adults 16% of population – 33% of Rx  
Clin Geriatr Med 22;38:621-5 Mayo Clin Proc 24;99:1773-84
  - **Community dwelling 75-85y ~37%**  
Mayo Clin Proc. 2021;96(1):242-56
- **Multimorbidity ( $\geq 2$  chronic medical conditions) increases risk of polypharmacy**
  - 66% of older adults
  - Use of single-disease treatment guidelines in multimorbid patients – med accumulation

CMS. Chronic conditions among Medicare beneficiaries, Chartbook, 2012 ed. Baltimore (MD): CMS; 2012  
 Emerg Med Clin N Am 06;24:449-65 J. Anaesthesia Intensive Care Med 17;18:205-9  
 BMC Geriatr. 2022. 22. 372 Medicina 2023. 59. 1585 Expert Opin Pharmacother 24;25:1199-208

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## RISK FACTORS FOR ADRs

- Prior adverse drug reaction
- **Dementia**
- **Increased age with frailty**
- **Renal, heart, or liver failure**
- Low body weight
- **Multiple prescribers & pharmacies**
- **Pharmacogenetics**  
Emerg Med Clin N Am 06;24:449-65 J. Anaesthesia Intensive Care Med 17;18:205-9  
 Mayo Clin Proc 00;75(suppl):S3-S9 Mayo Clin Proc 24;99:1773-84

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## OFFICE VISIT

- 80 y/o female with persistent nausea
  - 6 weeks prior – CABG
  - Since CABG and sometimes in rehab she had on/off nausea
- 102/56, RRR 60, 63.5 kg (down 1 kg)
- Question was:
  - **Is there anything on her med list that may be causing nausea?**

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## Discharge Meds – 1 mon prior

- **Amiodarone 100 mg BID for 1 mon**
- ASA 325 mg/d
- **Digoxin 0.25 mg/d for 1/mon**
- Colace
- Lisinopril 5 mg BID
- Metoprolol 25 mg BID
- **Furosemide 20 mg BID for 2 wks**
- **Pantoprazole 40 mg/d for 1 mon**
- **Niacin ER 500 mg/d**
- Simvastatin 40 mg/d
- Alendronate 70 mg/wk
- **FeSO4 324 mg/d**
- Tums 1000 mg BID
- Vit E, Vit C; Vit B12
- Multivitamin 1/d
- Percocet prn
- Acetaminophen prn

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## AMIODARONE & DIGOXIN

- Labs
  - BUN 20; Cr 1.3 (baseline ~ 0.7) – WHY?
  - Dig 3.1 (0.8-2.1) – WHY?
- On an ACEI with reduced intake (nausea) and taking furosemide – volume depletion
- Amiodarone can double digoxin levels
  - Reduce dose by 50% when amiodarone is started
  - Monitor digoxin s/s toxicity, levels

AFP 03;68:2189-96 NEJM 07;356:935-41 JAMA 07;298:1312-22

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## POLYPHARMACY

- Usually refers to **> 5 meds** (variable definition) including OTC, supplements, etc
  - **A threshold definition is not always useful**
- Usually considered as a **negative** to be avoided
  - Excessive, unnecessary or unmonitored meds
- May be **appropriate** if:
  - Evidence-based guidelines & appropriate indications
  - Monitored for efficacy and ADEs
  - **Therapy of HF, T2DM, CAD, HTN**

Mayo Clin Proc. 21;96:242-56 Medicina 2023, 59, 1585 Clin Geriatr Med 24;40:659-68  
DiPiro's Pharmacotherapy: A Pathophysiologic Approach, 12e. 2023  
Mayo Clin Proc 24;99:1773-84 Expert Opin Pharmacother 24;25:1199-208  
BMJ 24;385:e074892

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## OLDER ADULT TRENDS IN MEDICATION USE

- **> 65 y/o with > 5 Rx in US**
  - 13% in 1988 → **45% in 2017**
- **62-85 y/o**
  - > 5 Rx – 31% in 2005 → 35% in 2010
  - > 1 OTC ~40%
  - > 1 supplements – 52% in 1988 → 64% in 2010
- Patients may add meds without healthcare input: OTCs, Supplements, On-line, etc

BMJ 24;385:e074892

JAMA Intern Med 16;176:475-82  
Clin Geriatr Med. Online 3/1/17 <http://dx.doi.org/10.1016/j.cger.2017.01.007>  
Mayo Clin Proc 21;96:242-56

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## HF Guideline Directed Medical Therapy (GDMT)

- Highest expected benefit
  - ↓ symptoms, hospitalizations, & mortality
- 1<sup>st</sup>-line meds
  - **ARNIs, (or ACEIs, ARBs) βBs, MRA, and SGLT2i** (Dapa, Empa, Sota)
- **< 20% get GDMT “quad therapy”**
- “Essentially, all optimized HFREF patients in 2020 ... **meet the polypharmacy criteria**”

2024 ACC HFREF J Am Coll Cardiol 24;83:1444-88  
2024 ACC Consensus Hospitalized JACC 8/8/24  
Pharmacist's Letter. September 2024

HF Reviews. Online 7/2/21. <https://doi.org/10.1007/s10741-021-10135-4>

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## POTENTIAL PROBLEMS WITH POLYPHARMACY

- ADRs: cognitive impairment, frailty, falls, etc
- Drug-drug & drug-disease interactions
- Associated with use of PIMs
- Non-adherence
- Medication errors
- Health care utilization, ED visits, hospitalization, cost
- Mortality
- Quality of life

Med Clin N Am 15;99:295-310 BMC Geriatr. 22;22:372 Medicina 23; 59:1585  
Clin Geriatr Med 24;40:659-68 Mayo Clin Proc. 2024;99(11):1773-1784  
Expert Opin Pharmacother 24;25:1199-208 BMJ 24;385:e074892

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## STRATEGIES TO PREVENT POLYPHARMACY

- Accurate med list and medical history
- Encourage bringing all meds to visits
- Review changes with patient and caregiver and provide all the changes in writing
- Use fewest possible number of med and simplest possible dosing regimen
- Link each med with its diagnosis
- Stop all unnecessary med

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## STRATEGIES TO PREVENT POLYPHARMACY

- Screen for drug-drug & drug-disease interactions
- Include patient/family and interdisciplinary team
- Avoid starting PIMs, (Beers Criteria)
- Start new med at lowest dose and titrate slowly
- Avoid starting meds to combat potential side effects of other medicines – prescription cascade

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## PRESCRIBING CASCADE

- **Meds started in response to an ADR that is perceived to be a new illness**
  - May add to polypharmacy
- **Inappropriate intervention occurs**
  - CCB (amlodipine) induced pedal edema (5-60%) may lead to diuretics for prevention
    - No benefit for vasodilatory-induced edema
  - NSAID use and possible drug-induced increase BP
    - use of or increasing BP meds
  - ACEI cough – use of cough/cold products
- **May cause preventable ADRs**

Clin Geriatr Med 24;40:659-68 High Blood Press Cardiovasc Prev 24;31:261-9  
Mayo Clin Proc 24;99:1773-84

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## STRATEGIES TO PREVENT POLYPHARMACY

- Med reconciliation during care transitions
- Consider patients' goals of care and life expectancy
- The integration of STOPP (Screening Tool Of Older Person's Prescriptions) & START (Screening Tool to Alert to Right Treatment) for med review
- Use of AI???

Mayo Clin Proc 21;96:242-56  
StatPearls [Internet]. Polypharmacy. Feb 12, 2024

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### SPECIAL ARTICLES

Journal of the  
American Geriatrics Society

## American Geriatrics Society 2023 updated AGS Beers Criteria<sup>®</sup> for potentially inappropriate medication use in older adults

By the 2023 American Geriatrics Society Beers Criteria<sup>®</sup> Update Expert Panel [□](#)

Correspondence  
Mary Jordan Sammel, American Geriatrics Society, 40 Fulton Street, Suite 809, New York, NY 10038, USA.  
Email: msammel@americangeriatrics.org

### Abstract

The American Geriatrics Society (AGS) Beers Criteria<sup>®</sup> (AGS Beers Criteria<sup>®</sup>) for Potentially Inappropriate Medication (PIM) Use in Older Adults is widely used by clinicians, educators, researchers, healthcare administrators, and regulators. Since 2011, the AGS has been the steward of the criteria and has produced updates on a regular cycle. The AGS Beers Criteria<sup>®</sup> is an explicit list of PIMs that are typically best avoided by older adults in most circumstances or under specific situations, such as in certain diseases or conditions. For the 2023 update, an interprofessional expert panel reviewed the evidence published since the last update (2019) and based on a structured assessment process approved a number of important changes including the addition of new criteria, modification of existing criteria, and formatting changes to enhance usability. The criteria are intended to be applied to adults 65 years old and older in all ambulatory, acute, and institutionalized settings of care, except hospice and end-of-life care settings. Although the AGS Beers Criteria<sup>®</sup> may be used internationally, it is specifically designed for use in the United States and there may be additional considerations for certain drugs in specific countries. Whenever and wherever used, the AGS Beers Criteria<sup>®</sup> should be applied thoughtfully and in a manner that supports, rather than replaces, shared clinical decision-making.

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## PIMs and High Risk Medications

- Potentially inappropriate medications (PIMs)
  - 20-65% of elderly take PIMs

Intern Emerg Med 14;9:723-34  
Med Clin N Am 15;99:295-310

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## 2023 AGS Beers Criteria

- Explicit list of PIMs
  - May be best to avoid in most circumstances or under specific situations, such as certain diseases, conditions, or care settings
  - Except hospice and end-of-life settings
- Intention is to:
  - Reduce exposure to PIMs by improving medication selection
  - Educate clinicians and patients
  - Reduce ADEs
  - Tool for evaluating quality of care, cost, and patterns of drug use

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## 2023 AGS Beers Criteria

- Should be applied thoughtfully and in a manner that supports, rather than replaces, shared clinical decision-making
- Not meant to supersede clinical judgment or individual patient values or needs
- “Avoid” is not an absolute contraindication unless specified in the medication’s label

J Am Geriatr Soc 23;71:2052-81

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## Beers Criteria

- “educational tools designed to **encourage clinicians to pause and reflect on risks and benefits** of certain medications ...or to be more vigilant to possible ADRs”
- “should be viewed as an entry point to more comprehensive medication reviews”

Clin Geriatr Med. Online 3/1/17 <http://dx.doi.org/10.1016/j.cger.2017.01.007>

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## DRUGS MOST LIKELY TO CAUSE ADRs

- 66% of ADRs presenting to the ED and hospital due to:
  - Warfarin, Antiplatelet, Insulin, oral T2DM drugs

NEJM 11;365:2002-12

US DHHS, Office of Disease Prevention and Health Promotion. National action plan for ADE prevention. 2014. <https://health.gov/sites/default/files/2019-09/ADE-Action-Plan-508c.pdf>

- Drugs associated with preventable ADRs:
  - Anticholinergic, antiplatelet, hypoglycemic, antihypertensive, diuretic, psychotropic, and NSAIDs

Mayo Clin Proc 24;99:1773-84

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## NSAIDs IN ELDERLY

- Associated with ADEs
  - Nephrotoxicity, GI bleed, HTN, fluid retention, HF, MI
- In England 30% of admissions due to ADE
  - BMJ 24;386:e077880
- Renal risks
  - High-dose, prolonged use, volume depletion, renal vasoconstriction, & impaired renal blood flow autoregulation
- Low dose and sporadic use may have little or less affect on renal function

J Am Geriatr Soc 21;69:726-34

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## PIM NSAIDS IN OLDER ADULTS

- Risks
  - GI bleeding, ulcers, perforation in high-risk groups
    - >75 y or taking corticosteroids, anticoagulants, or antiplatelet agents
    - PPIs or misoprostol decreases – does not eliminate risk
  - Can induce renal injury and increase BP
- Avoid chronic use and short-term scheduled use combined with above agents
  - Unless alternatives are not effective & patient can use GI protective meds

Beers Criteria. J Am Geriatr Soc 23;71:2052-81

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## PIMs – Kidney Function

- NSAIDs
  - May increase risk of AKI and decline in kidney function
  - Avoid

Beers Criteria. J Am Geriatr Soc 23;71:2052-81

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## PAIN MANAGEMENT IN OLDER ADULT – NSAIDS

- Assuming no existing renal impairment, active HF exacerbation or GI distress
  - Trial of low dose NSAIDs for 5-7 d is reasonable especially if acetaminophen has been already tried
  - Ulcer prophylaxis with a PPI should be standard

Clin Geriatr Med 23;39:619-34

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## NSAID in Elderly Case

- 80 y/o male with 1 min syncopal episode
  - 3 wks ago treated for acute arthritis pain with indomethacin
  - Hgb 2 wks ago 9.4, colonoscopy showed colitis
  - Denies blood in stools or black stools
- PMH: RA for 44 y
- Meds: **ASA 81 mg/d**, **Prednisone 15 mg/d** – started 3 wks ago, **Indomethacin 25 mg 3xd** with meals, Ca/vit D
- **No PPI started**
- Hgb 7.6 ..... **UGIB**

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## INDOMETHACIN IN OLDER PERSONS

- “Of all the NSAIDs, indomethacin has the most adverse effects ...”
  - Avoid

Beers Criteria J Am Geriatr Soc 23;71:2052-81

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“The number of reports of drug interactions is so great as to be overwhelming to most clinicians.”

Mann HJ. Crit Care Clin 06;22:329-45

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## DRUG INTERACTIONS

- Drug-Drug interactions (DDIs)
  - **Pharmacokinetic interactions**
    - $\geq 2$  drugs that alter serum concentrations
  - **Pharmacodynamic interactions**
    - Drug alters pharmacologic effect of another drug
      - Additive, synergistic or antagonistic effect
    - Drugs with similar or opposite actions
      - Diltiazem plus metoprolol additive on HR and AV node
- Drug-Disease interactions
  - Disease alters kinetics or dynamics of a drug
    - Renal failure prolonging half-life of digoxin
  - Drug alters the disease
    - Prednisone in diabetes

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## DRUG INTERACTIONS

- Drug-Nutritional status – binding to albumin
- Drug-Food interactions
  - Tetracyclines and dairy products
- Drug-Herbal interaction
- Drug-electrolyte
  - Diuretics and hypokalemia, hyponatremia, hypomagnesemia
  - ACEIs, spironolactone and hyperkalemia

Am Fam Physician 19;99:558-64      Curr Hypertens Rep 21;23:14  
 Med Clin N Am 22;106:389-99      Psychiatr Clin N Am 22;45:431-50  
 Anaesth Intensive Care 23;24:217-20

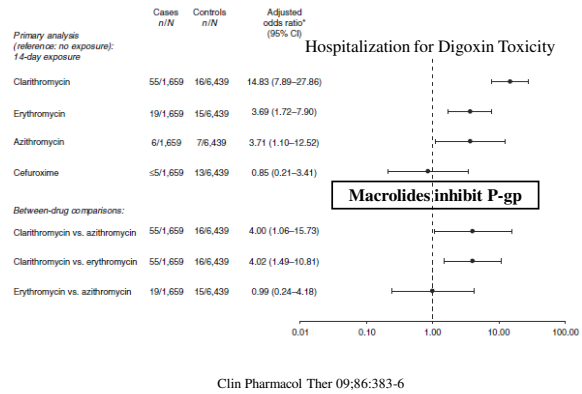
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### CASE

- 82 y/o female with n, v, anorexia, weakness
  - h/o HTN, CHF (EF 20%), AF, CABG, CVA
- Meds
  - ASA 81 mg/d, Warfarin
  - Digoxin 0.125/d
  - Furosemide, Metoprolol, Enalapril, Atorvastatin
  - Azithromycin for 5 days last week – RTI
- Dig 3.3
- WHY?

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### Macrolide-Induced Digoxin Toxicity



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### DRUG INTERACTIONS

- Elderly inpatient
  - 6% had a DDI with a detectable adverse outcome
  - 20% of these had a drug-disease interaction
- Drug-disease interactions
  - 2-3 times more frequent than DDIs

Ann Pharmacother 04;38: 9-14

Am J Geriatr Pharmacother 04;2:257-64

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### Examples Drug-Disease Interactions – AGS Beers Criteria

HF	NSAIDs, COX2 inhibitors, Thiazolidinediones
HFrEF	Verapamil, Diltiazem
Syncope	Nonselective $\alpha$ 1 blockers, TCA, antipsychotics
Delirium	Anticholinergics, antipsychotics, BZDs, corticosteroids, H2RA, z-hypnotics (eg, zolpidem, zoleplon)
Cognitive decrease	Anticholinergics, antipsychotics, BZDs, z-hypnotics
Falling	Antiseizure drugs, antipsychotics, BZDs, antidepressants, z-hypnotics, opioids
Parkinson's	Antipsychotics (except quetiapine, clozapine, pimavanserin), prochlorperazine, promethazine
PUD	ASA >325mg/d, NSAIDs
CKD $\geq$ Stage IV	NSAIDs

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### PIMs – Drug-Disease Interactions

- Heart failure
  - Potential for fluid retention &/or exacerbate HF
  - NSAIDs: Caution in asymptomatic HF; Avoid in symptomatic HF
- PUD
  - May exacerbate existing or cause new ulcers
  - NSAIDs: Avoid unless other alternatives are not effective & can take PPI or misoprostol

Beers Criteria. J Am Geriatr Soc 23;71:2052-81

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### DEMENTIA OR COGNITIVE IMPAIRMENT

- Drugs
  - Anticholinergics, benzodiazepines, hypnotics, antipsychotics
- Rationale
  - CNS ADEs
- Recommendation – Avoid
- Quality of Evidence – Moderate
- Strength or Recommendation – Strong

Beers Criteria J Am Geriatr Soc 23;71:2052-81

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## CASE

- 92 y/o female with a fall & rib fxs
  - Unwitnessed fall, lives in assisted living
- Osteoporosis, osteoarthritis, **dementia**, previous fall/hip fx 3 y PTA
- Meds
  - **Oxybutynin** 5 mg 2xd, Furosemide 80 mg/d, Metoprolol tartrate 50 mg/d
- 136/70, 87, RR 16-25, O2sat 95%
  - **Confused**

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## AMIODARONE CASE

- 82 y/o male with increased SOB
  - h/o chronic productive cough
- PMH: severe COPD; GERD; HTN; possible pulm fibrosis (past amiodarone); L ureteral stent with frequent UTI; AAA repair; pacemaker
- Smokes – 0.5 ppd for 55 y
- Meds: Dabigatran (Pradaxa) 75 mg 2xd
  - Metoprolol tartrate 25 mg 2xd; Tiotropium (Spiriva); Budesonide/formoterol (Symbicort)
  - Nitrofurantoin 1xd

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- CXR – RLL pneumonia
- U/A positive with UC P. aeruginosa (several past pos UCs with Pseud)
  - Resist Cipro – started aztreonam
  - Urology – stop abx since asymptomatic
- Past Amiodarone for AF but stopped due to concern of pulmonary adverse effect
- What about long-term nitrofurantoin in this patient?

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## NITROFURANTOIN

- Potential for pulmonary toxicity, hepatotoxicity, and peripheral neuropathy, especially with long-term use; safer alternatives available.
- Avoid in individuals with CrCl <30 mL/ min or for long-term suppression

Beers Criteria J Am Geriatr Soc 23;71:2052-81

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## MEDICATION RECONCILIATION CONSIDERATIONS

- Care that matters most to the patient, patient preferences
- Indications
- Risks and benefits; risk vs. benefit
- Med burden
- Drug-drug and drug-disease interaction
- Time to benefit
- Life expectancy

Mayo Clin Proc 24;99:1773-84

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## MEDICATION RECONCILIATION

- **Patient should be active participant**
- Review of a patient's medications
  - Verification of medication history
  - Clarification that the medications are appropriate
  - Reconciliation of discrepancies
- Involves members of the health care team
- Transitions of care may affect med regimens
  - Even with EHR
  - Potential for reduced patient safety due to med errors and ADRs

Prevent Adverse Drug Events by Implementing Medication Reconciliation. Cambridge, MA: Institute for Healthcare Improvement; 2011. (www.ihl.org)

Mayo Clin Proc 21;96:242-56 Mayo Clin Proc 24;99:1773-84

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## DEPRESCRIBING

- Identifying & d/c'ing or reducing dose of meds no longer needed or beneficial
  - After a thorough med review
  - May decrease polypharmacy and use of PIMs
- Shared decision-making with patients/caregivers
- Consider if:
  - Risk > benefit, adverse effects
  - Regimen no longer aligns to care goals
  - Preferences
  - Shorter life-expectancy, therapeutic futility
- Make a plan of action and monitoring the patient

DiPiro's Pharmacotherapy: A Pathophysiologic Approach, 12e, 2023  
 Clin Geriatr Med 24;40:659-68 Mayo Clin Proc 24;99:1773-84 BMJ 24;385:e074892

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## DEPRESCRIBING

- Goal not just a decrease in meds but also achieve a balance with **appropriate** polypharmacy
- D/c'ing a med to prevent/treat an adverse effect may reduce benefit of Treating/preventing a medical condition
  - Stopping BP med to prevent a fall from orthostasis or goal BP change may increase risk of CV events
  - Stopping digoxin may exacerbate HF

Drugs Ageing 13;30:8893-900 Clin Geriatr Med 24;40:659-68  
 J Am Geriatr Soc 24;72:318-20 BMJ 24;385:e074892

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## DEPRESCRIBING

- Identify suboptimal (overuse, underuse, inappropriate) med use
- Identify PIMs with low evidence of effectiveness and high risk of ADRs in high-risk patients
  - NSAIDs in HF, CKD, PUD
  - Anticholinergics (older antihistamines, overactive bladder meds, etc) in mild cognitive impaired or dementia

Drugs Ageing 13;30:8893-900 Mayo Clin Proc 21;96:242-56  
 DiPiro's Pharmacotherapy: A Pathophysiologic Approach, 12e, 2023  
 Clin Geriatr Med 24;40:659-68 J Am Geriatr Soc 24;72:318-20 BMJ 24;385:e074892

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## DEPRESCRIBING BARRIERS

- Patient
  - Uncertainty of outcomes – fear of negative outcome
  - Communication gaps and misunderstandings
  - Patient reluctance because of changes in treating a chronic disease with long time meds to achieve control and were told to never stop med – fear of stopping

BMJ 24;385:e074892 Beers Criteria J Am Geriatr Soc 23;71:2052-81

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## DEPRESCRIBING BARRIERS

- Provider
  - How to taper and monitor meds
  - Fear of possible consequences (withdrawal, loss of disease control)
  - Inertia if no patient ADE issues – “If it ain't broke, don't fix it” mentality
  - Delivering stop orders to pharmacist
  - Takes time and resources – insufficient time
  - Need for provider buy-in

BMJ 24;385:e074892 Beers Criteria J Am Geriatr Soc 23;71:2052-81

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## Attitudes of Older Medicare Beneficiaries Toward Deprescribing

- Data obtained from Medication Attitudes module
  - In-person interviews of National Health and Aging Trends Study
  - 95% had good understanding of why taking meds
- 92% willing to stop taking  $\geq 1$  med if physician said it was possible
  - Those on  $\geq 6$  meds vs less OR 2.9
- 67% want to reduce number of meds
  - Those on  $> 6$  meds vs less OR 2.3

JAMA Intern Med 18;178:1673-80

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## GERIATRIC ASSESSMENT

- Care team may include but not limited to any or all of the following:
- Geriatricians (Clinicians)
- Nurses, NP, PA
- Social workers
- Consultant pharmacists
- Nutritionists
- PT, OT
- Speech and hearing specialists
- Psychiatrists, Psychologists

Health in Aging Foundation. <https://www.healthinaging.org/sites/default/files/media/pdf/HIA-TipSheet%20Geriatric%205Ms.19.pdf>

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## QUICK GERIATRIC ASSESSMENT MEDICATIONS

- Reconcile med list
  - Refer to EHR and/or bring in all meds at next visit
- “Do you have trouble keeping track of your meds? Do you worry about the number of pills that you take?”
  - If “yes” – RTC to discuss supports for med set-up/administration & to review deprescribing opportunities

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## QUICK GERIATRIC ASSESSMENT MEDICATIONS

- Review med list for high-risk med classes:
  - NSAIDs, anticoagulants, antiplatelets, diabetes meds (hypoglycemics), anticholinergics, and psychotropic medication (affecting CNS)
  - Consult AGS Beers Criteria
- If any criterion is present
  - RTC to review indications, risks, benefits, burdens, drug-drug and drug-disease interactions, time to benefit, life expectancy, & consider deprescribing

Appendix. A Quick Clinic or Bedside Geriatric Assessment Using the Geriatric 5Ms. Mayo Clin Proc 24;99:1773-84

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## MEDS IN OLDER ADULTS KEY POINTS

- Improving and maintaining functional status
- Physiologic, pharmacokinetic and pharmacodynamic changes > risk of ADRs
- Inappropriate prescribing – Beers criteria
- Comorbidities may lead to polypharmacy
- Underutilization of med also occurs
- Deprescribing should be considered
- Consider targeting high risk to implement comprehensive management strategies

Psychiatr Clin N Am 22;45:735-44  
DiPiro's Pharmacotherapy: A Pathophysiologic Approach, 12e. 2023  
StatPearls [Internet]. Geriatric Cognitive Decline and Polypharmacy. Apr 16, 2023

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## Deprescribing makes me weep

- “focus during this activity must not be the drug, nor the list of drugs, nor the list of illnesses, but the person. And the outcome of such activity needs to be judged not by the reduction in the number of drugs prescribed, not by cost, not even by the current standard treatment of the illnesses concerned, but by the well-being of the patient.”
- Better term may be “clinical medication review” focused on the patient & clinical status

Zermansky A. Letter. BMJ 24;385:e074892

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