What Should Providers Do To Address Polypharmacy?

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ACR ARP ANNUAL MEETING

Disclosures

- There is no commercial support associated with this educational activity.
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Objectives

- Discuss strategies to recognize and address pharmacology management for clients on multiple medications.
- Explain the potential barriers and best approaches to de-prescribing patient medications.

Inappropriate Prescribing

- Over-prescribing – excessive doses/duration of medicines and polypharmacy
- Mis-prescribing – unfavorable choice of medicine, dose, or duration
- Under-prescribing – not prescribing a clinically indicated medicine, despite the patient not having any contraindications

The Challenges We Face

Medication List

Other medications you are on

- Taking Zyrtec : 10 mg 1 tab orally once a day,30 day(s) ,30
- Taking acetaminophen-hydrocodone : 325 mg-10 mg 1 tab orally every 6 hours,5 day(s) ,20
- Taking omeprazole : 40 mg 1 cap orally once a day,30 day(s) ,30
- Taking Restasis : 0.05% 1 gtt in each affected eye every 12 hours,30 day(s)
- Taking clonazepam : 0.5 mg 1 tab orally at bedtime
- Taking Vitamin D : 50,000 intl units 1 cap orally once a week
- Taking Nature-Throid : 32.5 mg 1 tab orally once a day,30 day(s) ,30
- Taking Alora : 0.1 mg/24 hours twice weekly 1 patch applied topically 2 times a week,30 day(s)
- Taking carvedilol : 12.5 mg 1 tab orally 2 times a day
- Taking aspirin : 81 mg 1 tab orally once a day,30 day(s) ,30
- Taking lidocaine topical : 5% 1 patch applied topically once a day,30 day(s)
- Taking tamsulosin : 0.4 mg 1 cap orally once a day,30 day(s) ,30
- Taking Fish Oil : 500 mg 2 cap orally 2 times a day,30 day(s) ,120
- Taking Voltaren Gel : 1% 2 grams Topical qid, PRN,30 days ,3 T
- Taking losartan : 25 mg 2 tabs orally once a day,30 day
- Taking Oxygen : 2 liters as directed
- Taking alendronate : 10 mg 1 tab(s) orall
- Taking novalog pen : 10 units as d
- Taking Trulicity Pen : 1.5 m a week
- Taking Myrbetriq : (s) ,30
- Taking Meth a week,90 days ,120 ,Refills: 0
- Taki
- T and an addition 25mg tablet orally once a day
- Ta ,30 ,10 Unspecified
- Tak roquine Sulfate : 200 mg 1 tab orally 2 times a day,90 ,180 Tablet ,Refills: 0
- Taki ol DosePak : 4 mg as directed orally daily,6 days ,1 dosepak ,Refills: 0
- Taking Methotrexate : 2.5 10 tabs orally once a week,84 ,120 Tablet ,Refills: 0
- Taking Lyrica : 150 mg 1 cap orally 3 times a day,90 days ,270 ,Refills: 0
- Taking Celebrex : 200 mg 1 cap(s) orally once a day (start after medrol dosepack completed),30 ,30 Capsule ,Refills: 0
- Taking Folic acid : 1 1 tab orally once a day except day of methotrexate,90 ,90 Tablet ,Refills: 0
- Taking Nystatin ointment : 100000 units/g 1 app applied topically twice daily as needed
- Taking Prevident 5000 plus toothpase - Fruitastic flavor : 1.1 % Fluoride brush teeth once a day as directed qd
- Taking amitriptyline : 25 mg 1 tab(s) orally once a day (at bedtime)
- Taking fluconazole : 100 mg 1 tab(s) orally once a day

Smoking Status

- former smoker

30 DAILY MEDICATIONS

Beers Criteria

- List of potentially inappropriate medication use in older adults
- Updated yearly
  - Drugs for which dose adjustment is required based on kidney function
  - Drug-drug interactions
  - Drug-disease interactions
- List of alternative pharmaceutical and non-pharmaceutical options

(Fick et al., 2019; Hanlon et al., 2015)

Table 1 Continued

Organ System, Therapeutic Category, Drug(s)	***Recommendation,*** Rationale, *QE, SR*
Benzodiazepines *Short- and intermediate-acting:* ■ Alprazolam ■ Estazolam ■ Lorazepam ■ Oxazepam ■ Temazepam ■ Triazolam *Long-acting:* ■ Clorazepate ■ Chlordiazepoxide (alone or in combination with amitriptyline or clidinium) ■ Clonazepam ■ Diazepam ■ Flurazepam ■ Quazepam	***Avoid*** Older adults have increased sensitivity to benzodiazepines and decreased metabolism of long-acting agents; in general, all benzodiazepines increase risk of cognitive impairment, delirium, falls, fractures, and motor vehicle crashes in older adults May be appropriate for seizure disorders, rapid eye movement sleep disorders, benzodiazepine withdrawal, ethanol withdrawal, severe generalized anxiety disorder, and periprocedural anesthesia *QE = Moderate; SR = Strong*
Meprobamate	***Avoid*** High rate of physical dependence; very sedating *QE = Moderate; SR = Strong*
Nonbenzodiazepine, benzodiazepine receptor agonist hypnotics ■ Eszopiclone ■ Zolpidem ■ Zaleplon	***Avoid*** Benzodiazepine-receptor agonists have adverse events similar to those of benzodiazepines in older adults (e.g., delirium, falls, fractures); increased emergency room visits/hospitalizations; motor vehicle crashes; minimal improvement in sleep latency and duration *QE = Moderate; SR = Strong*
Ergoloid mesylates (dehydrogenated ergot alkaloids) Isoxsuprine	***Avoid*** Lack of efficacy *QE = High; SR = Strong*
Endocrine	
Androgens ■ Methyltestosterone ■ Testosterone	***Avoid unless indicated for confirmed hypogonadism with clinical symptoms*** Potential for cardiac problems; contraindicated in men with prostate cancer *QE = Moderate; SR = Weak*
Desiccated thyroid	***Avoid*** Concerns about cardiac effects; safer alternatives available *QE = Low; SR = Strong*

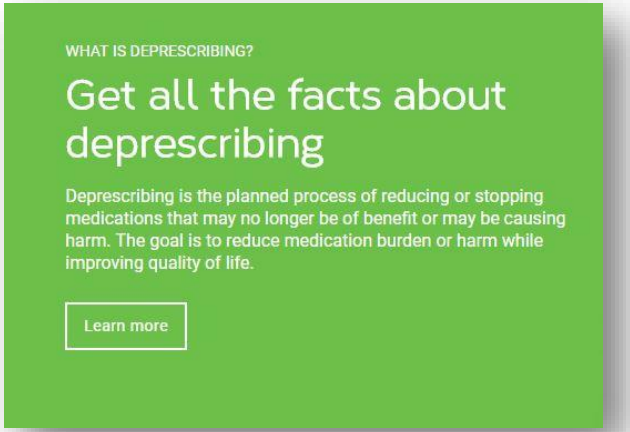
Table 1 Continued

Organ System, Therapeutic Category, Drug(s)	***Recommendation,*** Rationale, *QE, SR*
Estrogens with or without progestins	***Avoid oral and topical patch. Vaginal cream or tablets: acceptable to use low-dose intravaginal estrogen for management of dyspareunia, lower urinary tract infections, and other vaginal symptoms*** Evidence of carcinogenic potential (breast and endometrium); lack of cardioprotective effect and cognitive protection in older women. Evidence indicates that vaginal estrogens for the treatment of vaginal dryness are safe and effective; women with a history of breast cancer who do not respond to nonhormonal therapies are advised to discuss the risk and benefits of low-dose vaginal estrogen (dosages of estradiol <25 mcg twice weekly) with their health care provider *QE = Oral and patch: high. Vaginal cream or tablets: moderate.; SR = Oral and patch: strong. Topical vaginal cream or tablets: weak*
Growth hormone	***Avoid, except as hormone replacement following pituitary gland removal*** Impact on body composition is small and associated with edema, arthralgia, carpal tunnel syndrome, gynecomastia, impaired fasting glucose *QE = High; SR = Strong*
Insulin, sliding scale	***Avoid*** Higher risk of hypoglycemia without improvement in hyperglycemia management regardless of care setting; refers to sole use of short- or rapid-acting insulins to manage or avoid hyperglycemia in absence of basal or long-acting insulin; does not apply to titration of basal insulin or use of additional short- or rapid-acting insulin in conjunction with scheduled insulin (ie, correction insulin) *QE = Moderate; SR = Strong*
Megestrol	***Avoid*** Minimal effect on weight; increases risk of thrombotic events and possibly death in older adults *QE = Moderate; SR = Strong*
Sulfonylureas, long-duration ■ Chlorpropamide ■ Glyburide	***Avoid*** Chlorpropamide: prolonged half-life in older adults; can cause prolonged hypoglycemia; causes SIADH Glyburide: higher risk of severe prolonged hypoglycemia in older adults *QE = High; SR = Strong*
Gastrointestinal	
Metoclopramide	***Avoid, unless for gastroparesis*** Can cause extrapyramidal effects, including tardive dyskinesia; risk may be greater in frail older adults *QE = Moderate; SR = Strong*
Mineral oil, given orally	***Avoid*** Potential for aspiration and adverse effects; safer alternatives available *QE = Moderate; SR = Strong*

Pocket card reference available from GeriatricsCareOnline.org at:
https://geriatricscareonline.org/ProductAbstract/2019-ags-beers-criteria-pocketcard/PC007

Deprescribing.org

- Website with tools to help with deprescribing
- Information on research initiatives
- Deprescribing Guidelines and Algorithms
- Patient decision aids
- Webinars
- Information pamphlets



STOPP/START Criteria

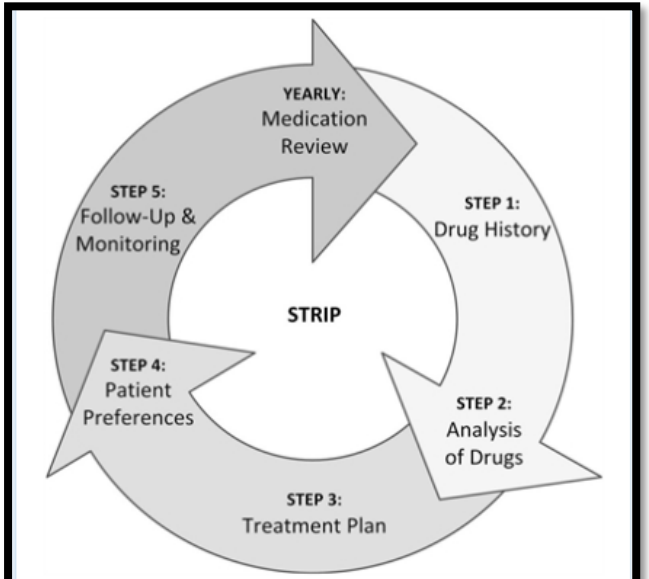
- STOPP = Screening Tool of Older People's potentially inappropriate Prescriptions
- START = Screening Tool to Alert providers to the Right Treatment
- Significantly associated with ADEs

(O'Mahoney, O'Sullivan, Byrne, O'Connor, Ryan, & Gallagher, 2015)

STRIP Tool

- Drug History
- Analysis of Drugs
- Treatment Plan
- Patient Preferences
- Follow-up/Monitoring
- Yearly review

(Drenth-van Maanen, 2017; Meulendijk, 2015)



Computerized Decision Support Improves Medication Review Effectiveness: An Experiment Evaluating the STRIP Assistant's Usability.

Drugs & Aging, Jun2015, Vol. 32 Issue 6, p495-503, 9p, 1 Diagram, 2 Charts
Diagram; found on p497

“Brown Bag” Review

- Have patient bring ALL medications to appointments
- Include OTC products
- Reconcile with documented medication list
- Query patient on what each medication is for and how it is taken

Stepwise Approach to Deprescribing

- Determine all current medications
- Consider overall risk of potential harm
- Evaluate risk versus benefit
- Prioritize drugs for discontinuation
- Implement the deprescribing plan and monitor closely

(Bouwmeester & Devlin, 2019; Scott et al., 2015)

Barriers to Deprescribing

Provider Barriers

- Guideline-recommended therapies
- Concern about withdrawal side effects
- Prescriptions initiated by another provider
- Patient resistance
- Lack of time

(Djatche, Lee, Singer, Hegarty, Lombardi, & Maio, 2017)

Patient Barriers

- Resistance to non-pharmaceutical interventions
- Uninformed/unaware of medication risks
- Medication perceived as necessary
- Not knowing how to cease medication
- Previous bad experience with medication cessation
- Fear of withdrawal

(Reeve, Hendrix, Shakib, Roberts, Wiese, 2013)

System Barriers

- Fragmented care continuum
- Non-interoperative electronic health records
- Inconsistent primary medication management
- Single-disease clinical practice guidelines

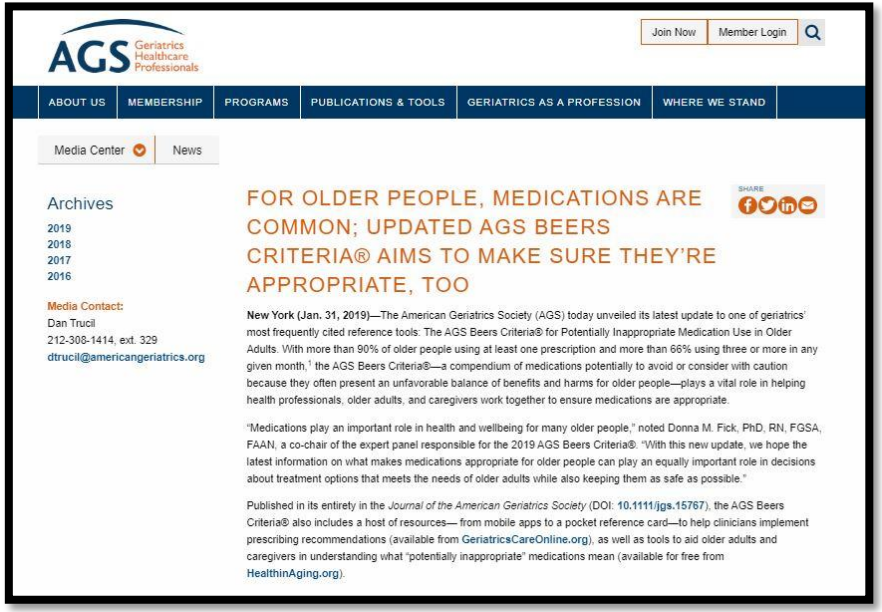
(Guharoy, 2017)

Summary

- Polypharmacy in combination with multimorbidity has become more prevalent as the population ages
- Clinical practice guidelines need to address multiple chronic disease management
- Tools are available to help clinicians address polypharmacy and deprescribing
- Comprehensive medication reviews and strategies for deprescribing need to be implemented in standard practice

Resources

Beers Criteria



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FOR OLDER PEOPLE, MEDICATIONS ARE COMMON; UPDATED AGS BEERS CRITERIA® AIMS TO MAKE SURE THEY'RE APPROPRIATE, TOO

SHARE

New York (Jan. 31, 2019)—The American Geriatrics Society (AGS) today unveiled its latest update to one of geriatrics' most frequently cited reference tools: The AGS Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults. With more than 90% of older people using at least one prescription and more than 66% using three or more in any given month,[1] the AGS Beers Criteria®—a compendium of medications potentially to avoid or consider with caution because they often present an unfavorable balance of benefits and harms for older people—plays a vital role in helping health professionals, older adults, and caregivers work together to ensure medications are appropriate.

"Medications play an important role in health and wellbeing for many older people," noted Donna M. Fick, PhD, RN, FGSA, FAAN, a co-chair of the expert panel responsible for the 2019 AGS Beers Criteria®. "With this new update, we hope the latest information on what makes medications appropriate for older people can play an equally important role in decisions about treatment options that meets the needs of older adults while also keeping them as safe as possible."

Published in its entirety in the *Journal of the American Geriatrics Society* (DOI: 10.1111/jgs.15767), the AGS Beers Criteria® also includes a host of resources— from mobile apps to a pocket reference card—to help clinicians implement prescribing recommendations (available from GeriatricsCareOnline.org), as well as tools to aid older adults and caregivers in understanding what "potentially inappropriate" medications mean (available for free from HealthinAging.org).

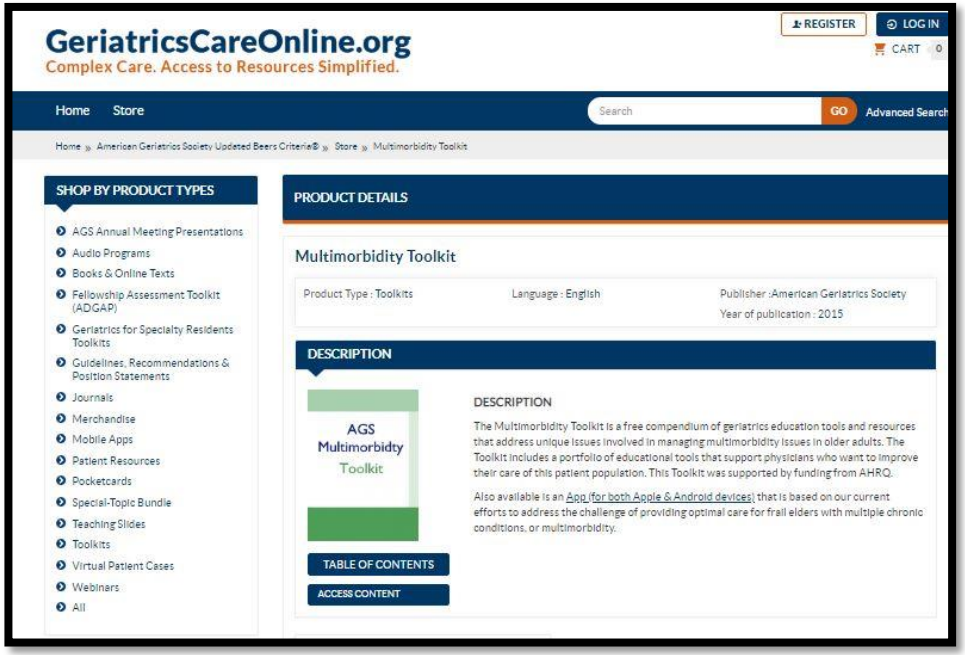
- American Geriatrics Society
- List of potentially inappropriate medication in elderly
- Pocket card reference:

https://geriatricscareonline.org/ProductAbstract/2019-ags-beers-criteria-pocketcard/PC007

Multimorbidity Toolkit

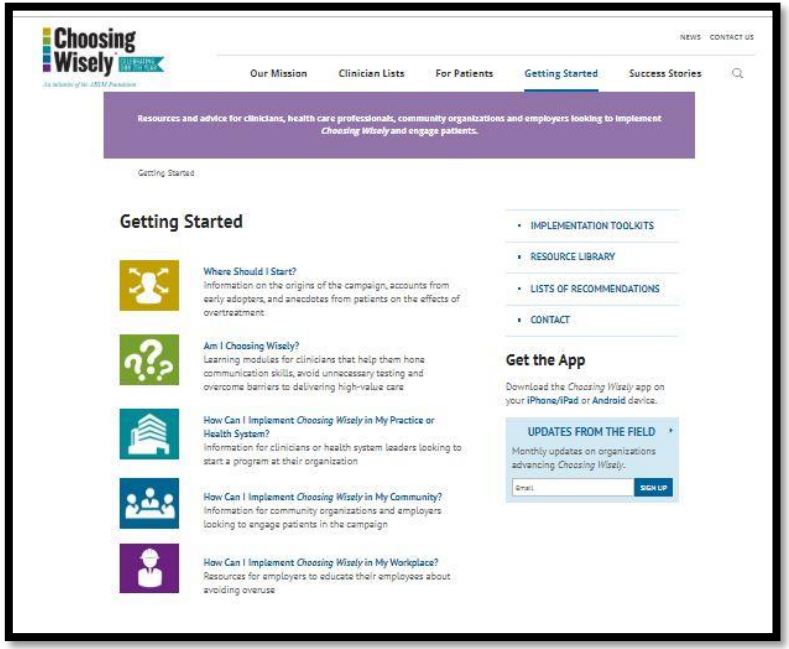
- Free resource for clinicians

https://geriatricscareonline.org/ProductAbstract/multimorbidity-toolkit/TK011



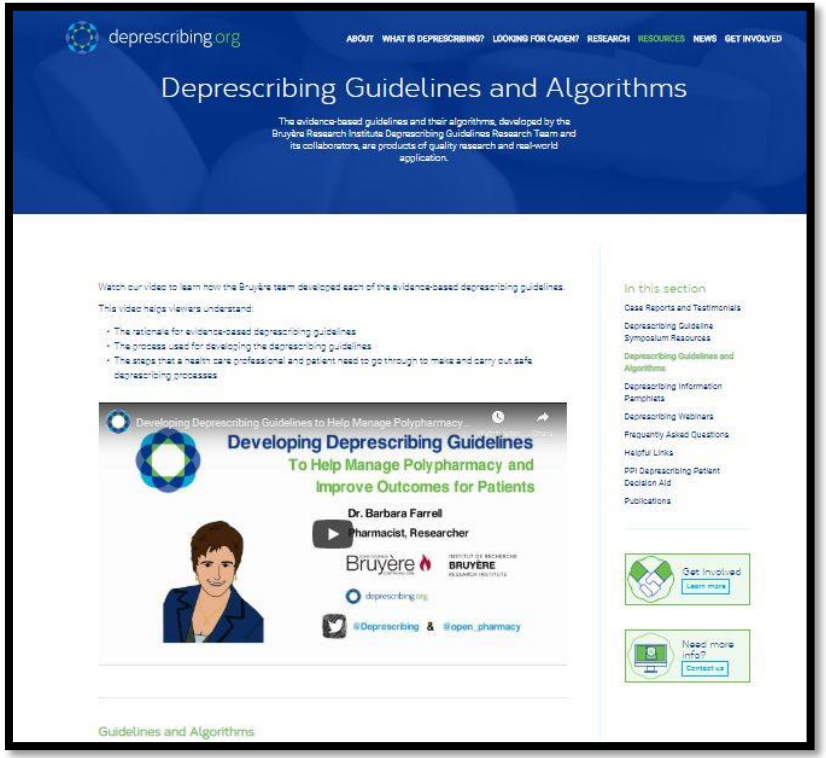
Choosing Wisely Campaign

- https://www.choosingwisely.org/
- Learning modules for clinicians
- Smart phone app
- Patient resources



Deprescribing.org

- https://deprescribing.org/
- Guidelines & algorithms to reduce medication use
- Decision aids & pamphlets
- Deprescribing App



Thank you for your attention!

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