Improving Medication Use in Geriatric Patients

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Objectives

- Identify August 2021 FDA approvals and CDC Advisory Committee on Immunization Practices (ACIP) recommendations for COVID-19 vaccination and how these apply in geriatric patient populations.
- Identify how newly FDA approved pneumococcal vaccinations compare to previously approved vaccinations.
- Identify ways to improve geriatric patient care collaborations between prescribers and pharmacists.

Immunization Updates

COVID-19 Vaccines

- August 13, 2021
  - “ACIP made an interim recommendation for use of an additional dose of Pfizer-BioNTech COVID-19 vaccine (for persons aged ≥12 years) or Moderna COVID-19 vaccine (for persons aged ≥18 years) after an initial 2-dose primary mRNA COVID-19 vaccine series for moderately to severely immunocompromised people.”
    - https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html
- On August 23, 2021 Pfizer’s Comirnaty® (COVID-19 Vaccine mRNA) was fully FDA approved for ages 16 years and older.
  - https://www.fda.gov/vaccines-blood-biologics/comirnaty
- The CDC’s ACIP COVID-19 Vaccines Work Group most recently met on August 30, 2021 and will be meeting again in mid-September to review additional information to make recommendations on COVID-19 vaccine additional doses.
  - https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2021-08-30/09-COVID-Oliver-508.pdf

Pneumococcal Vaccines

- On June 10, 2021 Pneumococcal 20-valent Conjugate Vaccine (PREVNAR 20™) was approved for adults 18 years of age and older.
  - https://www.fda.gov/vaccines-blood-biologics/vaccines/prevnar-20
- On July 16, 2021 Pneumococcal 15-valent Conjugate Vaccine (VAXNEUVANCE) was approved for adults 18 years of age and older.
  - https://www.fda.gov/vaccines-blood-biologics/vaccines/vaxneuvance
- These vaccines join previously approved Pneumococcal 13-Valent Conjugate Vaccine (Diphtheria CRM_{197} Protein) (Prevnar 13) and Pneumococcal Vaccine, Polyvalent (PNEUMOVAX® 23).
  - https://www.fda.gov/vaccines-blood-biologics/vaccines/prevnar-13
  - https://www.fda.gov/vaccines-blood-biologics/vaccines/pneumovax-23-pneumococcal-vaccine-polyvalent

Comparing FDA approved Pneumococcal Vaccines for Adults

	Pneumococcal Vaccine, Polyvalent (Pneumovax® 23)	Pneumococcal 13-valent Conjugate Vaccine (Diphtheria CRM_{197} Protein) (Prevnar 13)	Pneumococcal 20-valent Conjugate Vaccine (PREVNAR™ 20)	Pneumococcal 15-valent Conjugate Vaccine (VAXNEUVANCE)
***Streptococcus pneumoniae* serotypes covered by vaccine**	1, 2, 3, 4, 5, 6B, 7F, 8, 9N, 9V, 10A, 11A, 12F, 14, 15B, 17F, 18C, 19F, 19A, 20, 22F, 23F, and 33F	1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F and 23F	1, 3, 4, 5, 6A, 6B, 7F, 8, 9V, 10A, 11A, 12F,14, 15B, 18C, 19A, 19F, 22F, 23F and 33F	1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, 22F, 23F and 33F

https://www.fda.gov/vaccines-blood-biologics/vaccines/pneumovax-23-pneumococcal-vaccine-polyvalent, https://www.fda.gov/vaccines-blood-biologics/vaccines/prevnar-20 , https://www.fda.gov/vaccines-blood-biologics/vaccines/vaxneuvance, https://www.fda.gov/vaccines-blood-biologics/vaccines/prevnar-13

Improving geriatric patient care collaborations between prescribers and pharmacists

Facilitating collaboration between pharmacists and physicians using an iterative interview process

- Chui, MA, Stone, JA, Odukoya, OK, et al. Facilitating collaboration between pharmacists and physicians using an iterative interview process. *J Am Pharm Assoc* (2003). 2014 ; 54(1): 35–41. doi:10.1331/JAPhA.2014.13104
  - The authors interviewed 8 pharmacist/physician pairings from a variety of community pharmacy settings and providers specializing primarily in internal medicine, family medicine and geriatrics.
    - Each pharmacist and physician in each pairing were interviewed independently twice.
      - "The goal of these interviews was to identify issues, barriers, and facilitators to collaboration with the other provider" (Chui, et al. 3).
    - Each pharmacist and physician pairing were then interviewed together once following their individual interviews.
      - "They were encouraged to problem solve together to share the resources and infrastructure that would be needed to effectively implement and sustain the project. They were also encouraged to discuss their own ideas for collaboration that may not have been on the lists." (Chui, et al. 4)

Results

- Pharmacist identified needs on wish list from initial pharmacist interviews
  - Six items identified, duplicates not recorded.
- Physician identified needs on wish list from initial physician interviews
  - Eleven items identified, duplicates not recorded.
- Communicating these wish lists with one another helped participants brainstorm solutions and identify barriers
- Collaboration Barriers Identified
  - Timing of patient care issue communication relative to when patient care is being delivered.
  - Time to provide patient care in general

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Primary care clinician and community pharmacist perceptions of deprescribing

- Huffmyer, MJ, Keck, JW, Harrington, NG, et al. Primary care clinician and community pharmacist perceptions of deprescribing. *J Am Geriatr Soc*. 2021; 69: 1686– 1689. https://doi.org/10.1111/jgs.17092
- Methods
  - Primary care providers (n= 58) and community pharmacists (n=248) in Kentucky were electronically surveyed between December 2019 through February 2020.
    - "Survey questions addressed deprescribing experiences, beliefs, attitudes, influencing factors, barriers, and facilitators" (Huffmyer, et al. 1686)

Results

Clinician Barriers

- "Patient attitudes toward the medications they take" (69%)
- "Insufficient time available to spend with patients and communicate deprescribing recommendations" (58.6%)
- "Difficulty to communicate directly with other healthcare providers (e.g. subspecialists) about deprescribing recommendations" (46.6%)

Pharmacist Barriers

- "Difficulty to communicate directly with other healthcare providers (e.g. subspecialists) about deprescribing recommendations" (56%)
- "Insufficient time available to spend with patients and communicate deprescribing recommendations" (49.6%)
- "Lack of trust between healthcare providers and pharmacists" (31.9%)

Both pharmacists and clinicians agreed that "Lack of education and training related to deprescribing activities (21% and 20.7%) as well as "Lack of access to information in electronic health records" (26% and 20.7%) are barriers.

Huffmyer, MJ, Keck, JW, Harrington, NG, et al. Primary care clinician and community pharmacist perceptions of deprescribing. *J Am Geriatr Soc*. 2021; 69: 1686– 1689. https://doi.org/10.1111/jgs.17092

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Results

Clinician Facilitators

- "Adequate time to spend with patients to discuss deprescribing recommendations" (50%)
- "Trust between healthcare providers and patients" (48.3%)
- "Patient attitude toward the medications they take" (46.6%)

Pharmacist Facilitators

- "Ability to communicate directly with healthcare providers about deprescribing recommendations" (50%)
- "Adequate time to spend with patients to discuss deprescribing recommendations" (46%)
- "Trust between healthcare providers and pharmacists" (34.7%)

Both pharmacists and clinicians agreed that "Training and experience with deprescribing (27.4% and 37.9%) as well as "Clinical guideline updates that support deprescribing recommendations" (25.4% and 34.5%) are facilitators.

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Strategies and tools that focus on improving communication and collaboration

American Medical Association Recommendations: STEPS*forward*™

- Embedding Pharmacists Into Practice: Collaborate with pharmacists to improve patient outcomes
  - Module
    - Embedding Pharmacists Into the Practice | AMA STEPS Forward | AMA Ed Hub (ama-assn.org)
  - Resources
    - Embedding Pharmacists Into the Practice | AMA STEPS Forward | AMA Ed Hub (ama-assn.org)
      - Resource Title: Determining your pharmacy needs and identifying the right type of support
      - Resource Title: Quality opportunities checklist

American Board of Internal Medicine: Choosing Wisely®

- Pertinent Clinician Lists: "Five Things Physicians and Patients Should Question"
  - American Society of Consultant Pharmacists: Released May 17, 2021
    - https://www.choosingwisely.org/societies/american-society-of-consultant-pharmacists/
  - American Society of Health-System Pharmacists: Released June 1, 2017; updated June 20, 2019
    - https://www.choosingwisely.org/societies/american-society-of-health-system-pharmacists/

American Board of Internal Medicine: Choosing Wisely®

- Pertinent Clinician Lists: "Ten Things Clinicians and Patients Should Question"
  - American Geriatrics Society: Released February 21, 2013, updated multiple times, last reviewed 2021.
    - https://www.choosingwisely.org/societies/american-geriatrics-society/
- Pertinent Clinician Lists: "Fifteen Things Clinicians and Patients Should Question"
  - AMDA-The Society for Post-Acute and Long Term Care Medicine: Released September 4, 2014, updated multiple times, last updated July 6, 2021.
    - https://www.choosingwisely.org/societies/amda-the-society-for-post-acute-and-long-term-care-medicine/

Case Study Using AGS Choosing Wisely®

- 82 year old female who presents to your clinic to establish care. She was last seen by a provider 5 months ago and diagnosed with urinary incontinence (stress). Today she reports dry mouth, and occasional dizziness when she stands or when it's been a while since she's eaten. As part of her visit today, her medications are reviewed for appropriateness.
- PMH
  - Hypothyroidism, diagnosed April 1999
  - HTN, diagnosed May 2002
  - Dyslipidemia, diagnosed May 2002
  - Diabetes, type 2, diagnosed May 2016
  - Urinary Incontinence (Stress) x 5 months

Case Study Using AGS Choosing Wisely®

Vital Signs and Lab Values

- BP 134/86 mm Hg (sitting, L arm) BP 126/74 mm Hg (standing, L arm), P 81 bpm, RR 15, T 98.2°F, Wt. 58 kg, Ht 5'6"
- Chem 7 (today): Na 138 mEq/L
  - K 4.1 mEq/L
  - Cl 103 mEq/L
  - CO_2 27 mEq/L
  - Glu 115 mg/dL
  - BUN 20 g/dL
  - SCr 1.3 mg/dL
- TSH (today): 2.1 milliunits/L
- HbA_1C (today): 6.8%

Current Medications

- Levothyroxine 112 mcg po once daily
- Hydrochlorothiazide 25 mg po daily
- Lisinopril 20 mg po daily
- Atorvastatin 40 mg po daily
- Metformin 1000 mg po BID
- Glyburide 1.25 mg po daily
- Naproxen 500 mg po once daily as needed for headaches
- Oxybutinin ER 10 mg po once daily
- ASA 81 mg po daily
- Omeprazole 20 mg po daily
- Ibuprofen 200 mg po every 4-6 hours as needed for headaches

What should you question according to the AGS Choosing Wisely® List?

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