



# Opportunities to incorporate deprescribing into guidelines when robust trial evidence is not available

Michael Steinman, MD  
University of California, San Francisco  
US Deprescribing Research Network

# Disclosures

---

- Co-Chair
  - AGS Beers Criteria of Potentially Inappropriate Medications in Older Adults
  - AGS Alternatives to Beers Criteria Medications
- Royalties from UpToDate

# Overview

---

- What is the problem
- Evidentiary considerations specific to deprescribing
- Opportunities to incorporate deprescribing guidance



# The problem

---

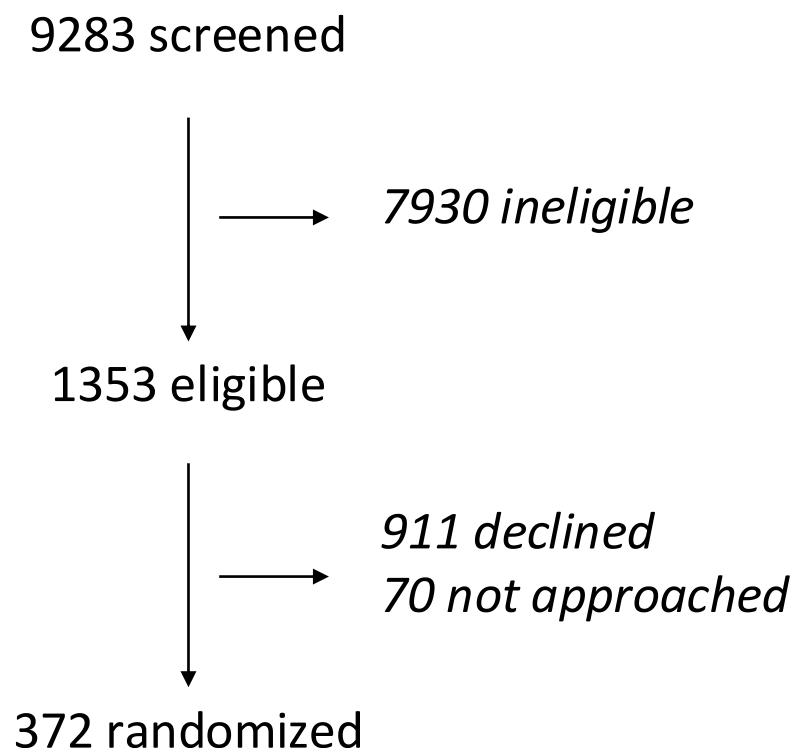
- High-quality RCT evidence of the type typically used by guidelines is often not available for deprescribing-related questions
  - A. Tell investigators to conduct high-quality RCTs that adhere to traditional evidence frameworks
  - B. Find alternate approaches that provide clinicians useful information while respecting importance of rigorous evidence
- Consider distinct evidentiary issues

# Evidentiary considerations specific to deprescribing

---

- Clinical trials
  - *Prescribing* trials: randomize to receive drug vs control
  - Many *deprescribing* trials: randomize to *behavioral intervention* that *tries* to stop drug(s)
  - When have a trial where randomizes to directly deprescribing → recruitment often very difficult

# Evidentiary considerations specific to deprescribing



- Why did people not enroll?
  - Overwhelmed by health status
  - Lack of interest or mistrust in research
  - Hesitancy about deprescribing
  - I only want my doctors changing my meds
  - I feel comfortable with my meds and don't want to make any changes
- Risk of under-enrolling historically underserved populations
  - High school education: OR ~0.67 (p=0.018)
  - Lower health literacy: OR ~0.71 (p=0.068)

Vasilevskis JAMA Intern Med 2023; Strayer Trials 2023; Vordenberg J Amer Geriatr Soc 2025

# Evidentiary considerations specific to deprescribing

---

- Observational studies
  - In *prescribing* studies, relatively easy to measure new drug starts
  - In *deprescribing* studies, can be difficult to measure true deprescribing
  - Confounding by indication

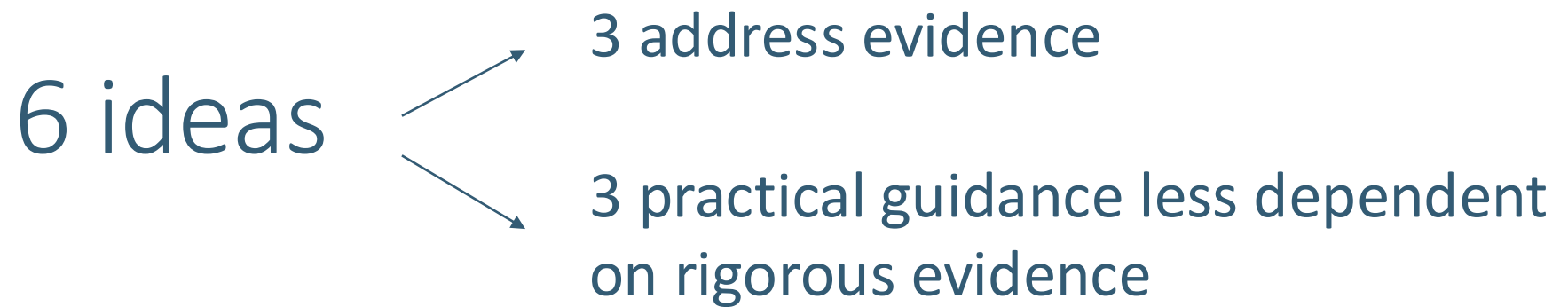
# Evidentiary considerations specific to deprescribing

---

- Non-inferiority
- Negative results from *prescribing* trials do not automatically provide evidence to support *deprescribing*
- Interpretation of adverse effects
  - If someone *starts* a statin and develops rhabdomyolysis --> adverse event
  - If someone *stops* a statin and then has an MI --> is that an adverse event?
    - Psychology and loss aversion

*Sheppard JAMA 2020; Taffet J Amer Geriatr Soc 2023; Lee J Amer Geriatr Soc 2025*

# What can we do?



# #1

---

- **Address these evidentiary challenges through methodologic work and consensus-building**

# #2

---

- **Consider non-inferiority framework**
- Do not need to demonstrate that deprescribing is better
  - Just that it doesn't lead to worse clinical outcomes
- But...important to identify and articulate some patient-centered benefits

# #3

---

- **Prioritize PICO(T) questions that address key topics in deprescribing**
- Get topics on the agenda
- Driven by needs of different stakeholders
  - Specialists, primary care, patients and caregivers.

# #4

---

- **Provide guidance on stopping drugs that lack indication or benefit**
- “Do not use drug X”
- “Do not use drug X – and if patient is already taking it, do...”
- May often rely on data from prescribing trials
  - Be careful about extrapolating data
  - But don’t be paralyzed – most evidence is extrapolated
- May help overcome clinicians’ barriers to deprescribing
  - Clinical inertia, loss aversion

# #5

---

- **Provide guidance on HOW to deprescribe**
- Tapering strategies
- Monitoring strategies
- Tools to support deprescribing (behavioral trials)
- How to discuss with patients
- May often rely on imperfect data and expert opinion
- Addresses deficits in skills, knowledge, self-efficacy
- Elevates importance

# #6

---

- **Forms of guidance other than guidelines (clinical practice updates, scientific statements, etc.)**
- Prioritization of deprescribing topics
- Addressing needs of different stakeholders
  - Specialists, PCPs, patients and caregivers
- Not mutually exclusive with guidelines (“yes, and”)