Clinical Considerations

- Consider new symptom may be a side effect rather than a new diagnosis/disease
- Get an accurate list of meds—include over-the-counter drugs and nutraceuticals
- Use a tool like the Beers or MAI as appropriate
- Does benefit clearly outweigh the risk of an additional med?
- Use non-pharmacologic means whenever possible
- Start low go slow... but get there
- Dose for aging physiology
  - Renal - GFR, tubular secretion, and blood flow
  - V, changes - % body fat, lean body mass and total body water
- Reassess constantly and stop medications whenever possible
  (Set a precise target of treatment - stop/change medications if not achieved)

Consider appropriateness/interaction of the medication with:

- Competing Risks – life expectancy, comorbidities, prognosis
- Occult physiologic changes – occult disease, CRF, cognition, reserves
- Functional Status – ADL/IADL loss, sensory loss, disability
- Support Systems – living situation, caregiver burden, access to care/transportation
- Patient-Centered Care – preferences/expectations, treatment burden
- Geriatric Syndromes – falls, frailty, delirium, dizziness, incontinence

Beers Criteria (selected medicines/classes) - meds to avoid in elderly

- Psych
  - Benzodiazepines – confusion, falls, risk of hip fracture by at least 50%
  - Amitriptyline (TCA) – anticholinergic, active metabolites
  - Fluoxetine – long T1/2, tremors, insomnia, agitation
- Pain
  - Propoxyphene (pain relief = acetaminophen) - sedation, addiction, falls
  - NSAIDs (long term) – GI, HTN, CHF, and renal side effects
  - Indomethacin – CNS side effects in addition to class effect
- Mepidine – toxic metabolite (seizures), renal elimination
- Muscle Relaxants – anticholinergic, falls
- GI/GU
  - H2 Blockers – CNS effects including delirium
  - Oxybutynin – anticholinergic, sedation, weakness, falls
  - Metoclopramide– Parkinsonian symptoms, delirium
- Misc
  - Antihistamines–constipation, urinary retention, confusion, falls
  - Anticholinergics – confusion, falls, urinary retention, constipation
  - Chlorpropamide/gliburide – long T1/2 risk hypoglycemia
  - CaCB – constipation, urinary retention, lower extremity edema

References