Cross specialty implications of ASCEPT’s EVOLVE list

Professor Jenny Martin
Quality Use of Medicines framework
1. Recognise and stop the prescribing cascade
2. Reduce the use of medicines when there is a safer or more effective non-pharmacological management strategy
3. Avoid using a higher or lower dose than is necessary for the patient to optimise the benefit to risk ratio and achieve the patient’s therapeutic goals
4. Stop medicines when no further benefit will be achieved or the potential harms outweigh the potential benefits for the individual patient
5. Reduce use of multiple concurrent therapeutics (hyper-polypharmacy)

All of these recommendations are of relevance to specialties which use therapeutic treatments but recommendation No. 1 had the most ‘votes’ from ASCEPT members.
A **prescribing cascade** occurs when a new medicine is prescribed to 'treat' an adverse reaction to another drug in the mistaken belief that a new medical condition requiring treatment has developed e.g. when a patient is prescribed a non-steroidal (NSAID) for pain and then proton pump inhibitors are prescribed to reduce the risk of gastric bleeding from the NSAID.

- Also includes treating with a new therapeutic a side effect caused by another drug e.g. atypical antipsychotic for depression followed by weight loss drug and fibrate
- Or a steroid for COPD followed by a diabetes drug and several osteoporosis therapies
Caughey et al. estimated that a prescribing cascade associated with prochlorperazine led to a 49% increased risk of hospitalisation for hip fracture.

“Adverse drug reactions (ADR) precipitate the prescribing cascade, so the key to preventing prescribing cascades is the avoidance and early detection of adverse drug reactions”


i.e. ADRs are sometimes misperceived as new diseases

(Skinner T, Scott I, Martin J.H.; Int. Journal of General Medicine, 2016)
Why is this recommendation important for patient care?

• Prescribing cascades are precipitated by adverse reactions to therapeutics prescribed and then ironically cause additional adverse reactions. Thus recognising a cascade is an essential element of quality use of medicines.

• Cascades can be prevented by avoidance and early detection of the initial adverse drug reaction e.g.
  – start treatment at low doses and titrate to effect
  – consider the potential for an adverse drug reaction to be the cause of any new symptoms, particularly if a drug has been recently started or changed
  – when such reactions occur, non-drug treatment strategies should be considered the most appropriate first-line treatment
Which healthcare practitioners is this recommendation relevant to?

- Clinical pharmacologists
- Hospital pharmacists
- General practitioners - may be managing multiple directives from multiple sub-specialty units
- General Physicians who may see patient first
- Subspecialist physicians whose treatments have a high therapeutics component e.g. geriatric medicine physicians and oncologists
- Emergency Doctors