

Drugs to be Avoided in the Elderly Initiative

Gateway Health Plansm (Gateway) has initiated a quality improvement activity to evaluate the medication profiles of our *Medicare Assured* members who are at least 65 years old and are taking at least one of the most frequently used drugs that are deemed to be potentially harmful to an elderly patient according to the Beers List. The Beers criteria are based on expert consensus developed through an extensive literature review with a bibliography and questionnaire evaluated by nationally recognized experts in geriatric care, clinical pharmacology, and psychopharmacology.

Network physicians may receive a letter informing them that a Gateway patient under his or her care is receiving a potentially harmful medication based upon the above criteria. We ask that the physician evaluate this therapy to determine if there are safer alternatives considering the member's age and medical condition.

A copy of the Beers List can be obtained at www.dcri.duke.edu/ccge/curtis/beers.html. Please take some time to review any opportunities to apply the Beers Criteria to applicable patients as this may decrease the possibility of potential drug related adverse reactions in the elderly.

The following list provides the rationale why specific medications are on the Beers List and alternative medications that can be prescribed.

Beers List Alternatives

Frequently Used Medications On The Beers List	Beers Rationale	Alternative Medication Recommendations
Propoxyphene Containing Products	Offers few analgesic advantages over Acetaminophen, yet exhibits adverse effects of other narcotic drugs, including fall risk	Acetaminophen w/o Codeine, Morphine
Meperidine	Not an effective oral analgesic in doses commonly used. May cause confusion and is highly recognized for possibility of seizures	Morphine, Codeine and Fentanyl patches
Indomethacin Naproxen Piroxicam Ketorolac	Of all the NSAID's available, these cause the most CNS adverse effects	Ibuprofen, Diclofenac
Amitriptyline Doxepin Fluoxetine	Its strong anticholinergic and sedation properties make this a poor choice of antidepressants for the elderly	Remeron, Celexa, Zoloft, or other TCA's such as Desipramine or Nortriptyline.
Flurazepam* Diazepam* Clorazepate* Chlordiazepoxide*	These drugs have reduced clearance and therefore longer half lives. Sedation and increased risk of falls are problematic in the elderly. Shorter acting benzodiazepines are preferred	Lorazepam*, Temazepam*, Clonazepam*

Fluoxetine	Long half life of near 2 weeks produces excessive CNS stimulation, sleep disturbances and increased agitation	Shorter acting SSRI's: Citalopram, Paroxetine, Sertraline
Clonidine	Potential for orthostatic hypotension and CNS side effects	Dependent on clinical scenario and comorbidities but may include: ACE-inhibitors, Ca++ channel blockers, Beta-blockers and ARB's
Short Acting Nifedipine	Potential for hypotension and constipation	Longer acting Nifedipine, Felodipine or Amlodipine
Hydroxyzine Diphenhydramine Cyproheptadine Dexchlorpheniramine Promethazine	Nonprescription and many prescription antihistamines have potent anticholinergic properties	Fexofenadine, Loratadine
Digoxin	Decreased renal clearance leads to toxic effects and narrow therapeutic window	Periodic Digoxin Serum levels to ensure appropriateness of dose. Also specific renal testing as a monitoring tool.
Ticlopidine	Has been shown to be no better than aspirin in preventing clotting and may be considerably more toxic	ASA, Clopidogrel
Cimetidine	CNS effects including confusion	Ranitidine*
Desiccated Thyroid	Concerns about cardiac effects	Levothyroxine without T3 component
Meprobamate	Highly addictive and sedating	Buspirone
Thioridazine	Greater potential for CNS and extrapyramidal side effects	Abilify, Geodon, Zyprexa, Prolixin
Amphetamines	Potential for dependence, angina, hypertension, and MI	Strattera
All barbituates except Phenobarbital	Highly addictive and causes more adverse effects than most sedatives or hypnotic drugs	Phenobarbital*
Dicyclomine, Propantheline	Highly anticholinergic, uncertain effectiveness	No preferred agents
Atropine, Hyoscyamine, Scopolamine	Strongly anticholinergic	Paregoric
Soma, Flexeril, Skelaxin, Robaxin, Norflex	Poorly tolerated in elderly, anticholinergic effects, sedation and weakness	Baclofen, Dantrium

Oral estradiol, estrogen	No cardioprotective effect. Risk of breast/endometrial cancer	No preferred agents
Chlorpropamide	Prolonged half life in elderly, prolonged hypoglycemia.	Glyburide, Glipizide
Dipyridamole, Isoxsuprine, Cyclandelate	May cause orthostatic hypotension	Hydralazine, minoxidil
Nitrofurantoin	May cause renal impairment	Trimethoprim, Methenamine mandalate
Methyltestosterones	Potential for prostatic hypertrophy and cardiac problems	Danazol

* Not Covered under Medicare Part D

References:

Fick DM et al. Updating the Beers criteria for potentially inappropriate use in older adults: Results of a consensus panel of experts. Archives of internal medicine. 2003 Dec 8-22;163(22):2716-24, American Medical Association.

<http://prodruginfo.com/Formulary/MedicationSafety/beers%20list%203.pdf>