

## Potentially Harmful Drug-Disease Interactions in the Elderly

### Potentially Harmful Drugs—Rate 1 Medications

Description	Prescription				
Anticonvulsants	<ul style="list-style-type: none"> <li>Carbamazepine</li> <li>Clobazam</li> <li>Divalproex sodium</li> <li>Ethosuximide</li> <li>Ethotoin</li> </ul>	<ul style="list-style-type: none"> <li>Ezogabine</li> <li>Felbamate</li> <li>Fosphenytoin</li> <li>Gabapentin</li> <li>Lacosamide</li> </ul>	<ul style="list-style-type: none"> <li>Lamotrigine</li> <li>Levetiracetam</li> <li>Methsuximide</li> <li>Oxcarbazepine</li> <li>Phenobarbital</li> </ul>	<ul style="list-style-type: none"> <li>Phenytoin</li> <li>Pregabalin</li> <li>Primidone</li> <li>Rufinamide</li> <li>Tiagabine HCL</li> </ul>	<ul style="list-style-type: none"> <li>Topiramate</li> <li>Valproate sodium</li> <li>Valproic acid</li> <li>Vigabatrin</li> <li>Zonisamide</li> </ul>
SSRIs	<ul style="list-style-type: none"> <li>Citalopram</li> <li>Escitalopram</li> </ul>	<ul style="list-style-type: none"> <li>Fluoxetine</li> </ul>	<ul style="list-style-type: none"> <li>Fluvoxamine</li> </ul>	<ul style="list-style-type: none"> <li>Paroxetine</li> </ul>	<ul style="list-style-type: none"> <li>Sertraline</li> </ul>

### Potentially Harmful Drugs—Rate 1 and Rate 2 Medications

Description	Prescription				
Antipsychotics	<ul style="list-style-type: none"> <li>Aripiprazole</li> <li>Asenapine</li> <li>Brexipiprazole</li> <li>Cariprazine</li> <li>Chlorpromazine</li> </ul>	<ul style="list-style-type: none"> <li>Clozapine</li> <li>Fluphenazine</li> <li>Haloperidol</li> <li>Iloperidone</li> </ul>	<ul style="list-style-type: none"> <li>Loxapine</li> <li>Lurasidone</li> <li>Molindone</li> <li>Olanzapine</li> </ul>	<ul style="list-style-type: none"> <li>Paliperidone</li> <li>Perphenazine</li> <li>Pimozide</li> <li>Quetiapine</li> <li>Risperidone</li> </ul>	<ul style="list-style-type: none"> <li>Thioridazine</li> <li>Thiothixene</li> <li>Trifluoperazine</li> <li>Ziprasidone</li> </ul>
Benzodiazepines	<ul style="list-style-type: none"> <li>Alprazolam</li> <li>Chlordiazepoxide products</li> </ul>	<ul style="list-style-type: none"> <li>Clonazepam</li> <li>Clorazepate-dipotassium</li> <li>Diazepam</li> </ul>	<ul style="list-style-type: none"> <li>Estazolam</li> <li>Flurazepam HCL</li> </ul>	<ul style="list-style-type: none"> <li>Lorazepam</li> <li>Midazolam HCL</li> <li>Oxazepam</li> </ul>	<ul style="list-style-type: none"> <li>Quazepam</li> <li>Temazepam</li> <li>Triazolam</li> </ul>
Nonbenzodiazepine hypnotics	<ul style="list-style-type: none"> <li>Eszopiclone</li> </ul>	<ul style="list-style-type: none"> <li>Zaleplon</li> </ul>			
Tricyclic antidepressants	<ul style="list-style-type: none"> <li>Amitriptyline</li> <li>Amoxapine</li> </ul>	<ul style="list-style-type: none"> <li>Clomipramine</li> <li>Desipramine</li> </ul>	<ul style="list-style-type: none"> <li>Doxepin (&gt;6 mg)</li> <li>Imipramine</li> </ul>	<ul style="list-style-type: none"> <li>Nortriptyline</li> <li>Protriptyline</li> </ul>	<ul style="list-style-type: none"> <li>Trimipramine</li> </ul>

### Dementia Medications

Description	Prescription
Cholinesterase inhibitors	<ul style="list-style-type: none"> <li>Donepezil</li> <li>Galantamine</li> <li>Rivastigmine</li> </ul>
Miscellaneous central nervous system agents	<ul style="list-style-type: none"> <li>Memantine</li> </ul>

### Potentially Harmful Drugs—Rate 2 Medications

Description	Prescription				
H <sub>2</sub> receptor antagonists	<ul style="list-style-type: none"> <li>Cimetidine</li> </ul>	<ul style="list-style-type: none"> <li>Famotidine</li> </ul>	<ul style="list-style-type: none"> <li>Nizatidine</li> </ul>	<ul style="list-style-type: none"> <li>Ranitidine</li> </ul>	
Anticholinergic agents, antiemetics	<ul style="list-style-type: none"> <li>Prochlorperazine</li> </ul>	<ul style="list-style-type: none"> <li>Promethazine</li> </ul>			
Anticholinergic agents, antihistamines	<ul style="list-style-type: none"> <li>Carbinoxamine</li> <li>Chlorpheniramine</li> <li>Hydroxyzine</li> </ul>	<ul style="list-style-type: none"> <li>Brompheniramine</li> <li>Clemastine</li> <li>Tripolidine</li> </ul>	<ul style="list-style-type: none"> <li>Cyproheptadine</li> <li>Dimenhydrinate</li> <li>Diphenhydramine</li> </ul>	<ul style="list-style-type: none"> <li>Dexbrompheniramine</li> <li>Dexchlorpheniramine</li> </ul>	<ul style="list-style-type: none"> <li>Doxylamine</li> <li>Meclizine</li> </ul>
Anticholinergic agents, antispasmodics	<ul style="list-style-type: none"> <li>Atropine</li> <li>Homatropine</li> </ul>	<ul style="list-style-type: none"> <li>Belladonna alkaloids</li> <li>Dicyclomine</li> </ul>	<ul style="list-style-type: none"> <li>Hyoscyamine</li> <li>Propantheline</li> </ul>	<ul style="list-style-type: none"> <li>Scopolamine</li> <li>Clidinium-chlordiazepoxide</li> </ul>	
Anticholinergic agents, antimuscarinics (oral)	<ul style="list-style-type: none"> <li>Darifenacin</li> <li>Solifenacin</li> </ul>	<ul style="list-style-type: none"> <li>Fesoterodine</li> <li>Flavoxate</li> </ul>	<ul style="list-style-type: none"> <li>Oxybutynin</li> <li>Trospium</li> </ul>	<ul style="list-style-type: none"> <li>Tolterodine</li> </ul>	
Anticholinergic agents, anti-Parkinson agents	<ul style="list-style-type: none"> <li>Benzotropine</li> </ul>	<ul style="list-style-type: none"> <li>Trihexyphenidyl</li> </ul>			
Anticholinergic agents, skeletal muscle relaxants	<ul style="list-style-type: none"> <li>Cyclobenzaprine</li> </ul>	<ul style="list-style-type: none"> <li>Orphenadrine</li> </ul>			
Anticholinergic agents, SSRIs	<ul style="list-style-type: none"> <li>Paroxetine</li> </ul>				
Anticholinergic agents, antiarrhythmic	<ul style="list-style-type: none"> <li>Disopyramide</li> </ul>				

### Cox-2 Selective NSAIDs and Nonaspirin NSAIDs Medications

Description	Prescription				
Cox-2 Selective NSAIDs	<ul style="list-style-type: none"> <li>Celecoxib</li> </ul>				
Nonaspirin NSAIDs	<ul style="list-style-type: none"> <li>Diclofenac potassium</li> <li>Diclofenac sodium</li> <li>Etodolac</li> </ul>	<ul style="list-style-type: none"> <li>Fenoprofen</li> <li>Flurbiprofen</li> <li>Ibuprofen</li> <li>Indomethacin</li> </ul>	<ul style="list-style-type: none"> <li>Ketoprofen</li> <li>Ketorolac</li> <li>Meclofenamate</li> <li>Mefenamic acid</li> </ul>	<ul style="list-style-type: none"> <li>Meloxicam</li> <li>Nabumetone</li> <li>Naproxen</li> <li>Naproxen sodium</li> </ul>	<ul style="list-style-type: none"> <li>Oxaprozin</li> <li>Piroxicam</li> <li>Sulindac</li> <li>Tolmetin</li> </ul>

American Geriatrics Society 2015 Beers Criteria Update Expert Panel. American Geriatrics Society 2015 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc 2015, 63:2227-2246.

National Committee for Quality Assurance (2018). HEDIS 2019. Technical Specifications. Vol. 2 (pp. 273-278). Washington, D.C.