

Medicare Advantage Plans High Risk Medications in Older Adults: Drug Alternative(s)

Drug Class	Drug Names	Concern / Risk	Beers Recommendation	Formulary and OTC Alternative(s)* G = available generically; OTC = available over the counter
Antihypertensive	 Guanabenz Guanfacine Methyldopa Reserpine (>0.1 mg/day) 	High risk of adverse CNS effects; may cause bradycardia and orthostatic hypotension; not recommended as routine treatment for hypertension	Avoid use as an antihypertensive	 Hypertension: Angiotensin Converting Enzyme Inhibitor (ACE) Angiotensin Receptor Blocker (ARB) Thiazide Calcium Channel Blockers (CCBs) Long acting – dihydropyridine Calcium Channel Blockers African Americans – thiazide type diuretics or CCB
Analgesics	Ketorolac Indomethacin	Increases risk of GI bleeding and peptic ulcer disease in high-risk groups	Avoid	Mild pain: APAP (OTC) Moderate or Severe pain: morphine (G) hydrocodone/APAP (Vicodin®) (G) oxycodone/APAP (Percocet®) (G) Avoid chronic use
Antianxiety	Meprobamate	Dependence and sedation	Avoid	Anxiety: • buspirone (Buspar®) (G) • SSRI (G) • SNRI (G)
Anticholinergics (includes combination products)	 Brompheniramine Chlorpheniramine Clemastine Dexbrompheniramine Dexchlorpheniramine Diphenhydramine Doxylamine Hydroxyzine Promethazine 	Highly anticholinergic; clearance reduced with age	Avoid (Use of diphenhydramine in situations such as acute severe allergic reactions may be appropriate)	Allergic Rhinitis: Intranasal Normal Saline fexofenadine (Allegra®) (OTC) cetirizine (Zyrtec®) (OTC) Intranasal Steroid (G) –e.g., beclomethasone, fluticasone, over the counter Pruritus: Topical agents (OTC): menthol and camphor, oatmeal baths, calamine lotion Anti-emetic: see anti-emetic section below

Anti-emetics	Trimethobenzamide	Low efficacy and extrapyramidal adverse effects	Avoid	• ondansetron (Zofran®) (G)
Antiparkinson agents	Benztropine (oral)Trihexyphenidyl	Not recommended for prevention of extrapyramidal symptoms with antipsychotics. More effective options available for Parkinson disease	Avoid	Parkinson's Disease: Carbidopa/Levodopa (Sinemet [®] , Sinemet [®] CR) (G) Amantadine (G) (tremor) Avoid antipsychotics for behavioral problems of dementia unless non-pharmacologic options have failed and patient is a threat to themselves or others. Antipsychotics are associated with increased risk of cerebrovascular accident (stroke) and mortality in persons with dementia.
Antipsychotics, typical	ThioridazineMesoridazine	Highly anticholinergic; risk of QT interval prolongation	Avoid	 risperidone (Risperdal[®])^c (G) haloperidol (Haldol[®])^c (G) ^cAvoid antipsychotics for behavioral problems of dementia unless non-pharmacologic options have failed and patient is a threat to themselves or others. Antipsychotics are associated with increased risk of cerebrovascular accident (stroke) and mortality in persons with dementia.
Antithrombotics	Ticlopidine Dipyridamole, oral short acting (does not apply to the extended-release combination with aspirin)	Safer effective alternatives available May cause orthostatic hypotension; more effective alternatives available	Avoid	Stroke prevention: Iow-dose aspirin (OTC) clopidogrel (Plavix®) (G) aspirin/Extended- release Dipyridamole (Aggrenox®) PCI: clopidogrel (Plavix®) (G) Effient®d dUse caution in patients75 years of age and older.
Barbiturates	 Amobarbital Butabarbital Butalbital Mephobarbital Phenobarbital Pentobarbital 	High rate of physical dependence; tolerance to sleep benefits; risk of overdose at low dosages	Avoid	Sleep: • trazodone (Desyrel®)(G) Migraine: • APAP (OTC) For epilepsy other anticonvulsants (e.g., lamotrigine, levetiracetam)

Calcium channel blockers	Nifedipine (short-acting only)	Hypotension; risk of precipitating myocardial ischemia	Avoid	 nifedipine ER- long acting (Procardia XL[®]) (G) long acting dihydropyridine CCB (e.g. amlodipine)
Cardiovascular agents, other	Disopyramide	A potent negative inotrope and may induce heart failure in older adults; strongly anticholinergic	Avoid	Atrial fibrillation: • For rate control—nondihydropyridine CCB (e.g., diltiazem), betablocker • For rhythm control—dofetilide flecainide, propafenone
	Digoxin (>0.125 mg/d) in heart failure	In heart failure, higher dosages associated with no additional benefit and may increase risk of toxicity; slow renal clearance	Avoid	Heart Failure: Dose reduction, with monitoring
Hormones	Estrogen with or without progestin (oral and topical patch)	Carcinogenic potential; lack of cardioprotective effect and cognitive protection in older women	Avoid	Hot flashes: Nondrug therapy (cool environment, layered clothing, cool compress) SSRI SNRI – venlafaxine IR (Effexor®) (G) gabapentin (Neurontin®) (G) Bone density: calcium/vitamin D (OTC) bisphosphonates (G)
Hypnotics	Chloral hydrate	Tolerance occurs within 10 days; overdose risk outweighs benefit	Avoid	Sleep: • remeron (Rozerem®) (G) • melatonin <15mg total/day
	Non benzodiazepine Hypnotics use of >90 days Eszopiclone Zaleplon Zolpidem	Adverse events similar to those of benzodiazepines in older adults (e.g., falls, delirium); minimal improvement in sleep latency and duration	Avoid chronic use (>90 days)	

Narcotics (includes combination products)	Meperidine Pentazocine	Not an effective oral analgesic in dosages commonly used; may cause neurotoxicity; safer alternatives available Causes more CNS adverse effects than other narcotic drugs; is a mixed agonist and antagonist; safer alternatives available	Avoid	Mild pain: APAP (OTC) Moderate or Severe pain: morphine (G) hydrocodone/APAP (Vicodin®) (G) oxycodone/APAP (Percocet®) (G) Avoid chronic use For chronic moderate to severe pain morphine (G) oxycodone/APAP (Percocet®) (G) tramadol (Ultram®) (G) avoid long-duration, sustained-release dosage forms in opioid-naïve individuals
Oral hypoglycemics	ChlorpropamideGlyburide	Prolonged hypoglycemia	Avoid	 glimepiride (Amaryl[®]) (G) glipizide (Glucotrol[®]) (G) metformin (Glucophage[®]) (G)
Skeletal muscle relaxants (as a single agent or in combination)	 Cyclobenzaprine Carisoprodol Chlorzoxazone Metaxalone Methocarbamol Orphenadrine 	Poorly tolerated by older adults because of anticholinergic adverse effects, sedation, risk of fracture; questionable efficacy at doses tolerated by elderly	Avoid	Non-drug therapy: • physiotherapy; corrective seating and footwear Spasticity: • baclofen (Lioresal®) (G) • tizanidine (Zanaflex®) (G)
Tertiary TCA's (single agent or as part of a combination product)	 Amitriptyline Clomipramine Doxepin (>6mg/day) Imipramine Trimipramine 	Anticholinergic effects , sedation, orthostatic hypotension, delirium	Avoid	Depression: SSRI (G) – except paroxetine SNRI (G) Bupropion (Wellbutrin®)(G) Neuropathic pain: SNRI (G) capsaicin topical Pregablin (Lyrica®) Lidocaine patch (Lidoderm®) Insomnia: see hypnotics section

Vasodilators	Isoxsuprine	Lack of efficacy	Avoid	Acetylcholinesterase inhibitors, memantine, Vitamin E
	Ergot mesylate	Lack of efficacy	Avoid	Alzheimer's disease: • donepezil (Aricept®) (G) • rivastigmine (Exelon®) (G) • Vitamin E Migraine: • APAP (OTC)
Others (Thyroid drugs, Urinary anti-infectives)	Desiccated thyroid	Concerns about cardiac effects; safer alternatives available	Avoid	levothyroxine (Levoxyl [®] , Synthroid [®]) (G)
	Nitrofurantoin (chronic use)	Potential for pulmonary toxicity; safer alternatives available; lack of efficacy in CrCl < 60 mL/min due to inadequate drug concentrations in the urine	Avoid for long-term suppression; avoid in patients with CrCl < 60 mL/min	Confirmed UTI: TMP-SMX (Bactrim DS®) (G) ciprofloxacin (Cipro®) (G) cephalexin (Keflex®) (G) trimethoprim (G)

^{*}Formulary Tiers vary by Plan. Please check patient's benefits for formulary status and coverage of medication and dosage form.

In some instances when generics are available, the brand product may not be covered.

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