### Alternatives to the Most-prescribed HMSA High-risk Medication (HRM) List 2017

Items in **bold** are on the 2017 HMSA formulary.

#### Drugs to Avoid | Concern | Possible Alternatives
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**eszopiclone**<br>zolpidem<br>zaleplon** | Cognitive impairment, delirium, unsteady gait, syncope, falls, motor vehicle accidents, fractures, sleep behaviors, and anterograde amnesia with minimal improvement in sleep latency and duration. | Nonpharmacologic therapy (e.g., avoid daytime naps and caffeinated beverages, and other sleep hygiene techniques), assess for treatment for depression and anxiety. Alternative medications for sleep: *trazodone* or *temazepam*. **methyldopa** | High risk of adverse CNS effects; may cause bradycardia and orthostatic hypotension. | Consider thiazide diuretics (HCTZ, indapamide, metolazone); ACEI (benazepril, captopril, enalapril, fosinopril, lisinopril, quinapril, ramipril, trandolapril); ARBs (irbesartan, losartan, valsartan); long-acting dihydypyrindine calcium channel blockers (amlodipine, felodipine, nifedipine ER). Consider rate control before rhythm control; monitor SCr and digoxin levels (free digoxin level). **digoxin** | In heart failure, high dosages are associated with no additional benefit; decreased clearance may lead to risk of toxic effects. | For uncomplicated cystitis: *trimethoprim* or *TMP-SMX*. Consider patient's allergy history, renal adjustment, and other risk factors and local resistance patterns. **nitrofurantoin** | Potential for pulmonary toxicity; hepatotoxicity and peripheral neuropathy with long-term use. Avoid in patients with CrCl <30 mL/min due to inadequate drug concentration in the urine. | For experimental cystitis: *trimethoprim* or *TMP-SMX*. Consider patient's allergy history, renal adjustment, and other risk factors and local resistance patterns. **amitriptyline**<br>clomipramine<br>doxepin >6 mg/day<br>imipramine** | Highly anticholinergic, (i.e., constipation, dry mouth), cognitive impairment, delirium, sedation orthostatic hypotension. | For depression: SSRI (citalopram, escitalopram, fluoxetine, sertraline), SNRI ( duloxetine, venlafaxine), or others (bupropion, mirtazapine) can be selected based on adverse effect profiles, cost, and patient preferences. For neuropathic pain: gabapentin, duloxetine, pregabalin. For insomnia: non-drug therapy, low-dose *trazodone*, or *temazepam*. Consider psychotherapy, ECT, or light therapy. **megestrol** | Minimal effect on weight; increases risk of thrombotic events and possibly death in older adults. | Determine underlying cause of weight loss; are other medications causing anorexia? Maximize nutritional supplementation. Consider mirtazapine for depressed patient (side effect profile may increase appetite by 17% with potential 12% increase in weight) per package insert. **clemastine**<br>cyproheptadine<br>hydroxyzine<br>promethazine** | Potent anticholinergic properties; may cause sedation, constipation, dry mouth, and impair cognitive performance; clearance reduced in advanced age. | For urticaria: levocetirizine (not on QUEST Integration formulary) OTC antihistamines (e.g., cetirizine, fexofenadine, loratadine) (covered on QUEST Integration formulary). For allergic rhinitis: intranasal corticosteroids (flunisolide, fluticasone). OTC intranasal saline or corticosteroids (fluticasone, triamcinolone, budesonide). For emesis: consider ondansetron. **chlorpropamide**<br>glyburide** | Greater risk of severe prolonged hypoglycemia in older adults. Higher risk if patient has stages 3 to 5 chronic kidney disease. | glibenpiride glipizide metformin **carisoprodol**<br>chlorozoxazone<br>cyclobenzaprine<br>meprobamate<br>metaxalone<br>methocarbamol<br>orphenadrine** | Poorly tolerated because of anticholinergic adverse effects, sedation, and weakness; effectiveness at doses tolerated by older patients is questionable. | For muscle spasms: nonpharmacologic therapy (e.g., physiotherapy, heat or cold, and TENS); baclofen tizanidine. For pain: celecoxib, short-term acetaminophen (<3 grams per day). **benztropine (oral)**<br>trihexyphenidyl** | Highly anticholinergic. Not recommended for prevention of extrapyramidal symptoms with antipsychotics; more effective agents are available for treatment of Parkinson’s disease. | For antipsychotic induced EPS: the cornerstones of treatment are prevention, early detection, and management of potentially reversible causes. For Parkinson’s disease: amantadine, carbidopa/levodopa (+/- entacapone), pramipexole, ropinirole, or selegiline. **NSAIDs** | Elevation of blood pressure, impairment of renal function, increased risk of GI bleeding and peptic ulcer disease in high-risk groups (age >75 taking corticosteroids, anticoagulants, or antiplatelets). | Consider a COX-2 selective NSAID (e.g., celecoxib) or OTC acetaminophen (<3 grams per day).