COMMONLY PRESCRIBED MEDICATIONS IN THE ELDERLY & THEIR COMPLICATIONS

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OBJECTIVES

• How common in the elderly is complications from drugs?
• Why is it so challenging to prescribe to the elderly?
• What is cascading?
• List one drug/drug class which is considered inappropriate for use in the elderly and their alternatives.
• What can you do to help?
HOW COMMON IS POLYPHARMACY IN ELDERLY?

• How many meds do the elderly use*:
  • 81% use at least 1 medication
  • 50% use more than 5 medications
  • 46% also use OTCs

• Frequency of Adverse Drug Reactions:
  • Outpatients 10 – 35%
  • Post Discharge – 15%
  • Hospital – 6.7%

• 72% of adverse drug events (ADEs) in primary care and 42% of ADEs in long-term care are preventable.

• Potentially Inappropriate Medications: 7.2 billion

• 4th or 5th most common cause of death

*N Engl J Med 2004; 351:2870
WHY IS POLYPHARMACY SUCH AN ISSUE WITH THE ELDERLY?

• Premarketing drug trials often exclude geriatric patients
  • Approved doses may not be appropriate for older adults
• Kidney function declines
• Drug clearance declines
• Toxic metabolites increase
• Protein levels change = more “free drug”
• More fat = change in kinetics of drug clearance
• Multiple illnesses mean multiple medications
• Multiple meds = multiple drug interactions
Prescribing cascades occur when a new drug is prescribed to treat symptoms arising from an unrecognized adverse drug event related to an existing therapy.

Then patient is at risk for developing additional Adverse drug events

**Examples of prescribing cascades**

<table>
<thead>
<tr>
<th>Initial drug therapy</th>
<th>Adverse drug event</th>
<th>Subsequent drug therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antipsychotics</td>
<td>Extrapyramidal signs and symptoms</td>
<td>Antiparkinsonian therapy</td>
</tr>
<tr>
<td>Cholinesterase inhibitors</td>
<td>Urinary incontinence</td>
<td>Incontinence treatment</td>
</tr>
<tr>
<td>Thiazide diuretics</td>
<td>Hyperuricemia</td>
<td>Gout treatment</td>
</tr>
<tr>
<td>NSAIDs</td>
<td>Increased blood pressure</td>
<td>Antihypertensive therapy</td>
</tr>
</tbody>
</table>

Medication prescribing cascades occur when patients are prescribed medications to treat the adverse side effects of previously prescribed medications. This leads to polypharmacy and further increases the risk for adverse drug events. Periodic review of medication lists, especially in older adults, can minimize this risk.

MEDICATIONS THAT MAY CAUSE ISSUES IN THE ELDERLY
## Frequency of adverse drug events by type

<table>
<thead>
<tr>
<th>Type</th>
<th>Total adverse drug events (n = 815) N (percent)</th>
<th>Preventable adverse drug events (n = 338) N (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuropsychiatric</td>
<td>199 (24)</td>
<td>97 (29)</td>
</tr>
<tr>
<td>Hemorrhagic</td>
<td>159 (20)</td>
<td>53 (16)</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>140 (17)</td>
<td>55 (16)</td>
</tr>
<tr>
<td>Renal/electrolytes</td>
<td>80 (10)</td>
<td>40 (12)</td>
</tr>
<tr>
<td>Metabolic/endocrine</td>
<td>64 (8)</td>
<td>35 (10)</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>36 (4)</td>
<td>15 (4)</td>
</tr>
<tr>
<td>Dermatologic</td>
<td>36 (4)</td>
<td>4 (1)</td>
</tr>
<tr>
<td>Extrapyramidal symptoms</td>
<td>30 (4)</td>
<td>7 (2)</td>
</tr>
<tr>
<td>Fall with injury</td>
<td>21 (3)</td>
<td>17 (5)</td>
</tr>
<tr>
<td>Fall without injury</td>
<td>21 (3)</td>
<td>11 (3)</td>
</tr>
<tr>
<td>Infection</td>
<td>19 (2)</td>
<td>1 (&lt;1)</td>
</tr>
<tr>
<td>Syncope/dizziness</td>
<td>16 (2)</td>
<td>8 (2)</td>
</tr>
<tr>
<td>Anticholinergic</td>
<td>9 (1)</td>
<td>3 (1)</td>
</tr>
<tr>
<td>Ataxia/difficulty with gait</td>
<td>9 (1)</td>
<td>5 (2)</td>
</tr>
<tr>
<td>Hematologic</td>
<td>8 (1)</td>
<td>3 (1)</td>
</tr>
<tr>
<td>Respiratory</td>
<td>6 (1)</td>
<td>4 (1)</td>
</tr>
<tr>
<td>Anorexia</td>
<td>3 (&lt;1)</td>
<td>2 (&lt;1)</td>
</tr>
<tr>
<td>Functional decline</td>
<td>3 (&lt;1)</td>
<td>2 (&lt;1)</td>
</tr>
<tr>
<td>Hepatic</td>
<td>1 (&lt;1)</td>
<td>1 (&lt;1)</td>
</tr>
</tbody>
</table>

Adverse drug events could manifest as more than one type. Neuropsychiatric events include oversedation, confusion, hallucinations, and delirium. Anticholinergic effects include dry mouth, dry eyes, urinary retention, and constipation.

• More than 7 million Americans suffer from dementia or mild cognitive impairment
  • 50% are coping with at least 2 additional chronic diseases that require treatment with more than 5 medications
• Elderly population is sensitive to experiencing drug related adverse effects that can negatively impact their cognitive function, i.e. anticholinergics
• Over 9 million older Americans, including those with cognitive impairment are prescribed at least one anticholinergic with negative cognitive effect
ANTI CHOLINERGIC SIDE EFFECTS

- Dry Eyes
- Dry Mouth
- Tachycardia
- Constipation
- Urinary Retention
- Confusion and Delirium
- Tremulousness and Twitching
Drugs believed to cause or prolong delirium or confusional states

<table>
<thead>
<tr>
<th>Analgesics</th>
<th>Corticosteroids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonsteroidal anti-inflammatory</td>
<td>Dopamine agonists</td>
</tr>
<tr>
<td>agents</td>
<td>Amantadine</td>
</tr>
<tr>
<td>Opioids (especially meperidine)</td>
<td>Bromocriptine</td>
</tr>
<tr>
<td></td>
<td>Lavedopa</td>
</tr>
<tr>
<td>Antibiotics and antivirals</td>
<td>Percolide</td>
</tr>
<tr>
<td>Acyclovir</td>
<td>Pramipexole</td>
</tr>
<tr>
<td>Aminoglycosides</td>
<td>Reponirole</td>
</tr>
<tr>
<td>Amphotericin B</td>
<td></td>
</tr>
<tr>
<td>Antimalarials</td>
<td></td>
</tr>
<tr>
<td>Cephalosporins</td>
<td></td>
</tr>
<tr>
<td>Cidoxyone</td>
<td></td>
</tr>
<tr>
<td>Fluoroquinolones</td>
<td>Gastrointestinal agents</td>
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<tr>
<td>Isoniazid</td>
<td>Antiemetics</td>
</tr>
<tr>
<td>Interferon</td>
<td>Antispasmodics</td>
</tr>
<tr>
<td>Linezolid</td>
<td>Histamine-2 receptor</td>
</tr>
<tr>
<td>Macrolides</td>
<td>blockers</td>
</tr>
<tr>
<td>Metronidazole</td>
<td>Loperamide</td>
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<tr>
<td>Nalidixic acid</td>
<td></td>
</tr>
<tr>
<td>Penicillins</td>
<td>Herbal preparations</td>
</tr>
<tr>
<td>Rifampin</td>
<td>Atropa belladonna extract</td>
</tr>
<tr>
<td>Sulfonamides</td>
<td>Henbane</td>
</tr>
<tr>
<td></td>
<td>Mandrake</td>
</tr>
<tr>
<td>Anticholinergics</td>
<td>Jimson weed</td>
</tr>
<tr>
<td>Atropine</td>
<td>St. John's Wort</td>
</tr>
<tr>
<td>Benztropine</td>
<td>Valarian</td>
</tr>
<tr>
<td>Diphenhydramine</td>
<td></td>
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<tr>
<td>Scopolamine</td>
<td>Hypoglycemics</td>
</tr>
<tr>
<td>Trihexyphenidyl</td>
<td></td>
</tr>
<tr>
<td>Anticonvulsants</td>
<td>Hypnotics and sedatives</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>Barbiturates</td>
</tr>
<tr>
<td>Labetalol</td>
<td>Benzodiazepines</td>
</tr>
<tr>
<td>Phenytoin</td>
<td>Muscle relaxants</td>
</tr>
<tr>
<td>Valproate</td>
<td>Baclofen</td>
</tr>
<tr>
<td>Vigabatrin</td>
<td>Cyclobenzapine</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>Other CNS-active agents</td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>Cisuliriam</td>
</tr>
<tr>
<td>Selective serotonin reuptake inhibitors</td>
<td>Cholinesterase inhibitors (eg, donepezil)</td>
</tr>
<tr>
<td>Tricyclic antidepressants</td>
<td>Interleukin-2</td>
</tr>
<tr>
<td>Cardiovascular and hypertension drugs</td>
<td>Lithium</td>
</tr>
<tr>
<td>Antarrhythmics</td>
<td>Phenothiazines</td>
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<tr>
<td>Beta blockers</td>
<td></td>
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<tr>
<td>Clonidine</td>
<td></td>
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<tr>
<td>Digoxin</td>
<td></td>
</tr>
<tr>
<td>Diuretics</td>
<td></td>
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<tr>
<td>Methyldopa</td>
<td></td>
</tr>
</tbody>
</table>

* Not exhaustive; all medications should be considered.
# Anticholinergic activity of medications and other substances

<table>
<thead>
<tr>
<th>Class</th>
<th>Drugs</th>
<th>Relative anticholinergic potency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antihistamines</strong></td>
<td>H&lt;sub&gt;1&lt;/sub&gt; receptor antagonists (1&lt;sup&gt;st&lt;/sup&gt; generation, eg, brompheniramine, carboxamine, chlorpheniramine, demestamine, cyproheptadine, dimenhydinate, diphenhydramine, doxepin, doxylamine, hydroxyzine, meclizine, triprolidine, others)</td>
<td>High</td>
</tr>
<tr>
<td><strong>Antihistamines</strong></td>
<td>H&lt;sub&gt;2&lt;/sub&gt; receptor antagonists (2&lt;sup&gt;nd&lt;/sup&gt; generation, eg fexofenadine, cetirizine*, loratadine, desloratadine, levocetirizine, others)</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Antiparkinson</strong></td>
<td>Benztropine, trihexyphenidyl</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Amantadine, bromocriptine, entacapone</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Antispasmodic</strong></td>
<td>Dicyclomine, oxybutynin, oxybutynin, solifenacin, tolterodine, trospium</td>
<td>High</td>
</tr>
<tr>
<td><strong>Antimuscarinic</strong></td>
<td>Atropine, chinidium-hyoscine, dicyclomine, hyoscyamine, glycopyrrolate, homatropine, methscopolamine, propantheline, scopalamine (hyoscine)</td>
<td>High</td>
</tr>
<tr>
<td><strong>Antimuscarinic, inhaled</strong></td>
<td>Ipratropium, bitolterodine</td>
<td>High (local effect)</td>
</tr>
<tr>
<td><strong>Antimuscarinic, ophthalmic drops</strong></td>
<td>Atropine, cyclopentolate, homatropine, scopalamine</td>
<td>High (local effect)</td>
</tr>
<tr>
<td><strong>Cardiovascular</strong></td>
<td>Dihydropyridine</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Gastrointestinal</strong></td>
<td>Antimecaline (eg, hyoscyamine, medine, promethazine, scopalamine); also refer to 1&lt;sup&gt;st&lt;/sup&gt; generation antihistamines above</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Dompipride, loperamide, prochlorperazine</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Muscle relaxant</strong></td>
<td>Orphenadrine, tizanidine</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Cyclobenzaprine&lt;sup&gt;**&lt;/sup&gt;, balofen, methocarbamol</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Psychotropic</strong></td>
<td>Antipsychotics 1&lt;sup&gt;st&lt;/sup&gt; generation: chlorpromazine, fluphenazine, loxapine, methotrimeprazine (levomepromazine), thioridazine, trifluoperazine</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Antipsychotics 2&lt;sup&gt;nd&lt;/sup&gt; generation: doxepin</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Antipsychotics 3&lt;sup&gt;rd&lt;/sup&gt; generation: haloperidol, perphenazine&lt;sup&gt;**&lt;/sup&gt;, others</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Muscle relaxant</strong></td>
<td>Orphenadrine, tizanidine</td>
<td>High</td>
</tr>
<tr>
<td><strong>Psychotropic</strong></td>
<td>Selective serotonin receptor antagonists (SSRI) antidepressants:</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Citalopram, fluoxetine, fluvoxamine, paroxetine&lt;sup&gt;**&lt;/sup&gt;</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Other neurologic</strong></td>
<td>Carbamazepine, lithium, nefazodone, oxcarbazepine, phenelzine, trazodone</td>
<td>Low</td>
</tr>
</tbody>
</table>

## Other substances

<table>
<thead>
<tr>
<th>Class</th>
<th>Drugs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plants</strong></td>
<td>Angel’s trumpet (Brugmansia species); Deadly nightshade (Atropa belladonna); Henbane (Hyoscyamus niger); Jimson weed (Datura stramonium); Mandrake (Drimia maritima); Moonflower (Datura inoxia); Muscarine mushroom species (particularly Citocybe and mexueby; other muscarine-containing mushrooms include: Amarantus, Entoloma, and Mycena species); Nightshade species: American nightshade (Solanum americanum), Bittersweet woody nightshade (Solanum dulcamara), Black (common) nightshade (Solanum nigrum)</td>
</tr>
</tbody>
</table>

A large number of medicines are reported to have some anticholinergic activity and considerable variation exists in potency rankings assigned to specific drugs using available anticholinergic risk scales and in expert lists; this list is not exhaustive. Increasing dose and additive effects from simultaneous use of more than one anticholinergic drug can alter the anticholinergic activity rating provided in this table.

* Classified as moderate or high anticholinergic potency in some references or variable effects reported.

** Intravenous famotidine use has been associated with central nervous system (CNS) effects (eg, delirium and confusion) in hospitalized older adults and patients with renal function impairment; this may be due to a central anticholinergic effect.

Courtesy of Paula A Rochon, MD and Stephen J Traub, MD with additional data from:
HRM: MUSCLE RELAXANTS USE IN THE ELDERLY

• Why are muscle relaxants a concern for older adults?
  • Can lead to grogginess and confusion
  • Increase risk of falls
  • Can also cause constipation, dry mouth, and problems urinating

• Plus…
  • Little evidence that they work well
  • NO study on muscle relaxant medications has ever focused on an elderly population.
  • Never been consistently demonstrated to improve muscle spasms in older adults.
Muscle Relaxants considered HRMs:

- Metaxalone (Skelaxin)
- Carisoprodol (Soma, Carisoma, Sodol)
- Methocarbamol (Marbaxin, Robaxin)
- Chlorzoxazone (Parafon Forte, Remular)
- Orphenadrine (Flexon, Norgesic, Norflex)
- Cyclobenzaprine (Flexeril)

ALTERNATIVES within Muscle Relaxants

- Baclofen (Lioresal, Baclosan)
- Tizanidine (Zanaflex)
QUESTIONS FOR MUSCLE RELAXANTS

• Do you feel tired or groggy?
• Sleeping more in the daytime? Falling asleep unexpectedly?
• Explain what confusion is…
  • Inability to think as clearly or quickly as you normally do.
  • May feel disoriented and have difficulty paying attention, remembering, and making decisions.
ALTERNATIVES FOR MUSCLE RELAXANTS

• For Spasticity:
  • Baclofen
  • Tizanidine

• For Musculoskeletal Pain:
  • Oral NSAIDs, Voltaren gel, Cymbalta
  • May consider non-pharmacologic treatments, such as cryotherapy, heat, massage, stretching/exercise, and transcutaneous electrical nerve stimulation (TENS)
Non-Benzodiazepine Hypnotics include: Eszopiclone (Lunesta), Zolpidem (Ambien), Zaleplon (Sonata)

There is currently no evidence to support the long-term use of these agents. These medications are meant to be taken on an as needed basis (generally no more than 3 days per week), not every night.

The efficacy and safety of these medications have not been proven when using these agents for longer than 3 months.

In general, these medications are recommended for short-term use (1-4 weeks). They have limited value in improving sleep when used for longer periods of time.
What are the risks associated with taking these medications?

- Increased risk of falls (especially at night)
- Memory impairment
- Headaches
- Cognitive impairments/amnesia
- Daytime sedation
- Motor incoordination
- Complicated sleep behaviors (Increased risk of motor vehicle accidents, sleep eating)
- Addiction
- Development of tolerance
- Rebound insomnia
What are some pharmacological alternatives to the medications listed above?

- Rozerem
- Silenor

Encourage member to discuss the medications listed above with their doctor or pharmacist.

Encourage member to address possible root causes of their sleeping problems (ie. other medical conditions, medications) with their doctor.

Encourage member to try nonpharmacological alternatives (with the guidance of their doctor) to aid in treating their sleeping problems.
What are some alternative ways to manage insomnia?

- Don’t watch t.v. before bed or while trying to fall asleep
- Don’t eat right before going to bed; have a light snack if hungry
- Sleep in a dark and quiet room at a cool temperature; try using a fan or other machine that will provide a white noise to help you fall asleep
- Try relaxation techniques while lying in bed
- Reflect on attitudes and beliefs about sleep
- Avoid taking long afternoon naps
NON-BENZODIAZEPINE HYPNOTICS

- Address any mental health concerns such as depression and/or anxiety
  Keep a sleep log
- Get up at a consistent time and go to bed at a consistent time
- If you find that you cannot fall asleep within 30 minutes, try reading or another quiet activity until you become sleepy
- Exercise each day, but not before bedtime
- Limit or eliminate alcohol, caffeine, nicotine, especially within 4 hours of bedtime
- Get into a bedtime routine in preparing for bedtime
- Wear something comfortable to bed
ANTI-HYPERTENSIVES

• Studies typically do not include elderly population when determining appropriate dosing
  • Low risk of fall injuries reported in clinical trials with healthy adults or healthy older adults is not reflective the risk in an older adult with multiple chronic diseases
• Some clinical trials have associated with serious fall injuries (including hip and other major fractures, …)
• Many elderly require multiple anti-hypertensives to reach treatment goals, but this can change as they age
  • Loss of weight, decreased renal function, ……..
• Postural changes in blood pressure or low blood pressure
• Monitor blood pressure, sit at the side of the bed prior to standing, evaluate risk vs benefit of multiple meds (serious fall injury morbidity vs CV event)
DIABETES IN THE ELDERLY

• Epidemiology
  • Prevalence of Diabetes in >65 yrs of age around 30% depending on diagnostic criteria used
  • Projected to increase by 4 fold before 2050
• Those >75 years of age have double the rate of ER visits for hypoglycemia than the general population with Diabetes
• Why is there more concern
  • With decreased cognitive function, visual impairments, decreased renal function, polypharmacy…..all make it difficult to perform complex self care and complications from treatments
    • Glucose monitoring, adjusting insulin dosing, appropriate timing and content of meals……………….
• Comparative effectiveness studies of medication to treat diabetes in the elderly is lacking

• Metformin
  • lower incidence of hypoglycemia
  • GI issues and weight loss
  • Typically need to have dose reduced

• Sulfonylureas
  • Risk of hypoglycemia
  • Glyburide has highest risk of severe prolonged hypoglycemia (on HRM list)
  • Chlorpropamide
  • Alternatives: short-acting sulfonylureas (glipizide), metformin
  • Short acting SU dose with meals may help those that eat sporadic
DIABETES IN ELDERLY

• Thiazolidinediones (pioglitazone)
  • Edema, heart failure, bone fractures,…

• Insulin
  • Risk of hypoglycemia
    • Insulin, sliding scale is on HRM list due to higher risk of hypoglycemia without improvement of hyperglycemic control (regardless of settings)
  • Visual or manual dexterity may be barriers to insulin therapy (pen devices help but costly)
  • Hypoglycemia risk is somewhat lower with analog compared to human insulin, but more expensive
## Selected high-risk drugs

<table>
<thead>
<tr>
<th>Drug</th>
<th>Potential harm</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Insulin                     | Hypoglycemia                                         | May often be appropriate; however, aggressive glycemic control may often yield greater harms than benefits in older adults.  
[1-3] |
| Sulfonylureas               | Hypoglycemia                                         | Older hospitalized patients at significant risk for hypoglycemia; avoid or use with great caution.  
[4] |
| Warfarin                    | Gastrointestinal, intracranial bleeding              | Although a high-risk drug, benefits of warfarin therapy often outweigh harms; maintenance of prothrombin time/international normalized ratio in therapeutic range tightly linked to risk/benefit ratio.  
[5] |
| Digoxin                     | Impairment of cognition, heart block                | May have a third-line role in management of systolic heart failure; suboptimal choice for rate control in atrial fibrillation.  
[6] |
| Benzodiazepines             | Falls                                               | Associated with as much as a 60 percent increase in fall risk.  
[6] |
| Diphenhydramine, other      | Impaired cognition, urinary retention in men         | Poor choice as sleep aid due to anticholinergic effects, next-day sedation, impact on performance including driving; dose medication reconciliation important because patients may also obtain over-the-counter drugs.  
[7] |
| First-generation antihistamines |                                                    |                                                                 |
| Opioid analgesics           | Constipation, sedation, confusion, cardiopulmonary depression, seizures | Codeine, morphine, hydrocodone, and nalbuphine are poor choices for analgesics. Fentanyl, morphine, or oxycodone are often appropriate with careful dose adjustment.  
[10] |
| Antipsychotics              | Death, pneumonia                                     | Elevated risk of death when used to treat behavioral complications of dementia, although in selected cases, benefits may exceed risks if consistent with patient goals of care.  
[11] |
| Chemotherapeutic agents     | Myelosuppression (neutropenia, anemia), hepatotoxicity, cardiotoxicity | Comprehensive assessment is required for determining goals of treatment, particularly in light of comorbidities. When indicated, chemotherapy dose and schedule should be carefully individualized for organ function and anticipated toxicities of treatment. In general, greater treatment-related toxicity is accepted when the expected outcome of treatment is cure.  
[12] |

### Selected antimicrobials

| Fluoroquinolones            | Tendon inflammation and rupture, hypoglycemia, cardiac arrhythmias. C difficile-associated diarrhea, exacerbation of myasthenia gravis | Elevated risk of tendon rupture in combination with glucocorticoids.  
[13] |
| Nitrofurantoin              | Pulmonary toxicity, hepatotoxicity                   | Therapeutic concentrations are not attained in urine of patients with renal insufficiency (Ccri <60 mL/minute)  
[14] |
| Trimethoprim-sulfamethoxazole | Hyperkalemia, hypoglycemia (with sulfonamide); severe dermatologic reaction (rare) | Drug interactions include warfarin (? INR), agents that increase serum potassium, and sulfonamides (? hypoglycemic effect).  
[15] |

### References:

WHAT CAN YOU DO?

• Often, members left on HRM because they are *tolerating it*
• The medical community still needs to exercise caution:
  • Contribution of HRMs to other disease states (delirium, dementia, constipation, urinary retention) may occur slowly and subtly, so difficult to relate medication’s contribution to the patient’s current problem.
  • If used chronically, adverse effects will become less tolerable as the patient ages.

We need your help to reevaluate the risk vs. benefits of the continued use of these HRMs every year.
WHAT CAN YOU DO (CONT’D)

• Review member’s medications and if you see one of the HRMs we talked about today:
  • Talk about the side effects of that particular HRM:
    • Can be done in person or via telephone.
    • Ask if they have had any of the specific side effects we listed today.
    • If you sense they are not able to answer, ask family or friends or a caregiver.
MEDICATION MANAGEMENT
PRINCIPLES

• The Eight Rights
  – Right Patient
  – Right Medication
  – Right Dose
  – Right Route
  – Right Time
  – Right Documentation
  – Right Reason
  – Right Response
HOW YOU CAN HELP

• If side effects exist…
  • Encourage member/family to call MD to discuss risk vs. benefits of the medication.
  • If you are comfortable with this, contact the provider yourself.
  • Provide handouts to the family. This will help encourage the conversation with their provider.
  • Refer member to plan’s MTM program
  • If it is a BCBSMN member and they are not eligible for MTM, email Donna Boreen. She may be able to assist.
HOW YOU CAN HELP

• If member is in an LTC setting:
  • Each LTC facility has a clinical pharmacist. They review member’s medications once a month. You could leave a note in the RPh “box” requesting the RPh to evaluate the benefit versus risk of the HRM. The Director of Nursing should be able to assist you as to where you can leave your note.
  • Utilize the nursing staff. Ask them if they note side effects issues.
  • MTM is also available to eligible members in an LTC facility.
• Member should **NOT** stop taking the HRM UNLESS instructed by their provider.
THANK YOU.