Chronic Meds in the Elderly: Taking a "Less Is More" Approach

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Polypharmacy is the number one predictor of adverse drug events (e.g., falls, hospitalization, death).[1,8] For this reason, the concept of "deprescribing" unneeded or potentially harmful medications has been suggested.[19] The chart below provides considerations and resources to help you identify medications that may need to be deprescribed, and tips on how to do so.

Disorder or Treatment	Considerations for Elderly Patients and Resources

General	• Be aware of meds that should generally be avoided or minimized in the elderly due to their risks:
	  • Our chart, *Potentially Harmful Drugs in the Elderly: Beers List*, summarizes the Beers list and gives alternatives.
	  • Avoid drugs with moderate or high anticholinergic activity, using our chart, *Drugs With Anticholinergic Activity*.
	• Help improve med safety in elderly patients by preventing med errors. Pharmacists can get our CE, *Preventing Medication-Related Errors*.
	• Ask patients to bring in all of their meds so you can document what they are actually taking ("brown bag" review).[17]
	  • Confirm that each medication has an indication and look for medications that may be used to treat avoidable side effects from another drug.[19] For example, oxybutynin may be used to treat urinary incontinence caused by donepezil.
	  • Identify meds for which the harms may be outweighing the benefit for the patient at this time.[19]
	  • Consider the appropriateness of any drug prescribed to treat a side effect of another drug.[19]
	  • Stop one med at a time.[19] Consider starting with meds with the highest risk/benefit ratio, which are often meds used for prevention of chronic illness (e.g., statins).[19] Taper if necessary.[19] When deprescribing, be aware of Common Oral Medications that May Need Tapering. This chart provides the rationale for tapering and suggested tapering strategies.
	  • Monitor the patient for worsening of the condition that was being treated, and withdrawal symptoms.[19]
	  • Ask about the use of over-the-counter medications, vitamins, or supplements, which may cause side effects or not be adding benefit.
	• Consider underlying causes, such as undertreated conditions, before adding a medication. For example, unmanaged pain or dehydration may lead to agitation.
	• Consider dose adjustments as needed for age, renal impairment, comorbidities, etc.
	• Recommend the use of nondrug therapies when appropriate.
	• Be especially watchful during transitions of care. Recommend stopping medications that may no longer be needed, such as proton pump inhibitors (PPIs), pain meds, etc.
	• Educate patients about ways to decrease their risk of falls, such as improving lighting, avoiding throw rugs and other tripping hazards, etc.

Continued…	

Disorder or Treatment	Considerations for Elderly Patients and Resources
General, continued	• Pharmacists can provide medication therapy management (MTM) services, including comprehensive med reviews, for elderly patients. This can help identify opportunities to optimize drug therapy and prevent drug-related problems. Keep in mind that many Medicare Part D enrollees (US) are eligible. • Use **shared decision making** to get patients/families involved in the deprescribing process. Learn more at https://www.ahrq.gov/professionals/education/curriculum-tools/shareddecisionmaking/index.html. • For deprescribing guidelines and algorithms, information pamphlets, patient decision aids, and more see http://deprescribing.org/. • For more help with deprescribing see our CE, *Elderly Patients' Unique Medication Needs*.
Analgesics	• **Opioids** are of concern in the elderly with a history of falls or fractures.[23] In addition, meperidine can cause neurotoxicity, delirium cognitive impairment, and has poor oral efficacy.[23] Pentazocine has more CNS effects than other opioids.[23] But opioid discontinuation is a challenging patient care situation. See our FAQ, *Opioid Tapering: Tips for Success*, for help. • **Muscle relaxants** have anticholinergic effects and questionable efficacy at doses tolerated in the elderly.[23]
Anorexia or cachexia	• Avoid Rx appetite stimulants (e.g., megestrol, dronabinol) in the elderly. Instead optimize social support and feeding assistance.[6]
Anticoagulation	• Most elderly atrial fibrillation patients qualify for an anticoagulant. See our chart, *A Fib Guidelines: Focus on Pharmacotherapy*. • Make sure doses of anticoagulants are adjusted appropriately, such as for reduced creatinine clearance, etc. For help, see our chart, *Comparison of Oral Anticoagulants*.

Asthma and COPD	• To minimize the adverse effects of inhaled corticosteroids, it might be possible to taper or even stop them.
	  • In patients with stable severe or very severe COPD, a tapered (12 week) withdrawal of an inhaled corticosteroid from a regimen also containing an inhaled long-acting beta-agonist and an inhaled long-acting anticholinergic could be considered.[24]
	  • For general guidance on stepping down inhaled corticosteroids in asthma, see our toolbox, *Improving Asthma Care*.

Dementia *Continued…*	• Most dementia patients will not benefit from dementia meds. In addition, costs and adverse effects are a concern. Reassess the use of cholinesterase inhibitors (e.g., donepezil) and memantine in elderly patients. Consider stopping drug therapy if there's no detectable benefit by three to six months, side effects are a problem, or the patient has advanced disease. • Use our chart, *Alzheimer's Dementia Pharmacotherapy*, for guidance on when to start and discontinue cholinesterase inhibitors and memantine in patients with Alzheimer's dementia. • Use our chart to identify *Drugs With Anticholinergic Activity*; they may worsen cognition.

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Dementia, continued	• Avoid antipsychotics for behavioral symptoms with dementia, due to increased risks of stroke and death. Reserve them for patients who have disturbing hallucinations or patients who exhibit dangerous behaviors. • For help identifying antipsychotic alternatives see our chart, *Pharmacotherapy of Dementia Behaviors*.

Diabetes	• For some elderly patients, quality of life and reducing med burden may be more important than preventing long-term complications of diabetes. Plus, hypoglycemia may lead to falls, cognitive impairment, and cardiac events.[2]
	• Consider using the "4S" pathway to simplify and deprescribe diabetes regimens in older adults.
	  o **Seek triggers or red flags** for re-evaluation of goals or strategies. Examples: unintended weight loss on GLP-1 agonist, polyuria, new or worsening urinary incontinence, hypoglycemia symptoms, falls, new comorbidity, psychosocial challenge, change in living situation).[26]
	  o Use **shared decision-making** to discuss risks and benefits.[26]
	  o **Set or re-set goals**.[26] Consider an A1C goal of 7.1% to 8.5% for frail elderly, limited life expectancy, recurrent severe hypoglycemia, hypoglycemia unawareness, dementia, decline in clinical or psychosocial status, or change in living situation .[27] Diabetes Canada has a decision tool for individualizing your patient's A1C target at https://www.diabetes.ca/managing-my-diabetes/tools---resources/individualizing-your-patient%E2%80%99s-a1c-target.
	  o **Simpler or SAFER treatment**.[26]
	  ▪ Consider stopping or reducing the dose of the diabetes med most likely associated with the red flag identified in the "seeking triggers and red flags" step, above.[26] For example, if hypoglycemia is the problem, stop or adjust sulfonylurea or insulin (e.g., give basal insulin in the AM if hypoglycemia occurs overnight).[26]
	  ▪ Monitor kidney function and check that meds are used at lower doses or avoided as appropriate.[26,28] For example in severe kidney impairment, reassess use of metformin, sulfonylureas, and SGLT2 inhibitors.[26] For details, see our infographic, *Drugs for Type 2 Diabetes*.
	• An evidence-based antihyperglycemic deprescribing guideline is available at http://www.cfp.ca/content/63/11/832. A deprescribing algorithm is available at http://deprescribing.org/wp-content/uploads/2017/11/AHG-deprescribing-algorithms-2017-English.pdf.

Dyslipidemia	• Older patients with CV disease are most likely to benefit from statin use. Per US cholesterol guidelines, for patients >75 years with CV disease, use a moderate-intensity statin (e.g., atorvastatin 20 mg) to limit side effects or interactions. However, don't back off of a high-intensity statin (e.g., atorvastatin 80 mg) if it is well tolerated. (Canadian subscribers can see our chart, *Canadian Dyslipidemia Recommendations*, for Canadian-specific recommendations.) • There's less evidence of statin benefit in patients >75 years without CV disease. Consider backing off for side effects, interactions, etc. Suggest stopping statins in patients with advanced dementia or life expectancy <1 year.[10,11] . Reevaluate the use of non-statins (e.g., niacin, fibrates). There's no proof they further improve CV outcomes when added to a statin and they can have side effects such as gastrointestinal issues, hyperglycemia, etc.

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Gastrointestinal Disorders	• **PPIs** are often overused and are associated with a number of side effects including increased risk of infections, increased risk of fractures, and electrolyte deficiencies.
	  • Consider whether there is a true indication for PPI use.
	  • Taper the dose of a PPI to the lowest effective dose needed to achieve therapeutic goals.[7]
	  • For more tips, see our chart, *Proton Pump Inhibitors: Appropriate Use and Safety Concerns.*
	  • For an evidence-based PPI deprescribing guideline see http://www.cfp.ca/content/63/5/354.
	  • A decision aid to help you discuss PPI discontinuation with patients is available at http://deprescribing.org/wp-content/uploads/2017/10/PPI-Consult-PtDA-Oct-11-v2-wt.pdf.
	• Despite its widespread use, there is not good evidence that **docusate** is effective for preventing or treating constipation. For alternatives see our algorithm, *Treatment of Constipation in Adults*.

Hypertension	• Use clinical judgement in setting blood pressure goals and consider patient preference in those with multiple comorbidities, falls, dementia, inability to live independently, orthostasis, Parkinson's disease, or limited life expectancy.[12] • In the absence of compelling indications, beta-blockers are not first-line agents for hypertension per US guidelines.[12-14] (In Canada, beta-blockers are considered a first-line option for patients <60 years old.)[20] Atenolol should be avoided because it does not improve CV outcomes.[12] • For help choosing pharmacotherapy for hypertension see our chart, *Treatment of Hypertension* (US), or our algorithm, *Stepwise Treatment of Hypertension* (Canada).
Insomnia	• Sleep problems in the elderly are common, and associated with impaired cognition and performance, fatigue, and trauma.[3] • Optimize therapy of contributing medical conditions (e.g., depression, pain).[3] Consider eliminating, or changing the dose or timing of, contributing medications (e.g., stimulants, diuretics).[3] • Targeted sleep hygiene measures are preferred to pharmacotherapy. Continue these even if pharmacotherapy is needed.[3] • When pharmacotherapy is needed, consider nonbenzodiazepine options (e.g., low-dose trazodone, ramelteon [US]).[15,16,18,19,25] • Our *Benzodiazepine Toolbox* provides tips for tapering oral benzodiazepines. • Use all sedatives cautiously in the elderly due to the risk of falls, fractures, car accidents, etc.[16] Start with half the usual adult dose, and short duration.[4] For more information to help you choose a treatment for insomnia, see our chart, *Comparison of Insomnia Treatments*.

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Osteoporosis	• Since the introduction and subsequent widespread, long-term use of bisphosphonates, a number of less common, potentially serious adverse effects such as atypical fractures and esophageal cancer have been noted. This has raised questions regarding the optimal duration of use. • Consider stopping oral bisphosphonates after five years.[21] Consider longer treatment for patients at high-risk of fractures.[21] • Continue to suggest adequate calcium and vitamin D.[21] • Our chart has more information on *Managing Osteoporosis: Screening, Treatment, and More.* We also have a CE, *Osteoporosis Treatment Options*.
Testosterone replacement	• Data supporting the efficacy of testosterone replacement therapy for older men are sketchy at best. Anecdotal reports have included men who feel more energetic or younger and small studies have shown some benefit with testosterone replacement therapy, but the long-term effects of testosterone and long-term outcomes in aging men remain unknown.[5] • For more information on the advantages, disadvantages and monitoring, see our chart, *Comparison of Testosterone Products.*
Urinary incontinence	• Anticholinergics can have side effects that are particularly undesirable in the elderly such as delirium, cognitive impairment, dry mouth, constipation, hospitalization, falls, etc.[22] Consider other options such as behavioral therapy when appropriate. If drug therapy is needed, the newer, longer-acting overactive bladder agents may be a better option for the elderly (i.e., fewer side effects). For help choosing a relatively safer option see our chart, *Medications for Overactive Bladder*.

Abbreviations: AM = morning; CV = cardiovascular.

Users of this resource are cautioned to use their own professional judgment and consult any other necessary or appropriate sources prior to making clinical judgments based on the content of this document. Our editors have researched the information with input from experts, government agencies, and national organizations. Information and internet links in this article were current as of the date of publication.

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