

EDITOR'S MESSAGE

Polypharmacy—the use of multiple chronic medications and the associated risks—is a common problem in Canada. It is estimated that over two thirds of patients age 65 or older take more than five medications daily. In those 85 years and older, 40% take more than 10 prescription medications.¹

The risks of polypharmacy are more prevalent in older adults in the context of age related changes in physiology and pharmacokinetics. These include hospital admissions due to unintentional overdoses, drug-interactions, and other adverse events, such as falls. Older patients with multiple and complex co-morbidities naturally have a need for increased health care, including prescription drugs and many chronic medications are appropriately initiated. However, regular evaluation of therapies based on changing goals of care and patient factors is essential to prevent inappropriate polypharmacy.

Deprescribing is the process of identifying, modifying, and stopping a medication that is no longer indicated or where the risk of taking it exceeds the benefit.² In primary care, this process can be complicated, time-intensive, and frequently requires an individualized approach. Furthermore, referral to specialized geriatrics services may not always be practical. Ideally, interprofessional teams in the community coupled with systematic approaches could make meaningful strides in deprescribing.

To offer a solution to one of these elements, researchers at the Bruyère Research Institute in Ottawa are developing streamlined evidence-based guidelines to help clinicians (especially in primary care) make this complex deprescribing process more manageable.³ Their focus is on creating deprescribing guidelines for several priority drug classes: benzodiazepines, atypical antipsychotics, anti-hyperglycemics, and proton-pump inhibitors (PPIs).

In September 2015 the first deprescribing algorithm for PPIs was unveiled and algorithms for benzodiazepines and anti-hyperglycemics are now also available freely online.⁴ The easy-to-navigate algorithms are accompanied by patient pamphlets, take into consideration treatment alternatives, and offer specific strategies for discontinuation. Alongside guideline development, the project will evaluate their efficacy and uptake by prescribers.

Uptake of such guidelines in Nova Scotia for drugs like PPIs could affect healthcare spending and improve patient care. In Nova Scotia's Pharmacare program—comprised of Senior's Pharmacare, Family Pharmacare, and Community Services Pharmacare—PPIs, for example, are the second most widely prescribed drug class.⁵ In 2013, 32.4% of beneficiaries used PPIs, rep-

resenting 4.3% of total program spending and ranking third behind only biologic agents and statins. While strong indications exist for PPIs (e.g., gastroesophageal reflux, erosive esophagitis, duodenal ulcers), PPIs are often initiated and continued inappropriately.⁶ Although tolerated well in the short term, concerns about long-term use—such as fractures, *C. difficile*, and acute kidney injury—warrants that therapy be re-evaluated routinely.⁷ Especially at risk are seniors, whose multiple comorbidities may predispose them to side effects and subsequently higher morbidity and mortality.

For widely used classes of drugs like PPIs and benzodiazepines (which are used by nearly 15% of Nova Scotia Pharmacare beneficiaries), it is hoped that deprescribing guidelines could have a real impact in reducing unnecessary prescription drug use, resulting in optimized healthcare spending and avoiding adverse drug effects.

In the face of managing multiple complex medical problems in primary care, evaluating every medication and initiating deprescribing may not be a realistic immediate priority. Nevertheless, access to streamlined and easy to use guidelines has the potential to be a step towards addressing polypharmacy and serving as a starting point for initiating discussion with patients about medication discontinuation.

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