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## MEDICATION USE AND SENIORS

### (UPDATE 2017)

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Older Canadians represent the fastest-growing segment of our population and are the largest users of prescription drugs. Seniors take more drugs than younger Canadians because, on average, they have a higher number of chronic conditions.. In 2012, nearly two-thirds (65.9%) of seniors had claims for 5 or more drug classes, and more than one-quarter (27.2%) of seniors had claims for 10 or more drug classes. The number of drugs used by seniors increased with age: 20.0% of seniors age 65 to 74 had claims for 10 or more drug classes, compared with 31.9% of seniors age 75 to 84 and 39.3% of seniors age 85 and older. <sup>1</sup>The use of multiple medications, or polypharmacy is of concern in the senior population.. The risk of drug interactions and adverse drug reactions is several-fold higher for seniors than for younger people. This phenomenon is associated with increasing age, changes in renal and hepatic function, increased sensitivity to drugs and multiple medical problems. In older persons, adverse drug reactions are often complex and may be the direct cause of hospital admissions for acute care. Cognitive and affective disorders, for example, may be due to adverse reactions to sedatives or hypnotic drugs.

While the Canadian Medical Association supports the development of a coordinated national approach to reduce polypharmacy, optimal prescribing by the physician can play a fundamental role in preventing adverse drug reactions among all patients. Prescribers must be vigilant to optimize pharmacotherapy and in reconciling medications. All medication review processes must include consideration of pharmacokinetic and pharmacodynamics factors specific to seniors.

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<sup>1</sup> Canadian Institute for Health Information. Drug Use Among Seniors on Public Drug Programs in Canada, 2012: Revised October 2014. Ottawa, ON: CIHI; 2014.

There has been considerable interest in determining which factors affect prescribing behavior and how best to influence these factors. Strategies that improve prescribing practices include evidence-based drug information provided through academic detailing; objective continuing medical education; accessible, user-friendly decision support tools available at point of care; and electronic prescribing systems that allow physicians access to their patient's treatment and medication profiles.

The following principles define the basic steps to appropriate prescribing for seniors.

- Know the patient.
- Know the diagnosis.
- Know the drug history.  
Keep a medication list for each patient and review, update (reconcile) and evaluate compliance at each visit. Instruct the patient to bring all prescription and over-the-counter medications, including medications prescribed by other physicians, and natural health products, to each office visit. In some provinces, pharmacists can conduct annual medication use reviews for patients on public drug benefit programs.
- Know the history of use of non-medical drugs such as alcohol, tobacco and caffeine.
- Consider non-pharmacologic therapy.  
Diet, exercise, psychotherapy or community resources may make a difference. Continuing medical education in specific non-pharmacologic therapies is valuable.  
Appropriate evaluation and management of behavioural and psychological symptoms of dementia should be considered before anti-psychotic therapy.
- Know the drugs.  
Critically evaluate all sources of drug information and use multiple sources such as textbooks, clinical practice guidelines, medical journals, Internet sites, conferences, colleagues, continuing medical education, regional drug information centres.  
Monitor patients continually for adverse drug reactions.  
Appropriate drug dosage depends on factors such as age, sex, body size, general health, concurrent illnesses and medications, and hepatic, renal and cognitive function (older people are particularly sensitive to drugs that affect the central nervous system).
- Keep drug regimens simple  
Avoid mixed-frequency schedules when possible.  
Try to keep the number of drugs used for long-term therapy under five to

minimize the chance of drug interactions and improve compliance.

- Establish treatment goals
  - Determine how the achievement of goals will be assessed.
  - Regularly re-evaluate goals, adequacy of response and justification for continuing therapy.
  - Time to benefit of prescribed medications should be a key consideration when providing care to seniors at end of life.
- Encourage patients to be responsible medication users
  - Verify that the patient and, if necessary, the caregiver, understands the methods and need for medication.
  - Recommend the use of daily or weekly medication containers, calendars, diaries or other reminders, as appropriate, and monitor regularly for compliance.

**Knowledge is the best medicine**, is a program that helps seniors with their prescriber and the rest of their healthcare team to manage medicines safely and appropriately. It can be accessed at <https://www.knowledgeisthebestmedicine.org> . Strongly encourage the use of one dispensary.