



Canadian
Deprescribing
Network

Annual Report 2018

Deprescribing:
a paradigm shift
in health care



Canadian Deprescribing Network

The Canadian Deprescribing Network is a group of health care leaders, clinicians, decision-makers, academic researchers and patient advocates working together to mobilize knowledge and promote the deprescribing of medication that may no longer be of benefit or that may be causing harm.

Goals

- Raise awareness and decrease the use of potentially inappropriate medications for seniors by 50% by 2020.
- Ensure access to safer drug and non-drug therapies.

Contact us!

We want to speak with you about how we can collaborate. Is there a project we can help you with?

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This annual report is available on our website in French and English.
Printed copies available by request.

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Important concepts

What is appropriate medication use?

Ensuring patients receive the appropriate dose of the appropriate medications at the right time and for the appropriate length of time.

When a medication ceases to be appropriate because the dose is too high, the medication is taken for too long or there are safer alternatives, deprescribing should be considered.

What are potentially inappropriate medications?

Potentially inappropriate medications are drugs for which the potential for harm may outweigh the potential for benefit. As we age, medications affect us differently. Medications that were good then, may not be the best choice now.

What is deprescribing?

Deprescribing is the planned and supervised process of reducing or stopping medications that may no longer be of benefit or may be causing harm. The goal is to reduce medication burden and harm, while maintaining or improving quality of life.

Deprescribing is an integral part of appropriate prescribing, managing chronic conditions and avoiding adverse effects, all of which lead to improved outcomes.





Nearly half of Canadian seniors (49%) have at least one claim for a drug on the Beers List* ([CIHI 2018](#)).



The use of potentially inappropriate drugs is more common among women ([CIHI 2018](#)).

Approximately 1.9 million Canadian seniors regularly use at least one potentially inappropriate medication. ([CIHI 2018](#))

**American Geriatrics Society (AGS) Beers Criteria for Potentially Inappropriate Medication Use in Older Adults is one of the most frequently cited reference tools in the field of geriatrics ([AGS 2015](#)).*

Why all the fuss about appropriate medication use?

Prescription drugs are among the most important components of modern health care. When prescribed and used appropriately, they can prevent and cure disease, improve quality of life and extend life expectancy. However, over time and with age, some medications can become unnecessary or even harmful.

What helped improve health at one stage in life may not be of benefit at another stage, and may even cause harm because of side effects and drug interactions. Potential medication harms for seniors include falls, memory problems, hospitalizations and death.

Too many medications

The risk of harmful effects, drug interactions and hospitalizations increases when you take more medications.



2 out of 3 Canadians (66%) over the age of 65 take at least 5 different prescription medications.







1 out of 4 Canadians (27%) over the age of 65 take at least 10 different prescription medications ([CIHI 2018](#)).

Medications affect us differently as we age



Seniors are hospitalized five times more often than people under the age of 65 because of harmful medication effects ([CIHI 2013](#)).

Medications deemed potentially inappropriate for seniors:

-  Long-term use of proton-pump inhibitors for acid reflux
-  Use of opioids for chronic non-cancer pain
-  Antipsychotics for behavioural and psychological symptoms of dementia
-  Sleeping pills and sedatives

Sleeping pills: are they really worth it?

14% of Canadian seniors take benzodiazepines, also known as sedatives or sleeping pills.

Benefits

1 person out of 13
will experience one of the
benefits below



Extra sleep:
approx. 35 minutes
Getting to sleep faster:
14 minutes

Harms

1 person out of every 6
will be harmed



50% increase in falls
2X increase in hip fractures
5X increase in cognitive impairment
Driving:
equivalent to a blood-alcohol level
of 0.06-0.11%

Sources: [Cumming et al. 2003](#); [de Jong et al. 2013](#); [Glass et al. 2005](#); [Hansen et al. 2015](#); [Smith et al. 2002](#)

Did you know the opioid crisis affects seniors?



Over 19% of seniors used prescription opioids in 2016.



For women, hospitalization rates due to opioid poisonings were higher for those over the age of 45.



Benzodiazepines are involved in at least 30% of fatal opioid overdoses. Canadian seniors are particularly vulnerable, as 13% of them take benzodiazepines.



Accidental poisonings account for the highest proportion of hospitalizations caused by opioids in seniors (63%)

([Sun et al. 2017](#); [CIHI 2018](#))

Deprescribing is a team sport

To change society's paradigms around prescribing and medication use, all groups within the modern health care system must be involved: health care professionals, patients, caregivers, the general public and policymakers. Since 2015, our Network has been bringing these stakeholders together to maximize, leverage and build on each other's successes and strengths.

Who we are



Health care leaders



Patient advocates



Decision-makers



Clinicians



Academic researchers



Community organizations



Nurses on board and engaged in deprescribing

Due to increasing interest from nurses across Canada in 2018, the Network partnered with the Canadian Gerontological Nursing Association to create a committee of nurses. The goal is to support their efforts and provide tools to ensure appropriate use of medications in all sectors of the health care system.

See this webpage for information on our members: deprescribingnetwork.ca/our-members

Over the past year, new key players have become involved:



Physiotherapists, inhalation therapists, psychologists, social workers, kinesiologists and administrators are just some examples.



The Network admin team

What we do



Spark: Generating interest, ideas and enthusiasm through information sharing, meetings and conversations with the public, providers and other key stakeholders.



Connect: Creating links between people who lead existing and/or budding practices and policy initiatives.



Influence: Inspiring and steering the thinking and direction of activities to encompass our goals.



Facilitate: Sharing intellectual capital and tools to take initiatives further.



Accelerate: Moving the initiatives of others along faster.

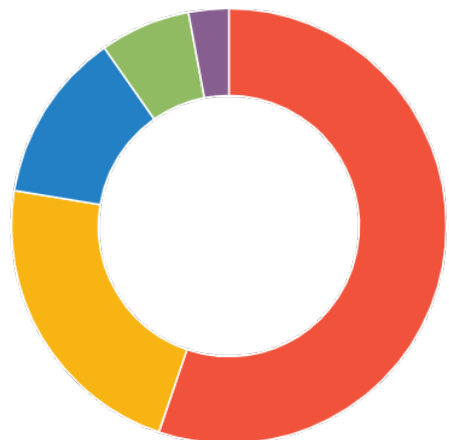
Deprescribing Summit 2018

To achieve a truly sustainable solution to medication harms, everyone needs to be at the table. The Canadian Deprescribing Network started this past year with a bang with the *2018 National Stakeholder Summit on Medication Safety for Older Men and Women*, which took place on February 8th and 9th, 2018. The event brought together health care professionals, policymakers, and 30 community and seniors' organizations from all Canadian provinces.

Diverse speakers discussed cutting-edge initiatives, promising practices and successful policies in their province. Local organizations shared how they are engaging their communities to reduce the rising epidemic of opioid and sedative-hypnotic medication use among Canadian seniors.



Attendees by participant type



- Health care professionals
- Community organizations
- Policy-makers
- National health organizations
- Researchers and students

Total number of participants: 107



Photos from the Deprescribing Summit 2018

At the 2018 Summit, we showcased the Deprescribing Fair, an interactive exhibit featuring displays about the history of medications, as well as games and tools to increase awareness and support appropriate medication use.



Championing medication safety in communities

The Canadian Deprescribing Network (CaDeN) Champions are community leaders working to empower older adults with tools and information to safely manage their medications. They have reached countless Canadians by giving talks, organizing workshops and sharing deprescribing resources with their members. Below is a selection of just a few of our Champions.



Herb John, National Pensioners Federation



Maureen Klenk, Saskatchewan Seniors Mechanism



Joan Cochrane, Saskatoon Council on Aging



Doug Danforth and Jerry Gosling, Council of Senior Citizens' Organizations of BC



Robert Rogers, Newfoundland & Labrador 50+ Federation

Public awareness

The Canadian Deprescribing Network created a grassroots-driven public awareness campaign with local community organizations through the following activities on the topic of medication safety and deprescribing.



community organizations with whom CaDeN regularly collaborates



brochures sent to community organizations and events across Canada in 2018



presentations to seniors groups in 2018



articles published in major news media in 2018 featuring the Canadian Deprescribing Network



newsletter subscribers



articles published in community organization publications in 2018



participants for 4 webinars organized by CaDeN



focus groups held to review educational tools for the public, which included 45 participants



More on public awareness activities: Turner, J., Currie, J., Trimble, J., Tannenbaum, C. 2018. [*Strategies to promote public engagement around deprescribing*](#). Therapeutic Advances in Drug Safety. 1-13.

Deprescribing tools for the public

The Canadian Deprescribing Network has been developing tools to encourage seniors and their caregivers to initiate conversations with their health care providers about medications and deprescribing. All the tools are available in English and French here: deprescribingnetwork.ca/useful-resources/



Indigenous communities

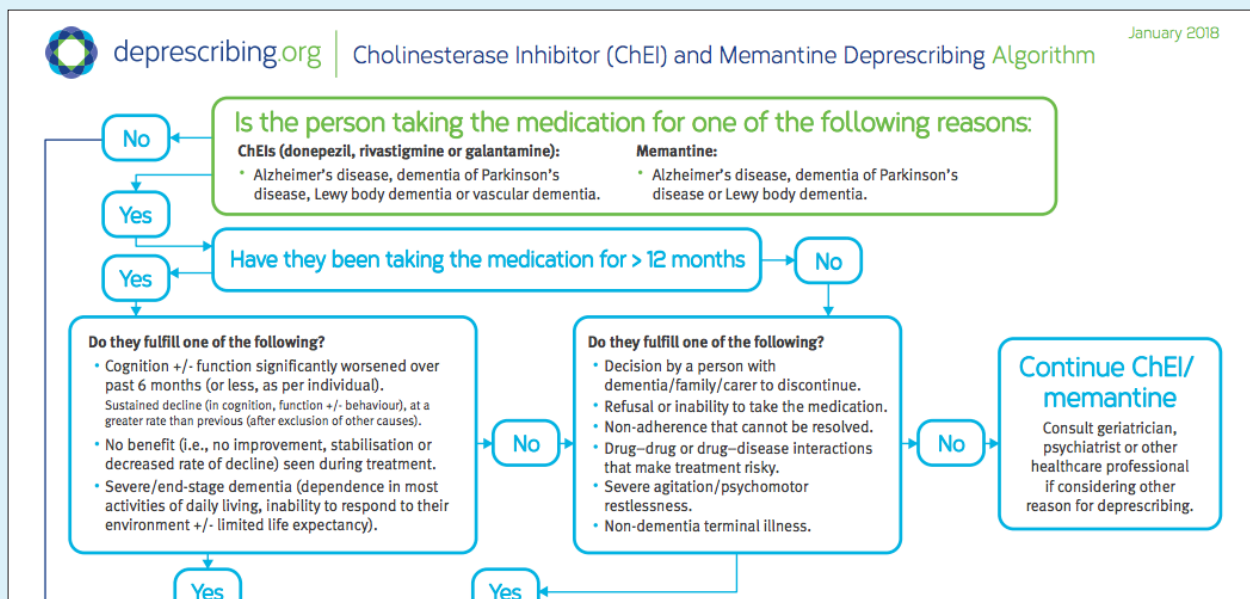
Our public awareness activities also involve local indigenous communities. For example, First Nations representatives were consulted when developing a brochure on opioids sent to patients throughout Manitoba.

We also widely disseminated *Coyote's Food Medicines* (available at: www.coyotestory.ca), a book about polypharmacy integrating traditional indigenous storytelling. This powerful story was written by Elders of Northern Secwepemc and is the result of a collaboration between the Shared Care Committee (a partnership of Doctors of BC and the British Columbia Government) and the First Nations Health Authority.



Deprescribing tools for health care providers

The Canadian Deprescribing Network is sharing a wealth of evidence-based materials with health care providers to aid in deprescribing decisions. Bilingual resources for health care providers are compiled here: deprescribingnetwork.ca/professionals/



Deprescribing algorithms developed by the Bruyère Research Institute and the Ontario Pharmacy Research Collaboration

Evidence-Based Pharmaceutical Opinion
Sedative-hypnotics

Date (dd/mm/yy): _____

To the attention of Dr. _____ Pharmacist name: _____
Address: _____ Address: _____
Tel: (____) _____ Fax: (____) _____ Tel: (____) _____ Fax: (____) _____

Your patient, _____ (DOB (dd/mm/yy) _____), is currently taking _____ to treat his/her insomnia and/or anxiety. The use of sedative-hypnotics is associated with an increased risk of falls, fractures and memory impairment and is not recommended in adults over the age of 65, safer alternatives may be considered. Your patient is at risk because: _____

Suggested alternatives → Indicate all that apply

Provide information to this patient on cognitive behavioral therapy (e.g. download this brochure: www.crnugm.gc.ca/fichier/pdf/Sleep_brochure.pdf, see sleepwellns.ca), which has been shown to be effective for the treatment of both insomnia and anxiety and helps patient with sedative-hypnotic discontinuation.

Provide this patient with information on other behavioral changes to treat insomnia and anxiety such as relaxation exercises, managing eating habits, etc.

I will consider adding an SSRI or SNRI at the next visit if required.
Note: These medications are also associated with falls in the elderly, but are preferred over benzodiazepines, non-_____

I certify that: _____

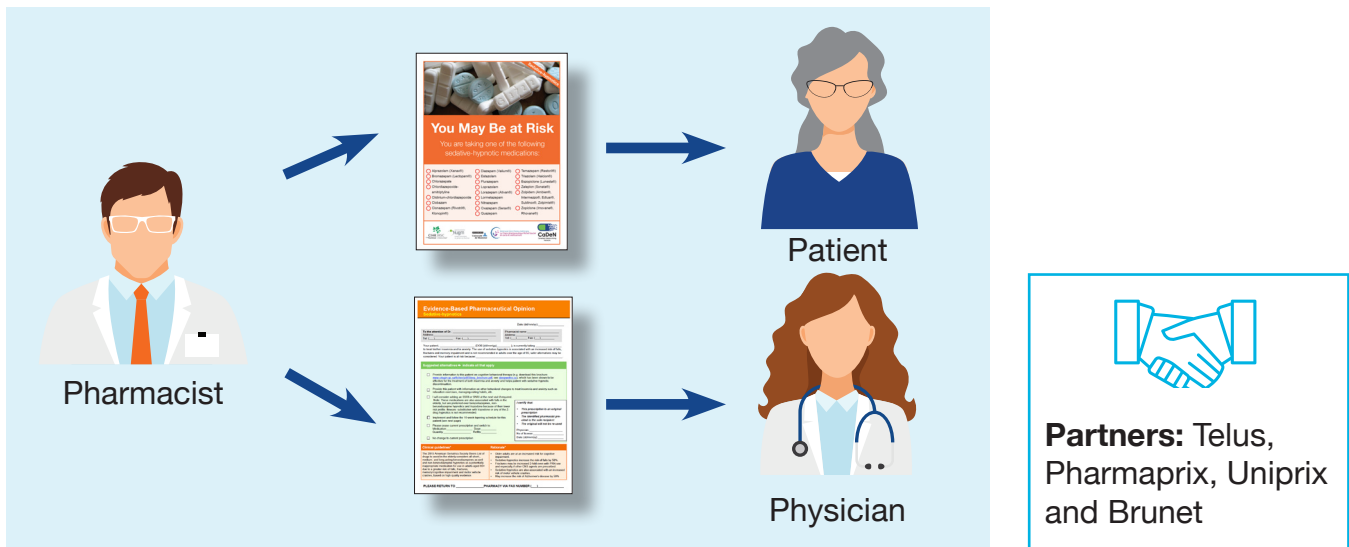
Evidence-based pharmaceutical opinions



Postcard to direct health care providers to our online resources

Do our tools make a difference?

Can educational interventions drive deprescribing?



Our patient brochures coupled with evidence-based pharmaceutical opinions led to deprescribing among:

43%

of sedative-hypnotic users (benzodiazepine and z-drugs)

58%

of non-steroidal anti-inflammatory drugs (NSAID) users

31%

of glyburide users (an antidiabetic medication)



No adverse events requiring hospitalization were reported, although 38% of patients who attempted to taper sedative-hypnotics reported transient withdrawal symptoms.

Publication: Martin, P., Tamblyn, R., Benedetti, A., Ahmed, S., Tannenbaum, C. 2018. [*Effect of a pharmacist-led educational intervention on inappropriate medication prescriptions in older adults: the D-PRESCRIBE randomized clinical trial.*](#) JAMA. 320(18):1889-1898.

Province-wide initiatives

An initiative to improve medication use across Newfoundland and Labrador through a collective impact

This initiative brings together health care providers, patients, decision-makers and academic researchers to drive change and reduce the use of unnecessary or potentially harmful medications. SaferMedsNL aligns with and leverages other initiatives across Canada to increase awareness of the potentially inappropriate use of medications by providing education, tools and resources to both patients and health care providers.



Partners: Choosing Wisely Newfoundland/Quality Care Newfoundland and Labrador, Canadian Association for Retired Persons, Newfoundland and Labrador 50+ Federation, Provincial Advisory Council for Aging and Seniors, Pharmacists' Association of Newfoundland and Labrador, Association of Registered Nurses of Newfoundland and Labrador, Newfoundland and Labrador Pharmacy Board, Newfoundland and Labrador Medical Association, Memorial University, Université de Montréal, Government of Newfoundland and Labrador.

Results: available next year.

Addressing the opioid crisis in Manitoba

The Manitoba government mailed educational brochures about the risks of opioid use and safer alternatives to 5,700 community-dwelling adults across Manitoba, who had active opioid prescriptions for chronic non-cancer pain. The effectiveness of this educational intervention will be determined by the reduction of opioid prescriptions.

Partners: Manitoba Government (Dept. of Health, Seniors and Active Living), Manitoba Monitored Drugs Review Committee, College of Physicians and Surgeons of Manitoba.

Results: available spring 2019.

You may be at risk if you are taking

**opioids/narcotics
for chronic pain**

Within the last six months, you have been dispensed more than one of the following medications:

- Buprenorphine (Butrans®)
- Codeine (Tylenol NO. 1®, NO. 2®, NO. 3®)
- Fentanyl (Duragesic®)
- Hydrocodone (Hycodan®)
- Hydromorphone (Dilaudid®)
- Meperidine (Demerol®)
- Methadone (Metadol®)
- Morphine (MS-Contin®, M-Eslon®, Kadian®, Stalex®)
- Oxycodone (OxyNeo®, Percocet®, Supeudol®)
- Tramadol (Tramacet®, Ralivia®)

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Pharmacare and deprescribing

Currently, Canadians cover medication costs either out of their own pockets, or through a patchwork of provincial and private drug plans. The Canadian Government is in the process of thinking through a National Pharmacare Plan. The plan could lower drug prices and improve patient care through easier access to safe and appropriate medication use. Deprescribing is a crucial component of appropriate medication use, yet it is seldom discussed.

How can deprescribing be integrated into pharmacare?



Establish an evidence-based formulary to address drug safety, efficacy and value for money



Standardize drug safety initiatives across Canada, such as e-prescribing and monitoring of prescribing



Encourage regular review of medications for people taking 5+ drugs or over age 65



Ensure drugs that are no longer needed are stopped



Require an indication and a time limit when prescribing



Support and train health care providers to deprescribe



Reducing the use of potentially inappropriate medications in Canadian seniors translates to huge savings for the government and for tax payers:

**\$419 million
per year**

is spent on potentially inappropriate prescriptions in Canada. This does not include hospital costs.

**\$1.4 billion
per year**

is spent in health care costs to treat harmful effects of medications, including fainting, falls, fractures and hospitalizations.

(Morgan et al. 2016)

“The Canadian Deprescribing Network believes all Canadians deserve equitable access to safe, cost-effective, and appropriately prescribed medicines at a fair and affordable cost to patients and society as a whole. - Dr. Cara Tannenbaum

Appropriate medication use must be considered through a sex and gender-based analysis plus (SGBA+) lens. For example:



42% of women vs 31% of men
are prescribed potentially inappropriate medications

Women are also more susceptible to harmful effects of medication due to their biology and physiology.

(Morgan et al. 2016)

The Canadian Deprescribing Network is funded by:



Special thanks to:

