

# Canadian Deprescribing Network



2017 Annual Report

### What's 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.

### Contact us and get involved

Canadian Deprescribing Network
Centre de recherche de l'Institut universitaire de gériatrie de Montréal
4565 Queen-Mary Road, Montreal (Quebec) H3W 1W5
Email: info@deprescribingnetwork.ca

Website: deprescribingnetwork.ca Facebook: @deprescribingnetwork

Twitter: @DeprescribeNet

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

# Contents

	Message from Directors	04
لسا	Successes & Challenges	06
0	Snapshot of the Network	08
12	Public awareness	10
<b>=</b>	Health care provider awareness	16
(3)	Policy	17
<b>‡</b>	Executive committee members	18
<b>/</b>	References	19

# Message from Directors

You can't change the way people think. All you can do is give them a tool, the use of which will change their thinking.

#### - R. Buckminster Fuller

People need the resources, the opportunity and the motivation to follow a new path to change their behaviour and do things differently. Currently, more than one in three Canadian seniors use at least one potentially inappropriate medication, which can lead to health risks, including falls, fractures, hospitalizations and death. People over the age of 65, women and people taking multiple medications are especially at risk. Yet this doesn't need to be the case. Safer alternatives exist, and people need to be made aware of them and where to find them.





In order to raise awareness about medication safety and deprescribing, the Canadian Deprescribing Network is providing a range of tools and resources to our diverse stakeholders, including the general public, community organizations, health care professionals and policy makers. Through this approach, the Canadian Deprescribing Network aims for a 50% reduction in the use of inappropriate medications for Canadians over the age of 65.

This year, the Canadian Deprescribing Network expanded outreach and advocacy efforts across Canada. The Network held multiple events and public awareness initiatives, including the launch of a new website (deprescribingnetwork.ca), which serves as a public awareness information hub on medication safety and deprescribing. We also deepened our understanding of the importance of roles played by community organizations in promoting seniors' well-being and established collaborative activities to further develop our deprescribing toolkit.

This annual report provides a snapshot of the ongoing work of our network. We're looking forward to another year of collaborating with health care providers, policy-makers and the general public to change perceptions around medication use for a healthier Canada.

loaner Jones 2. Al sivis

Sincerely,

Cara Tannenbaum & James Silvius

Co-directors, Canadian Deprescribing Network



# ~40% of Canadian seniors take at least one potentially inappropriate medication

(Morgan et al. 2016)

## Potentially inappropriate medications for seniors:

- Antipsychotics for dementia & insomnia
- First-generation antihistamines
- Long-acting diabetes medications (sulfonylureas)
- Opioids for chronic non-cancer pain
- Proton-pump inhibitors for more 12 weeks
- Sleeping pills (benzodiazepines & z-drugs)

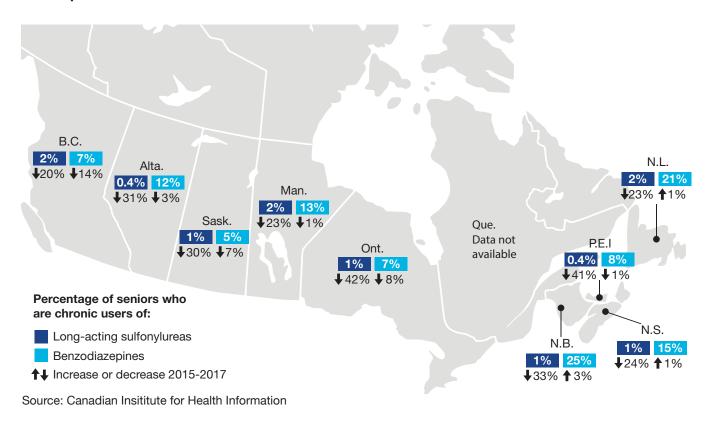
## Harmful effects of these medications:

- Drug interactions
- Falls & fractures
- Memory problems
- X Hospitalizations & death

## Successes

# Chronic use of long-acting sulfonylureas and benzodiazepines by seniors in each province

Chronic use of long-acting sulfonylureas decreased among seniors across Canada between 2015 and 2017. Reductions in benzodiapine use were seen in most provinces.



### Highlights

#### Long acting sulfonylureas

- In all provinces, less than 2% of seniors are chronic users.
- The greatest reductions in chronic use were seen in Ontario and Prince-Edward Island.

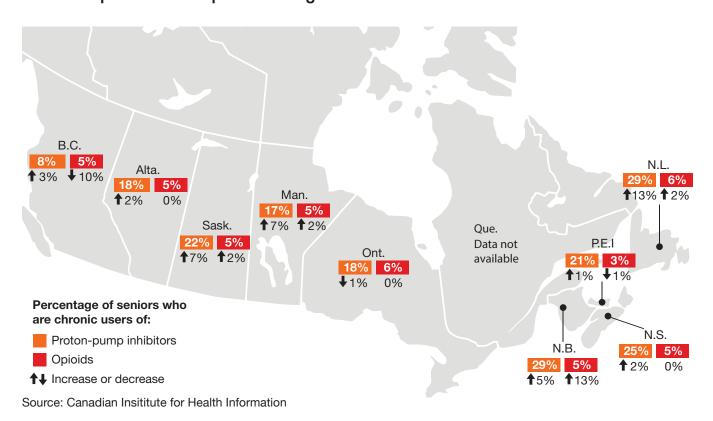
#### **Benzodiazepines**

- Seniors in New Brunswick (25%) and Newfoundland and Labrador (21%) have the highest rates of chronic use.
- Saskatchewan (5%), Ontario (7%) and British Columbia (7%) have the lowest rates of chronic use.
- The greatest reduction in chronic use was seen in British Columbia.

# Challenges

# Chronic use of proton-pump inhibitors and opioids by seniors in each province

Chronic use of proton-pump inhibitors increased in all provinces across Canada, except Ontario, between 2015 and 2017. There was little change in chronic opioid consumption among seniors.



### Highlights

#### **Proton-pump inhibitors**

- Seniors in Newfoundland and Labrador (29%) and New Brunswick (29%) have the highest rates of chronic use.
- British Columbia (8%) has the lowest rate of chronic use.
- The greatest rise in chronic use was seen in Newfoundland and Labrador.

#### **Opioids**

• Chronic opioid use among seniors has remained relatively stable in all provinces. However, we see a rise in chronic use in New Brunswick and a reduction in British Columbia.

# Snapshot of the Network

### Who we are



Health care leaders



Patient advocates



Decisionmakers



Clinicians



Academic researchers



Community organizations



### What we do

We work together to mobilize knowledge and promote the deprescribing of medication that may no longer be of benefit or that may be causing harm.

Deprescribing can be a complex process, involving patients, caregivers, health care providers and policy makers. The Canadian Deprescribing Network uses a practical, comprehensive, ecological approach to optimize medication use through coordinated action across Canada's health system.

# Network numbers

### 5 committees

35 committee members in 8 Canadian provinces/territories



**52** partners **415** members



### **Network objectives**

Raise awareness and decrease the inappropriate use of medications for seniors by 50% by 2020.

Ensure access to safer drug and non-drug therapies.



Curbing prescribing of inappropriate medications for seniors by 50% by the year 2020 could save:

### \$700 million

in preventable drug-related hospital admissions.

### \$200 million

in annual drug costs.

(Morgan et al. 2016)



# **Public awareness**

Health information can be complex and confusing. It can be difficult for the general public to find credible, relevant and accessible information about their health. Moreover, busy health care providers may miss medication-based risks and may not have the time to thoroughly discuss a health issue or a medication. That's why patients need to be aware and informed about their medications – and keep a sharp eye out for side effects.

To bridge this gap, the Canadian Deprescribing Network is developing educational tools and resources for the general public, seniors and caregivers. These tools are helping patients make informed choices about their health and enhancing conversations with their health care providers.

# What do Canadians know about medication safety?

In order to find out, we conducted a telephone survey in English or French in all ten provinces and three territories, with 2,665 men and women over the age of 65.

**Objective:** Learn about Canadians seniors' awareness of harmful effects of medications and deprescribing.

**60**%



of Canadians 65 or older think appropriate prescribing should be a national government priority. **65**%



are familiar with the concept that some medications can potentially be harmful to seniors.

41%



have asked their doctor about stopping certain medications.



**Only 7%** 

have heard the word "deprescribing" before.



People are **4X more likely** to ask their doctor about deprescribing if they have actively sought information about the potential medication harms.

**49**%



have gone online or elsewhere to learn more about the harmful effects of medications.



Francophone Canadians are **72% less likely** to be aware of harmful effects of medications than Anglophones.

(Turner & Tannenbaum, 2017)

# Addressing the opioid crisis through education

To address the inappropriate prescribing of opioids – one of the major causes of the ongoing opioid crisis – the Canadian Deprescribing Network is collaborating with the Government of Manitoba.

#### **Objectives:**

- Educate the public about the risks of long-term use of opioids for chronic non-cancer pain.
- Encourage people to speak to their doctor or pharmacist about reducing their dose or stopping their opioid medication.

As part of a randomized controlled trial, we developed an educational brochure, in French and English. The brochure was mailed to all residents of Manitoba taking opioids for chronic non-cancer pain who met our inclusion criteria. The results of the study will be available next year.



### Key stats about opioids in Canada:





# 5,840+ hospitalizations

for harmful effects of opioids in 2016-2017, and most cases were accidental. This equals 16 people every day (CIHI, 2017).

### 24% of seniors

hospitalized because opioids were taking them as directed (CIHI 2016).



Seniors have the highest rate of opioid pain reliever use (CCSA, 2015).

### 2,800+ deaths

from opioid overdoses during 2016. This surpasses yearly car accident deaths by over 50% (CIHI, 2017).

**75%** 

of people addicted to opioids started via prescription medication (Cicero et al. 2014).

# Canada ranks 2nd

behind the United States for highest per capita use of prescription opioids (INCB, 2015).

### **Deprescribing Fair**

The Canadian Deprescribing Network designed and created the Deprescribing Fair, an interactive exhibit illustrating the history of medications, appropriate medication management and alternative non-pharmacological treatments.

This year, we held the Deprescribing Fair in Montreal (Quebec), Moncton (New Brunswick), Quebec City (Quebec), Mississauga (Ontario) and Ottawa (Ontario). Hundreds of participants from all walks of life attended each event.



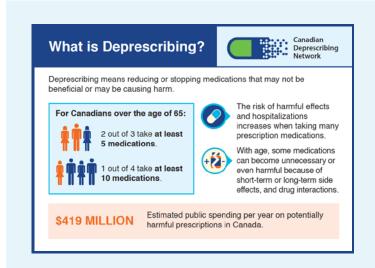


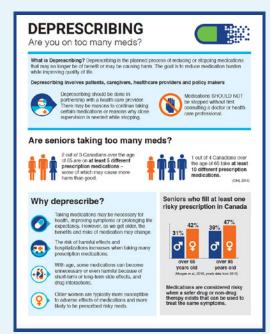
### **Public awareness toolkit**

The Canadian Deprescribing Network is creating a set of tools to help seniors, their families and caregivers learn about medication safety, the risks of polypharmacy as well as the importance of deprescribing. These tools also help motivate seniors to initiate conversations with their health care providers about medications and deprescribing.

The Canadian Deprescribing Network organized a series of focus groups across Canada with local seniors organizations to inform the development of the toolkit. These organizations are also testing these tools to collect feedback from their members.

### Tools developed so far:



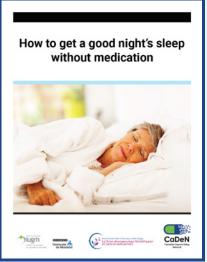


Fact sheets and postcards on deprescribing

Poster on medication safety



Brochure on tips and techniques for a good night's sleep without sleeping pills









Series of articles about "What's normal as you age?" and quizzes on medications. The articles and quizzes are sent to community organizations for publication in their newsletters and websites.

Brochures on the risks associated with certain medications: antipsychotics, first-generation antihistamines, non-steroidal anti-inflammatory drugs (NSAIDs), proton pump inhibitors, sedative-hypnotic medication and sulfonylureas.

### **Brochures & tools disseminated in 2017:**



5,000+ brochures sent by mail



6,000+
brochures distributed at events and workshops

### **Online presence**

### Website for the general public

Last summer, the Canadian Deprescribing Network launched a new website (deprescribingnetwork.ca) entitled "Do I still need this medication?". The website serves as a public awareness information hub on medication safety and deprescribing. The website features all of our brochures, tools and educational materials.





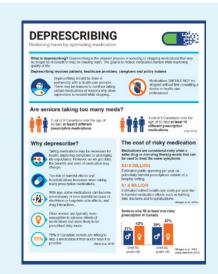




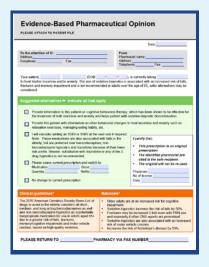
# Health care provider awareness

Recognizing the need for health care providers to be able to respond to patient requests, the Canadian Deprescribing Network is providing doctors, pharmacists and nurses with a wealth of evidence-based materials to aid in deprescribing decisions. Resources for health care providers as well as some of our partners' tools, are compiled on this web page: <a href="deprescribingnetwork.ca/clinician-tools">deprescribingnetwork.ca/clinician-tools</a>

### **Key resources for healthcare providers:**



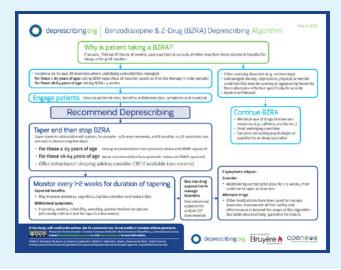
Deprescribing Fact Sheet for health care providers



Pharmaceutical opinions for antihistamines, benzodiazepines and sulfonylureas



Collaboration with Choosing Wisely Canada on a toolkit to reduce benzodiazepine prescribing



Deprescribing algorithms for the following medication classes: antihyperglycemics, antipsychotics, benzodiazepines, proton-pump inhibitors (developed by CaDeN members from the Bruyère Institute and the Ontario Pharmacy Evidence Network)

# **Policy**

The Canadian Deprescribing Network has contacted all provincial and territorial governments to understand what policies may be in place to promote more appropriate prescribing. Several potential projects on medication appropriateness are being discussed with provincial governments.

The Network proposes coordinated provincial strategies to rectify the issue of unnecessary prescriptions through education, public awareness and capacity building among health care providers.

### International policy scan

To find out what other countries are doing to address inappropriate use of benzodiazepines, the Canadian Deprescribing Network conducted an international policy scan to pinpoint successful policies we may be able to adopt here in Canada.

### **Preliminary findings:**



Seniors in Denmark taking long-acting benzodiazepines were not allowed to renew their driver's license. This regulation was coupled with health care provider education. They reduced the use of long-acting benzodiazepines by 66% and short-acting benzodiazepines by 37% (Eriksen & Bjerrum 2015).



Some policies use "surveillance": in the USA, doctors had to fill out three copies of a single benzodiazepine prescription, one of which was sent to the government to be monitored (Wagner *et al.* 2003).



In France, doctors received a small financial incentive to reduce their rates of benzodiazepine prescriptions. This policy however, did not manage to reduce the amount of benzodiazepines still being prescribed (Rat *et al.* 2014).



Certain policies were successful in some countries, but not in others. An example is "de-listing", where a country decides to stop paying for the medicine. In the USA, older people continued to find ways to use the medicine while in the Netherlands, this policy led to fewer people taking the medicine.

Policy

# **Executive committee**members

#### Cara Tannenbaum, MD, MSc, Co-Director

Michel Saucier Endowed Chair in Pharmacy, Health & Aging Professor, Faculties of Medicine and Pharmacy, Université de Montréal Scientific Director, Institute of Gender and Health, Canadian Institutes for Health Research

#### James L. Silvius, BA (Oxon), MD, Co-Director

Medical Director, Seniors Health, Community Seniors, Addiction, Mental Health & Pharmacy Services, Alberta Health Services

#### **Janet Currie, MSW**

Medication Safety Advocate, Psychiatric Medication Awareness Group, PharmaWatch & Psychmedaware.org

PhD Candidate, University of British Columbia

#### Barbara Farrell, BScPhm, PharmD, FCSHP

Scientist, Bruyère Research Institute, Ottawa Assistant Professor, Department of Family Medicine, University of Ottawa Adjunct Professor, School of Pharmacy, University of Waterloo

### David Gardner, PharmD, MSc

Professor, Department of Psychiatry, College of Pharmacy, Dalhousie University

### Steve Morgan, PhD

Professor, School of Population and Public Health, University of British Columbia

### Andrea Murphy, PharmD, BSc

Associate Professor, College of Pharmacy, School of Nursing, Department of Psychiatry, Dalhousie University

#### **Johanna Trimble**

Patients for Patient Safety Champion (Canada) Steering Committee, BC Polypharmacy Risk Reduction Initiative Consumer Advocate, <u>isyourmomondrugs.com</u>

## References

Canadian Centre on Substance Abuse (CCSA), 2015. Retrieved on December 5th, 2017 from: <a href="http://nperesource.casn.ca/wp-content/uploads/2017/03/CCSA-Canadian-Drug-Summary-Prescription-Opioids-2015-en.pdf">http://nperesource.casn.ca/wp-content/uploads/2017/03/CCSA-Canadian-Drug-Summary-Prescription-Opioids-2015-en.pdf</a>

Canadian Institute for Health Information (CIHI), 2017. Opioid-Related Harms in Canada. Ottawa, ON: CIHI; 2017. Retrieved October 23rd, 2017 from:

https://www.cihi.ca/sites/default/files/document/opioid-harms-chart-book-en.pdf

CIHI, 2016. 13 Canadians hospitalized each day for opioid poisoning infographic. Retrieved on December 11th, 2017 from: <a href="https://www.cihi.ca/en/13-canadians-hospitalized-each-day-for-opioid-poisoning-infographic">https://www.cihi.ca/en/13-canadians-hospitalized-each-day-for-opioid-poisoning-infographic</a>

Cicero TJ, Ellis MS, Surratt HL, Kurtz SP. The changing face of heroin use in the United States: a retrospective analysis of the past 50 years. JAMA Psychiatry 2014;71:821-6.

Eriksen SI, Bjerrum L. Reducing Prescriptions of Long-Acting Benzodiazepine Drugs in Denmark: A Descriptive Analysis of Nationwide Prescriptions during a 10-Year Period. Basic Clin Pharmacol Toxicol 2015;116:499-50

International Narcotics Control Board (INCB), 2016, Retrieved on December 5th, 2017 from: <a href="https://www.incb.org/incb/en/narcotic-drugs/Technical">https://www.incb.org/incb/en/narcotic-drugs/Technical</a> Reports/narcotic drugs reports.html

Morgan SG, Hunt J, Rioux J, Proulx J, Weymann D, Tannenbaum C. Frequency and cost of potentially inappropriate prescribing for older adults: a cross-sectional study. CMAJ Open 2016;4:E346-E51.

Rat C, Penhouet G, Gaultier A, et al. Did the new French pay-for-performance system modify benzodiazepine prescribing practices? BMC Health Serv Res 2014;14:301.

Turner JP, Tannenbaum C. Older Adults' Awareness of Deprescribing: A Population-Based Survey. J Am Geriatr Soc 2017.

Wagner AK, Soumerai SB, Zhang F, et al. Effects of state surveillance on new post-hospitalization benzodiazepine use. Int J Qual Health Care 2003;15:423-31.

### **Special thanks to:**







### The Canadian Deprescribing Network is funded by:



