Annual Report
2021

Towards a National Strategy for Appropriate Medication Use



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.

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

Visit <u>deprescribingnetwork.ca</u> for more information

Contact: info@DeprescribingNetwork.ca
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Twitter: @DeprescribeNet

This report is available on the Canadian Deprescribing Network website in French and English: deprescribingnetwork.ca/reports



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Interview with the Co-Directors

In 2021, the Canadian Deprescribing Network marked the fifth year since its inception. We asked Co-Directors Dr. Jim Silvius and Dr. Justin Turner for their take on what has changed over this time, and what the Network, as well as Canada, need to do next to continue improving medication safety and reducing medication harm for older Canadians.

Question – What has changed these past five years since starting the Network?



Dr. Jim Silvius, CaDeN Co-Director, BA(Oxon), MD, FRCPC (JS): When the network was founded, members agreed that "the pendulum had swung too far": too many seniors were using too many medications, often risky ones. As a geriatrician, I'm seeing change: more family physicians are asking for consults on how to safely stop longterm medications with their older patients. Patients are grateful when, in partnership with them, we stop medications that were, at best, not providing benefit, at worst, causing harmful side effects.



Justin Turner, CaDeN Co-Director, PhD, BPharm, MClinPharm (JT): Changing hearts and minds takes time, and patience is key! Nonetheless, exciting things are happening: older adults are talking to their relatives about the risks of taking too many medications and health care providers are talking to their patients about deprescribing. Collaboration among members of the public, health care providers and policy makers has created change on the ground. This report is filled with inspiring examples of people creating change from coast to coast. Slowly, the culture is changing!

Question – What needs to happen next?

JS: This report answers that question. The creation of the Canadian Drug Agency Transition Office in 2021 provided an amazing window of opportunity to improve the "three A's" of medications: Access, Affordability and Appropriateness. While attention has been focused on access and affordability, we need to ensure that appropriateness is properly considered. This report provides our vision for this strategy.

JT: This strategy is informed by other countries' medication appropriateness work. We see this report being useful to decision-makers at the federal and jurisdictional levels. It seems like much work is already being done in several Canadian jurisdictions, albeit in silos.

JS: We also need to move past "Canada is a country of pilot projects". We can and should make this happen for medication appropriateness.

JT: Yes! From engagement to implementation to evaluation, Canada has the expertise. Now is the time to bring all of this knowledge and experience together to build and implement a national strategy that ensures the medications all Canadians are prescribed are safe and appropriate.

Inappropriate Medication Use in Canada

In 2020, Canadians filled over 750 million prescriptions (IQVIA 2020).

Medications can help us in many different ways. However, when medications are not used appropriately, they put Canadians at risk of harm:



Medication harms include falls, fractures, memory problems, car crashes, premature loss of independence, and death. (Brubacher et al. 2021; Halli-Tierney et al. 2019)



Older adults, women, people taking multiple medications, and people living in low-income neighbourhoods are at greatest risk of medication harm.

(CIHI 2018)



Nearly \$2B is spent yearly on potentially inappropriate medications and their consequences in older adults.

(2013 estimate - Morgan et al. 2016)



Inappropriate medication use means taking more medications than needed, taking a medication for longer than is needed, or when the potential for harm outweighs the potential for benefit.

Too many older Canadians are taking too many medications



2 out of 3 Canadians age 65 and over take at least 5 prescription medications.



1 out of 4 Canadians age 65 and over takes at least 10 prescription medications.

(CIHI 2018)

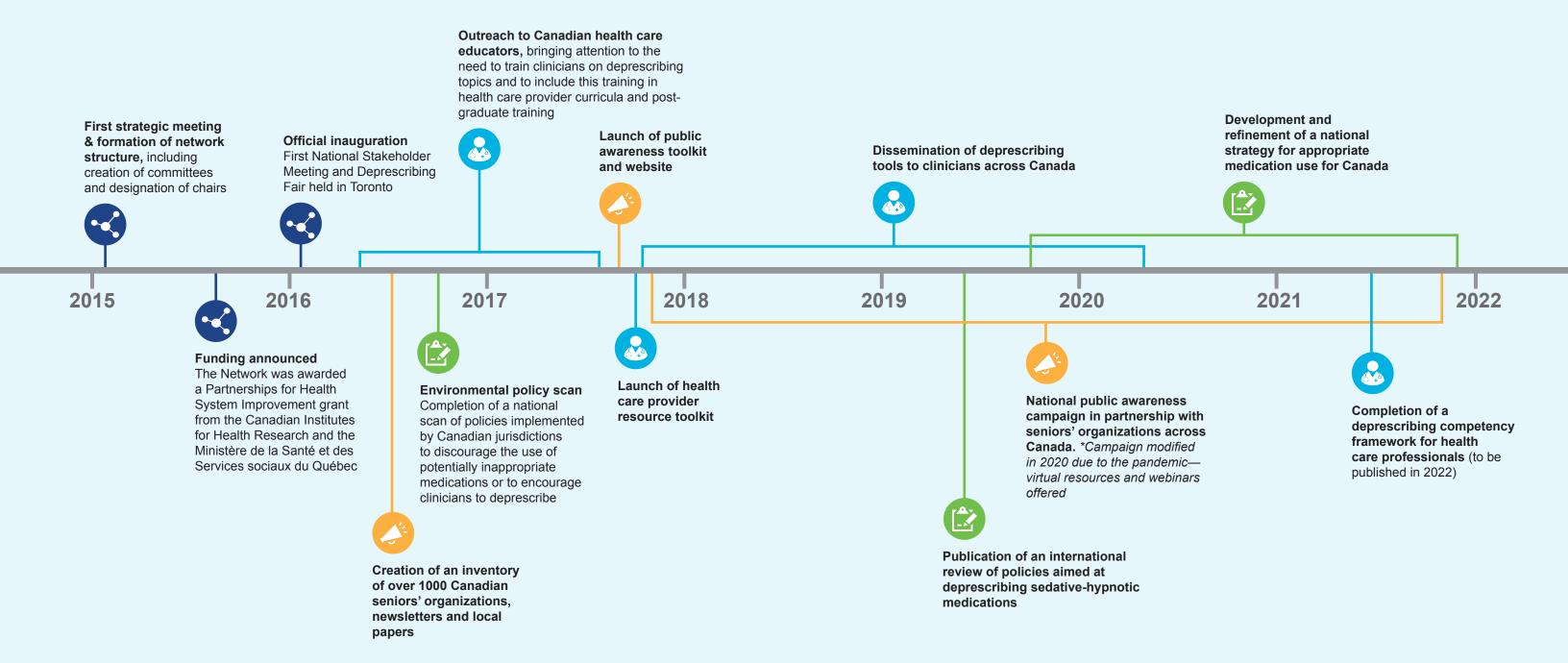
Older Canadians are taking medications that may do more harm than good



In 2016, nearly half of all older Canadians took at least one potentially inappropriate medication (CIHI 2018).

Our First Six Years: A Retrospective

In 2015, a small group of dedicated health care providers, patient advocates, researchers, community leaders and decision-makers came together with a big dream: to reduce the use of potentially inappropriate medications by 50% and increase access to safer drug and non-drug therapies in Canada. Since then, the Network has grown from 40 to several hundred Canadians working to raise awareness and make change in their milieux. Our achievements since then are testament to the strength of our collaborations and the commitment of our members and champions.



LEGEND

Foundation of the Network

Policy Committee

Public Awareness Committee

Health Care Provider Committee

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Public Awareness & Knowledge Translation

Collaborating with the public to raise awareness of the potential harms of inappropriate medication use has been embedded in our structure from the beginning. Many of our members have launched their own initiatives to spread the word to the older adults in their communities and beyond. We continue to be inspired by their efforts to change the knowledge landscape around what safe and appropriate medication is, and is not.

Spreading the word to older Manitobans during the pandemic

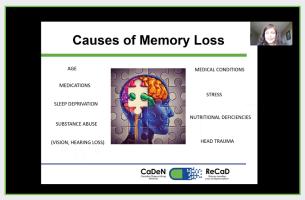
Connie Newman, Executive Director of the Manitoba Association of Senior Centres, has been leading the charge in Manitoba for many years to engage older adults in conversations about safe medication use. As the pandemic precluded in-person meetings, she wanted to make sure the information continued to make its way to seniors across the province.

In 2021, the Manitoba Association of Senior Centres and the Canadian Deprescribing Network partnered to create a series of free, educational webinars on medication safety. The webinars tackle many important topics, including how to safely manage medications, how to identify medication side effects, and they also offer tips for talking to your health care provider about deprescribing. Dozens of participants attended these virtual sessions. We are excited to see that technology has helped break seniors' isolation while providing a safe learning environment.



Connie Newman, Executive
Director of the Manitoba
Association of Senior
Centres

All three webinars are publicly available and can be viewed on the <u>Canadian Deprescribing Network's YouTube channel</u>.



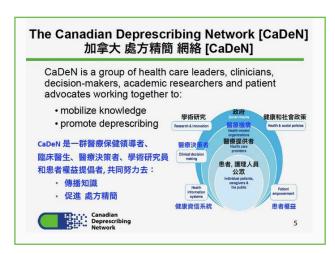
Slide from webinar "Memory and Medications" presented by Shirin Jetha, PharmD.



Slide from webinar "Safe Options for Insomnia" presented by Dr. David Gardner.

Reaching Seniors in Cantonese with "Age Well, Live Well with Safer Medication Use"

"Age Well, Live Well with Safer Medication Use" is a free workshop offered by the COSCO Seniors' Health and Wellness Institute to community organizations across British Columbia. In early 2021, this presentation was adapted to Cantonese and presented in that language. We are thrilled that Cantonese-speaking older adults are now able to access, in their own language, information to help them engage in meaningful conversations with their health care providers about their medications. Demand for the session – in English and Cantonese – continues to rise, with presentations being given to groups at least every other month!



A slide from the "Age Well, Live Well with Safer Medication Use" presentation in Cantonese.

More info: https://seniorshelpingseniors.ca/workshops/

Do you know how to talk to health care providers about medications?

Founding member of the Network and Co-Chair of the Health Care Provider Committee, Dr. Barbara Farrell leads a deprescribing research team based at the Bruyère Research Institute in Ottawa. Her team created "Talking About Medications" to help older adults and their care partners have conversations with health care providers about medications. The series comprises three 90-minute, interactive workshops, each focusing on a different topic. The series was designed so that it can be easily delivered by health care providers for their patients and members of the



public. Participants learn how to find information about medications, document and share this information with others, and take part in decision-making about medication use.

More info: https://deprescribing.org/medication-workshops/

The Antidote: A 6-Step National Strategy for Appropriate Medication Use

The use of too many medications and medications known to be risky leads to unnecessary patient harm and health system costs. Canada urgently needs a strategy for appropriate medication use to tackle this problem. Our strategy proposes a national organization to coordinate and support evidence-based interventions with and for jurisdictions. This would promote efficient use of resources and allow jurisdictions to build on the learnings and interventions of others. Jurisdictions would have the freedom to select intervention programs that most fit within their needs or context, and in which timeframe. Evaluation would be completed externally, at the level of the national coordinating organization (see p. 11: The Functions of a National Coordinating Organization).



Support jurisdictions to implement the

(See p. 16.)

interventions they choose.

common issues. (See p. 15.)

The Functions of a National Organization



Engagement

- Public (including vulnerable and marginalized populations), health care provider, jurisdictional policymaker, and other stakeholder engagement embedded in the organizational structure from the outset.
- Inclusive of a needs assessment and identification of potential priorities for development.
- Ongoing planned routine engagement to ensure currency and relevance of the work.

Evidence-informed intervention creation

- Screening for national and international evidence to inform intervention development.
- Selection of initial priority areas and development of intervention programs to improve appropriate medication use, which may include non-pharmacologic therapies.
- Jurisdictions to select intervention(s) to implement and in which time frames; collaboration to adapt them to jurisdictional contexts.
- Ongoing development of additional intervention programs over time.

Review of evidence and adaptation

- Evidence reviewed for new programs and updating of existing programs on a continuous basis as new data emerges.
- Evidence review to include research, real-world learnings, process and outcome data.
- Successful interventions adapted to other jurisdictions and integrated in a sustainable manner.

Evaluation framework development; evaluation completion

- Evaluation framework identified as part of development of the intervention program that considers both processes and outcomes at patient, health system and jurisdictional levels.
- Collaborating and leveraging other established agencies, resources and links with experts and academics to conduct the evaluation.
- Evaluation of process and outcome results used for program improvement, which may include the range from minor modification for successful programs through to discontinuation for non-successful programs.

Economic evaluation

- Development of a framework for rigorous and comprehensive economic evaluations.
- Evaluation inclusive of system level costs including direct costs of interventions (pharmacologic and nonpharmacologic), health system savings/costs.
- Evaluation also to consider costs of unintended consequences, and patient-level costs.
- Completion of evaluation leveraging other established agencies and resources.
- Development of recommendations for sustainability based on the evaluation(s).

Research facilitation and integration

- Identify priority areas, link with researchers, and encourage research opportunities with other funders.
- Add to the literature through publication at different stages from description of interventions through implementation evaluation and outcomes.

Step 1. Engage with the Public, Health Care Providers & Policymakers

Build empowering partnerships with stakeholders.

SaferMedsNL: A collaborative approach from the outset

In 2017, the government of Newfoundland and Labrador made a commitment to promote appropriate use of medications. The Canadian Deprescribing Network and Memorial University of Newfoundland's School of Pharmacy sought to understand the province's needs through discussions with local policymakers and a close look at provincial data. Several drug classes were identified as possible priorities. At the same time, the team began creating relationships with key stakeholders, including



members of the public, patient advocates, front-line health care providers, and health professional organizations. With these collaborations in place, a thorough review of successful interventions was conducted. Several interventions were then presented that could be implemented to address the identified priority areas. This collaborative approach combined local on-the-ground expertise with best evidence from Canada and abroad. From this process, SaferMedsNL was born!

More info: https://safermedsnl.ca/

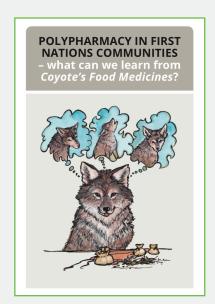




SaferMedsNL public engagement event held in 2019.

Deprescribing guidance informed by clinicians' needs

Dr. Cheryl Sadowski, a member of the Health Care Provider Committee, has been working with a team in Drug Utilization and Stewardship at Alberta Health Services to create two resources that will serve to provide information and guidance on deprescribing for health care providers. The resources provide detailed information on deprescribing for different drug classes, and include references, useful resources, and steps on how to implement deprescribing in different health care settings. An example of true engagement, the process of creating the resources involved consultation with health care providers across disciplines and specialities, and close collaboration with geriatricians and experts in drug stewardship.



Cover of postcard to raise awareness of the Coyote's Food Medicines story.

Coyote's Food Medicines: Empowering Indigenous communities to tell their story about medications

Coyote's Food Medicines was born from the will to bridge worldviews and promote meaningful conversations about medications. This powerful story about healthy medication use was written with guidance from 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. Gina Gaspard, a member of the Canadian Deprescribing Network Nursing Committee, was a central collaborator in the creation and dissemination of this story. We are proud to continue promoting this example of how by empowering communities to tell their own health stories, more people are able to access important health information.

More info: https://www.coyotestory.ca/

Perspectives of patients and providers on the development and resolution of prescribing cascades

Prescribing cascades are important targets for deprescribing. They occur when one drug is prescribed to manage the side effect of another, typically where the side effect is misinterpreted as a new medical condition and a potentially unnecessary and harmful second drug is prescribed.

The research team of Drs. Barbara Farrell, Lisa McCarthy, Lianne Jeffs and Colleen Metge have interviewed people, their caregivers, and health care providers to explore how and why prescribing cascades happen and persist across care settings.



These findings were used to develop options for evidence-informed interventions and tools for identifying and managing prescribing cascades (including deprescribing). Additional consultations with stakeholders on the feasibility, acceptability and optimal design of these interventions are underway.

Step 2. Review Best Evidence

Collaborate and coordinate with others to review and evaluate the scientific literature for pharmacologic and non-pharmacologic therapies from Canada and abroad.

International review of policies that promote appropriate medication use

Public health policies that promote appropriate medication use have been successfully implemented in various countries. Such policies have reduced costs and improved patient-level and system-level outcomes. Facing uncontrolled costs and the growing use of potentially inappropriate medications, Canada must learn from international evidence to design new, innovative pharmaceutical policies. This review, presented at the 2021 Canadian Agency for Drugs and Technologies in Health (CADTH) Symposium, identified existing policies that promote appropriate medication use in Australia, England and Sweden, and assessed their impact. Publication to come in 2022.



Dr. Justin Turner was a co-presenter at the 2021 CADTH Symposium.

Watch the presentation: https://youtu.be/J3Sd0kSfx6Y?t=285

The development of deprescribing guidelines and algorithms

Evidence-based deprescribing guidelines to help manage polypharmacy and improve outcomes for patients have been developed by or in collaboration with the Bruyère Research Institute. Dr. Barbara Farrell, Canadian Deprescribing Network Co-founder and Health Care Provider Committee Co-Chair, has been one of the leads behind this work. The process included surveying front-line clinicians about priorities, conducting systematic reviews of the literature and creating interprofessional guideline development teams. Each team considered deprescribing evidence, harm of continuing the medication, patient values and preferences, and associated costs. Dr. Farrell's team published a methods paper for



Deprescribing algorithm for benzodiazepines and z-drugs.

developing deprescribing guidelines and an accompanying Guideline Instruction Manual. This process and the resultant deprescribing tools are now being used by new teams to inform the development of three additional deprescribing guidelines: Opioids (Dr. Danijela Gnjidic, Dr. Feng Chang), Statins (Dr. Lise Bjerre) and Antihypertensives (Dr. Carina Lundby).

More info: https://deprescribing.org/resources/deprescribing-guidelines-algorithms/

Step 3. Adapt and Develop Evidence-Informed Interventions

Use evidence to develop interventions for implementation to address common issues.

The TAPERING trial: Adapting EMPOWER to the Manitoba context

To address the inappropriate prescribing of opioids – a major cause of the ongoing opioid crisis – the Canadian Deprescribing Network collaborated with the Provincial Drug Programs Branch within the Health, Seniors and Active Living Department of the Government of Manitoba to develop and launch the TAPERING intervention.

As part of TAPERING, an educational brochure for the public on the risks of long-term use of opioids for chronic non-cancer pain was developed. The design and content of the brochure were adapted from the brochure on sedatives used in the EMPOWER Cluster Randomized Trial. The brochure's aim was to encourage people to speak to their doctor or pharmacist about stopping or reducing the dose of their opioid medication. The brochure was tested during focus groups with patients taking opioids for chronic non-cancer pain, and modifications were made according to patients' comments. This led to the creation of a new deprescribing tool which was sent to 5,700 community-dwelling adults across Manitoba who had active opioid prescriptions for chronic non-cancer pain. This panprovincial research collaboration is an example of how evidence can provide grounds for jurisdictions to select an intervention, while also allowing them to adapt and develop it according to their particular needs and context.



Photograph of participants of one of the focus groups that tested the brochure for the TAPERING trial.

Step 4. Implement with Jurisdictions

Support jurisdictions to implement the interventions.

Reducing reliance on sleeping pills with YAWNS NB

Use of sleeping pills in older adults is associated with harms such as physical impairments leading to falls, memory and other cognitive problems, dependence, and impaired driving. New Brunswick has the highest rate of regular sleeping pill use among older adults in Canada, at 25 per cent. Drs. Andrea Murphy and David Gardner, both pharmacist-researchers at Dalhousie University and members of the Canadian Deprescribing Network Executive Committee, decided to tackle this problem by promoting cognitive behavioural



therapy for insomnia (CBT-i), a safe and effective non-medicated treatment for insomnia. They are leading YAWNS NB (Your Answers When Needing Sleep in New Brunswick), a pan-provincial study in partnership with the University of New Brunswick that is testing the effect of mailing participants one of two different information packages on sleep and sleeping pill use against a treatment-as-usual control group (no mailed package). This intervention, building on the evidence of the EMPOWER study and adapted to the New Brunswick context, will compare the EMPOWER package with Sleepwell, a new package emphasizing CBTi methods and resources to improve sleep along with guidance for the gradual dose reduction of sleeping pills used long term. Recruitment for the study ended November 30, 2021 with 594 people enrolled. Results are expected in the fall of 2022.

More info: https://sleepstudy.ca/

MedSafer: Deprescribing recommendations integrated in Ontario's electronic medical record

MedSafer is an electronic tool built by McGill researchers that helps guide clinicians through the process of deprescribing. This year, the Ontario government announced funding to support implementation of new medication safety technologies in Ontario long-term care homes. Homes that use the electronic health record Med e-care or Point Click Care can access MedSafer recommendations directly at the point of performing quarterly medication reviews. MedSafer reports contain a priority list of individualized deprescribing opportunities for older adults along with embedded links to the Canadian Deprescribing Network patient brochures.

More info: https://www.medsafer.org/



Step 5. Evaluate Outcomes

Develop a framework to assess processes, patient outcomes, health system outcomes, and economic outcomes.

Improving public health surveillance with the integration of polypharmacy indicators

Dr. Caroline Sirois's research team at Université Laval in Québec City has been working in collaboration with the Public Health Expertise and Reference Centre in Quebec (INSPQ) to develop polypharmacy indicators relevant to public health surveillance as well as to clinicians. This will enable an investigation of polypharmacy from different points of view and contribute to a deeper understanding of the clinical, social, and ethical issues surrounding polypharmacy and its surveillance, as well as the use of artificial intelligence for health record data.



Read the publication on this research here:

https://bmcmedinformdecismak.biomedcentral.com/articles/10.1186/s12911-021-01583-x

Are pharmacist-led deprescribing interventions cost-effective?

By preventing the harmful consequences of medications, deprescribing interventions may generate health system- or societal-level savings. Two cost-effectiveness studies involving Canadian Deprescribing Network Co-Director Dr. Justin Turner and Co-Founder Dr. Cara Tannenbaum assessed the financial impact of deprescribing interventions targeting sedatives and non-steroidal anti-inflammatories (NSAIDs) in community-dwelling older adults from a public health system perspective. The evaluations were conducted as post-hoc analyses of the D-PRESCRIBE trial. In both cases, the intervention proved to be cost-effective by reducing costs and improving quality of life.



Read the publications on these studies here:

NSAIDs: https://pubmed.ncbi.nlm.nih.gov/32105355/ Sedatives: https://pubmed.ncbi.nlm.nih.gov/32105355/

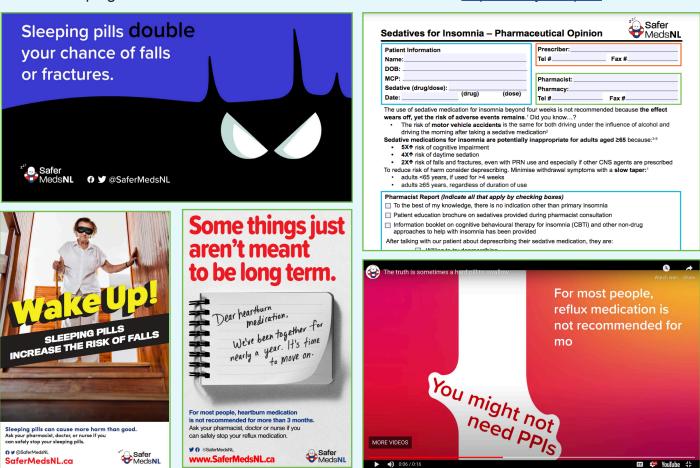
Step 6. Learn Iteratively

Consider learnings from evaluation and evidence reviews and adjust accordingly. Embed learnings at organizational/jurisdictional levels.

Embedding the learnings from SaferMedsNL in the fabric of Newfoundland and Labrador's health care

December 2021 marked the completion of <u>SaferMedsNL's</u> initial three-year public awareness campaign. The campaign's goals? To reduce the use of risky medications and increase awareness of safer alternatives across the province. The approach? The campaign's design was based in the science of behaviour change. TV commercials, social media ads, posters, and public events were all used to bring attention to the issues. While the ads sought to raise awareness of the potential harms of certain medications, they also promoted meaningful conversations between providers and patients to ensure medications are continued when necessary and safely stopped when no longer needed. In collaboration with the Government of Newfoundland and Labrador, the project team is now looking at how to take what they learned from the project to inform next steps and further operationalize them.

View the campaign videos on the SaferMedsNL Youtube Channel: https://bit.ly/34igQ1i.



Photos: Postcard for sleeping pill campaign (top left); health care provider communication form for sleeping pills (top right); poster for sleeping pill campaign (bottom left); poster for heartburn medication campaign (bottom centre); heartburn medication campaign video (bottom right).

How Can You Help Bring this Strategy to Fruition?

The Canadian Deprescribing Network is looking for partners from all Canadian jurisdictions to help bring this strategy to fruition!

Are you....



A decision-maker?

Decision-makers, we would like to encourage you to consider the benefits of a coordinated yet flexible approach to tackling the harm and resource wastage caused by inappropriate medication use prevalent in every jurisdiction in this country. As the old saying goes, *why reinvent the wheel* 13 times? With its built-in evaluation component, this strategy has the agility to learn from what is and is not working, and quickly make adjustments.



A leader in your community (seniors' organization, patient support group, cultural or religious community, etc.)?

Build these initiatives with us! By helping organize medication safety initiatives in your community, you'll ensure that they truly meet the needs of its members. <u>Discover our medication safety resources for the public here.</u>



A healthcare professional or health administrator?

No matter where you practice, you can contribute to these efforts. Initiatives aimed at improving appropriate medication use and reducing the harmful effects of medications are underway in many different settings, including the community, acute care, and long-term care. Opportunities are numerous for clinicians and health administrators looking to improve quality of care. Make these dream projects of yours a reality! Click here to discover our tools for clinicians.



A citizen who wants to see change?

Everyone can help raise awareness by speaking about medication appropriateness with others in their community, including friends and family, healthcare professionals and policymakers. <u>Discoverour medication safety resources for the public here.</u>

Let's work together to create intersectional change and eliminate harm from inappropriate medication use. Contact us at info@deprescribingnetwork.ca.

The Canadian Deprescribing Network is funded by:







Special thanks to:





