

Do I still need this medication?



Winnipeg Regional
Health Authority

Office régional de la
santé de Winnipeg



A conference for family and friends
caring for a person with dementia.

Saturday, October 26
9 am - 3:30 pm

Canadian Mennonite University
500 Shaftesbury Blvd.
Winnipeg, MB

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Pharmacy Manager, WRHA Long Term Care Program
Member of the Canadian Deprescribing Network (CaDeN)*



Outline

1. Medications and aging
2. Polypharmacy
3. Risky medications and medications that may cause harm
4. Deprescribing
5. Questions to ask your doctor, nurse or pharmacist
6. Resources

Acknowledgements

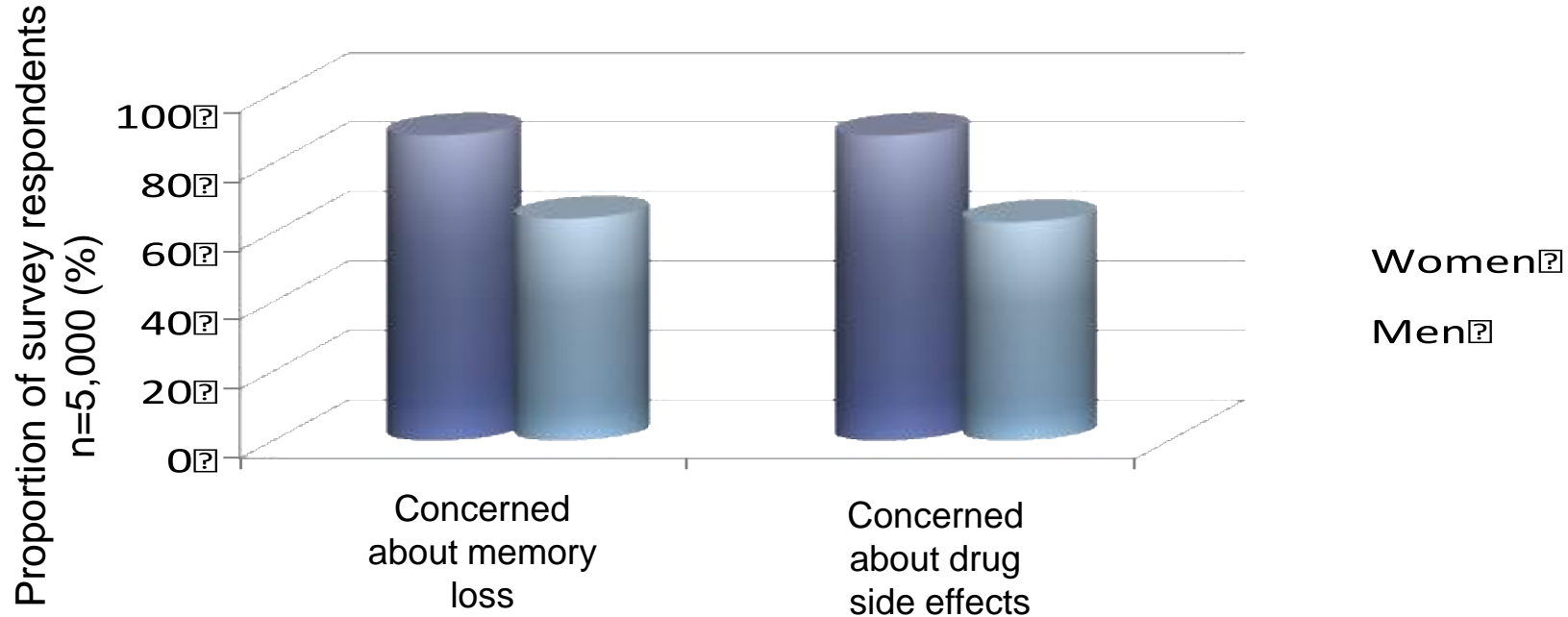
- *I have no actual or potential conflicts of interest in relation to this presentation.*
- *Thanks to Camille Gagnon, PharmD, Assistant Director, Canadian Deprescribing Network for her assistance with this presentation*

Why do we take medications?

- Maintain health
- Improve symptoms
- Manage chronic conditions
- Prolong life expectancy
- Slow disease progression

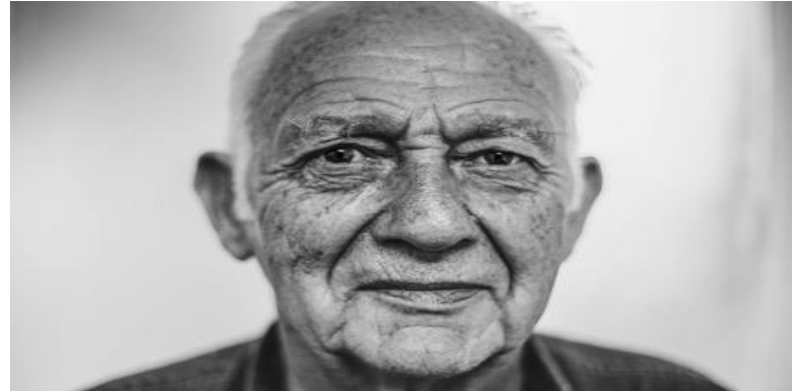


Top health concerns among aging Canadians



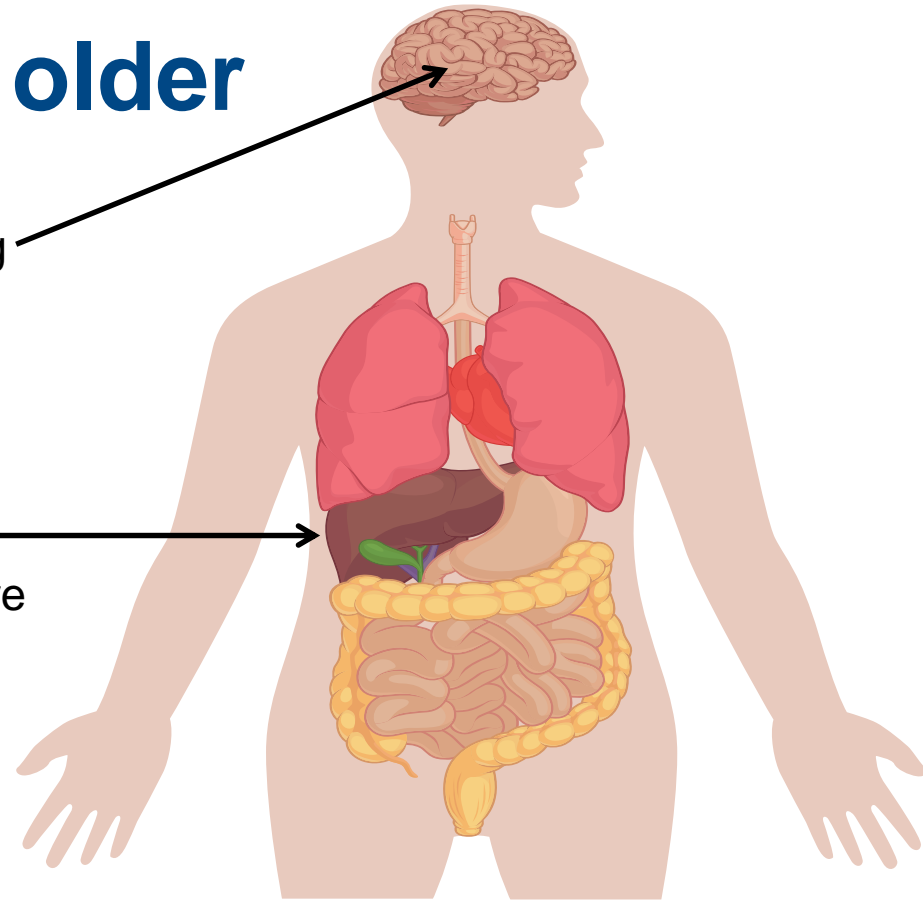
As we get older...

- We often need to take more medications to manage chronic conditions
- The benefits and risks of medications may change



As we get older

- The brain becomes more sensitive to drug effects
- Medications stay longer in our body because we have less muscle and more body fat
- Our liver and kidneys do not process medications as efficiently as when we were younger
- Our body contains less water and some medications can become more concentrated



How many medications?

What percentage of community-dwelling older adults take:



5 or more different prescription medications?

66%



10 or more different prescription medications?

27%



What percentage of people over age 85 take 10+ medications?

38%

"We combined all your medications
into ONE convenient dose."



What is Polypharmacy?

Medication Overload: America's Other Drug Problem

How the drive to prescribe
is harming older adults

April 2019



- The use of multiple medications for which the harm outweighs the benefit
- Medication overload or harmful polypharmacy
- No strict cutoff for when the number of medications becomes harmful, but the greater number of medications, the greater their likelihood of experiencing harm

From: <https://lowninstitute.org/wp-content/uploads/2019/04/medication-overload-lown-web.pdf>

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Harms of Polypharmacy



Adverse Drug Events

For each additional drug in a patient's medication regimen, the **risk of adverse drug events increases by 7 to 10 percent.**^{7, 8, 9}



Delirium

Older patients taking 6 or more drugs in the hospital are more than **twice as likely to experience delirium** compared to patients taking fewer drugs.¹⁰ Older people taking more than 10 drugs are nearly 2.5 times more likely than those taking fewer than 5 drugs to experience impaired cognition.¹¹



Falls

For older adults, taking 4 or more drugs is associated with an **18 percent greater risk of falls.** Taking 10 or more drugs is associated with a 50 percent higher risk of falls.^{12, 13}



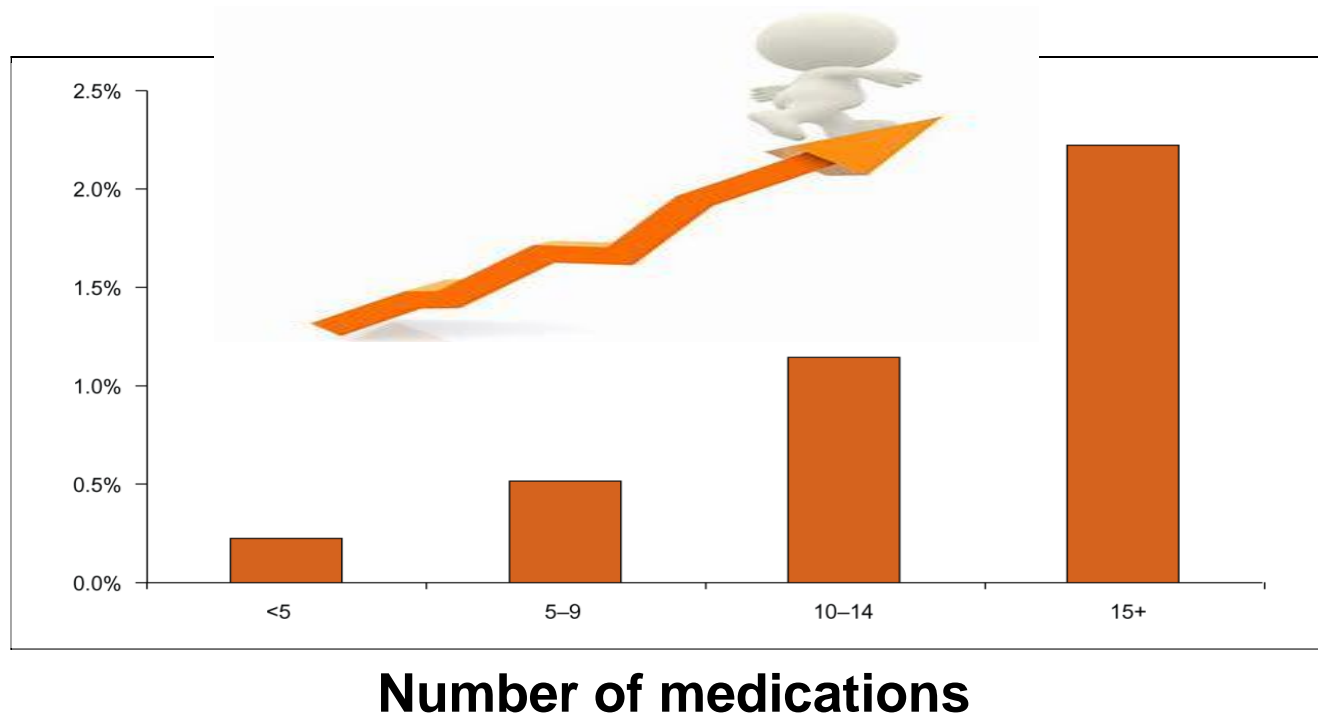
Mortality

For older adults, taking 6 to 9 medications is associated with a **59 percent greater chance of death** compared to taking no medications. Taking 10 or more medications is associated with a 96 percent greater chance of death.¹⁴

- Drug interactions
- Hospitalizations
- Cost
- Poor adherence to treatment
- Errors/confusion in managing medications

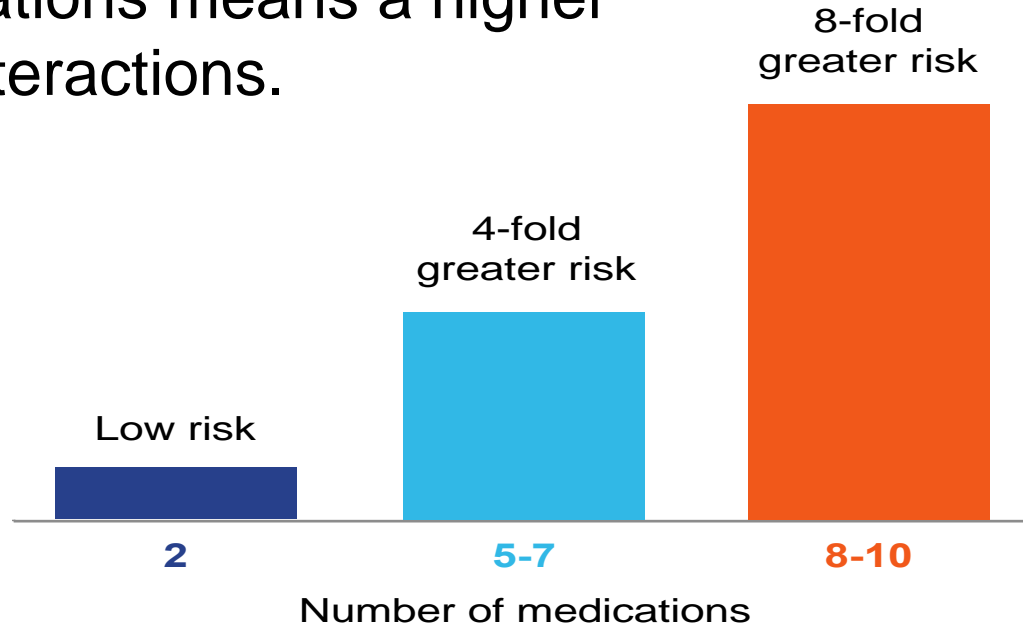
More Hospitalizations

% of seniors hospitalized
because of a side effect of a
medication



Risk of Drug Interactions

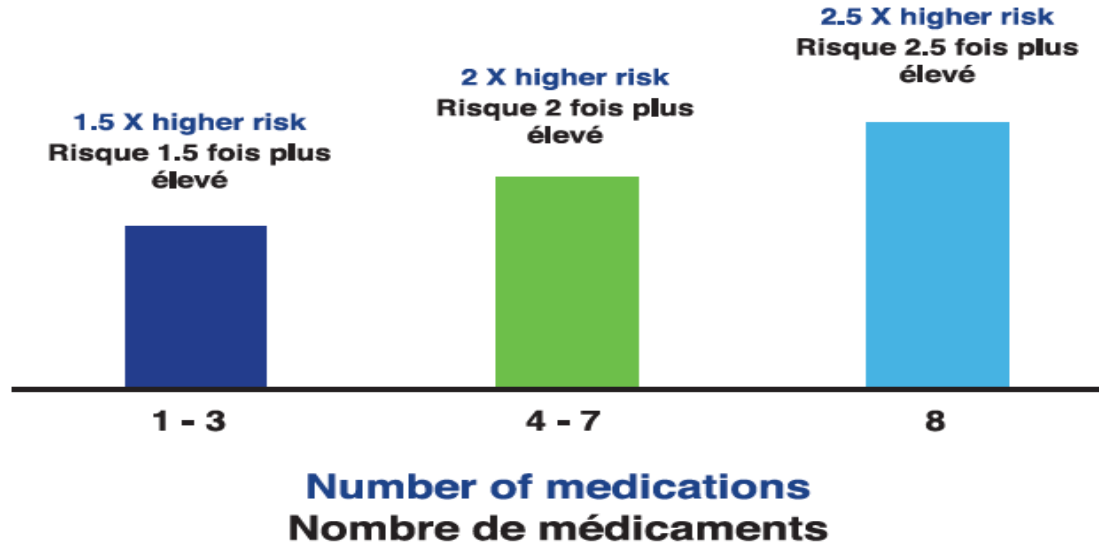
More medications means a higher chance of interactions.



Risk of Falling

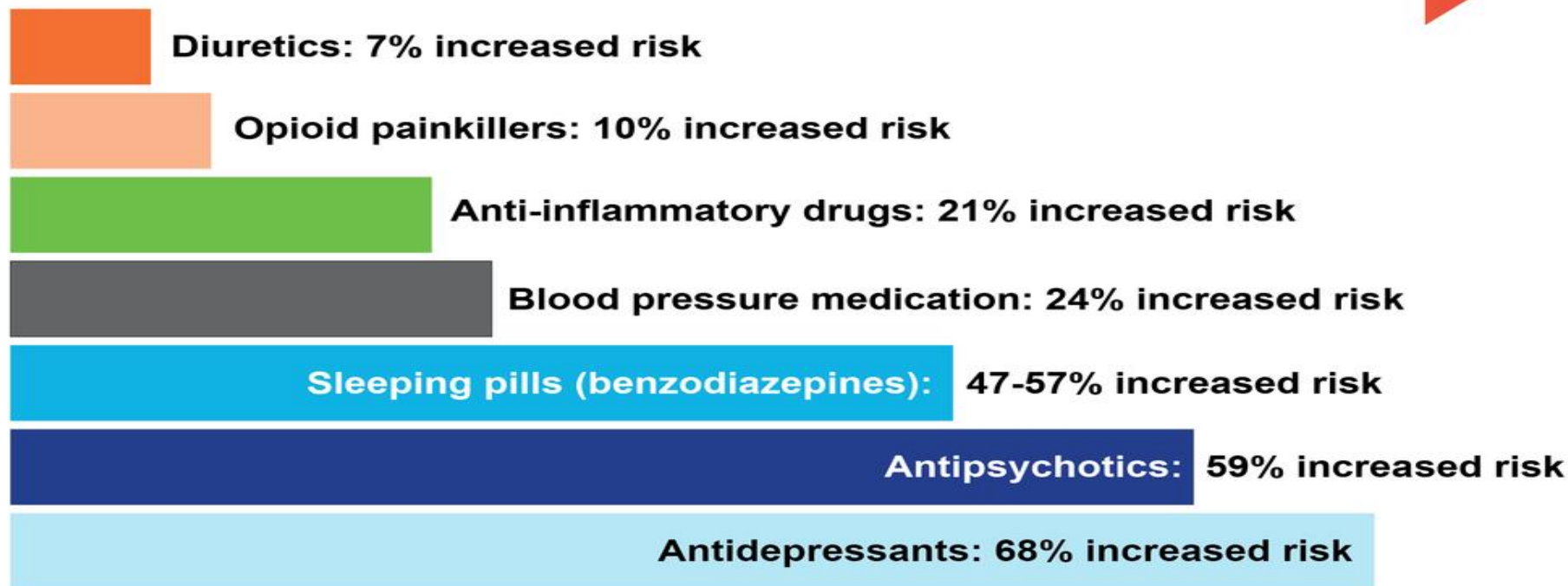


Taking more medications increases your risk of falls

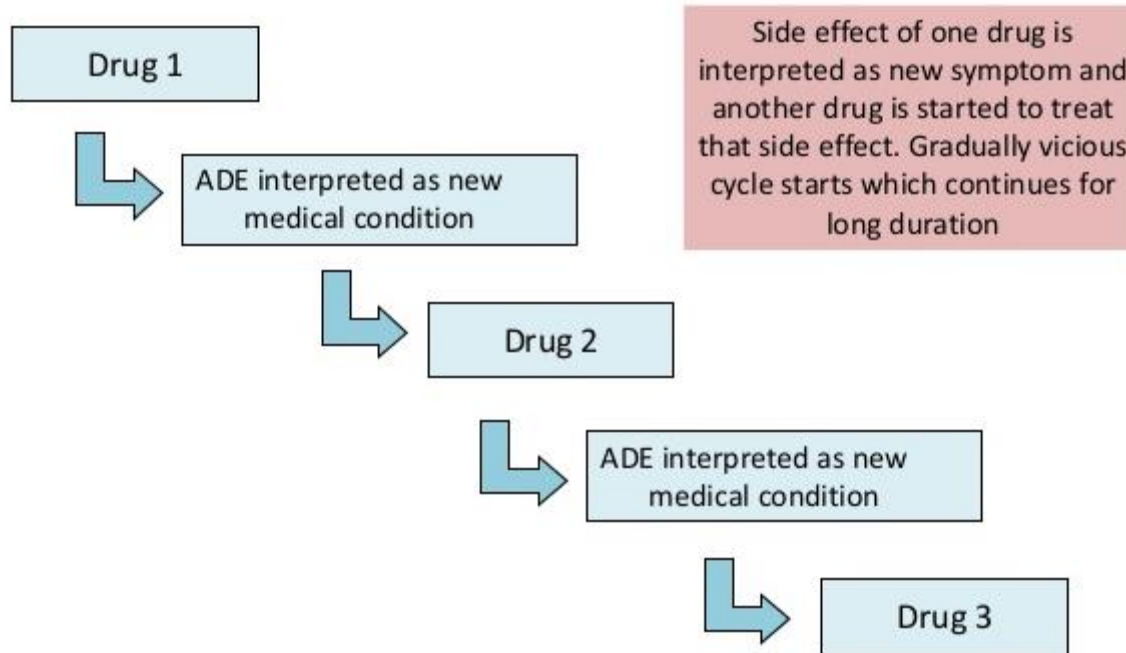


Adapted from / Adapté de Zieme et al. 2006

Which medications increase the risk of falls?



Medication Cascade



Rochon PA, Gurwitz JH. Optimizing drug treatment in elderly people: the prescribing cascade. *BMJ* 1997;315:1097.

Patient Journey



Meet Gary. He lives with his wife in Akron, Ohio. He's a retired teacher and loves fishing.

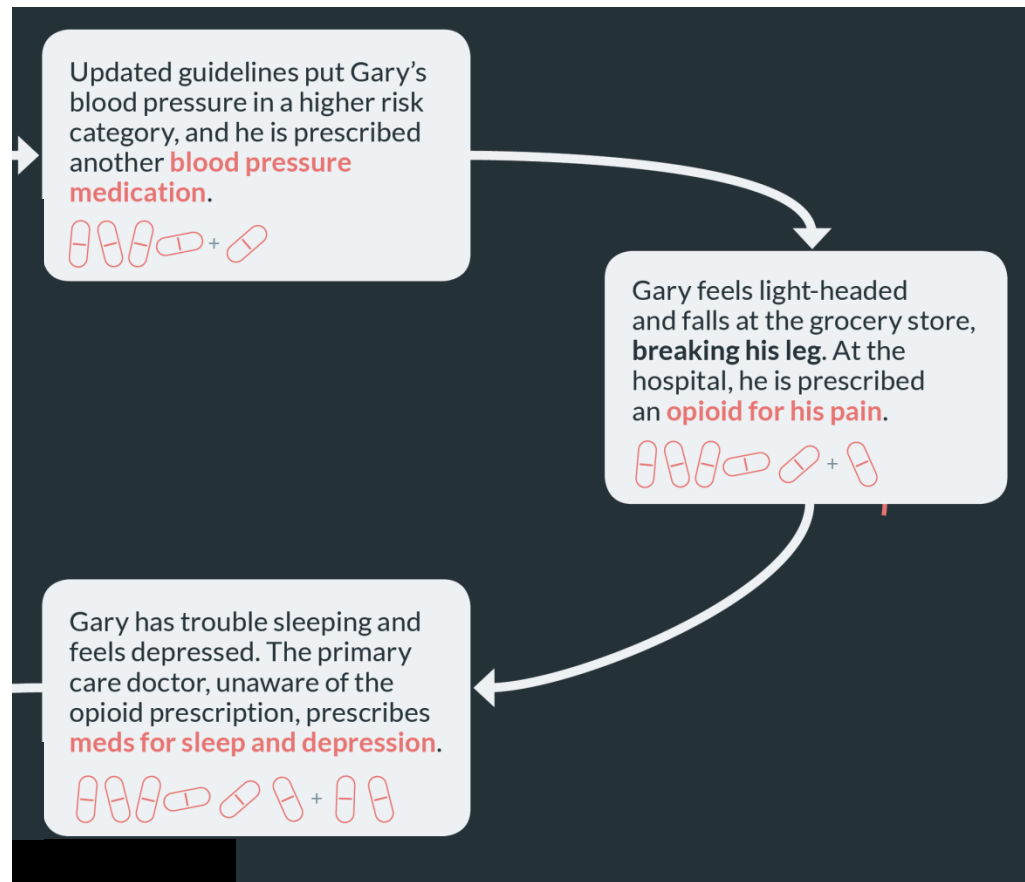
At age 65, Gary is prescribed medication **for high blood pressure** and **high cholesterol**.



At age 72, Gary is diagnosed with type 2 diabetes and prescribed **medication to control his blood sugar**.



Updated guidelines put Gary's blood pressure in a higher risk category, and he is prescribed another **blood pressure medication**.



↓

Gary gets the flu and becomes **dehydrated**, making him more susceptible to drug side effects.

→

Dizzy and confused, Gary rear-ends the car in front of him at a stop light. His family believes he is showing **signs of dementia** and may not be safe at home.

↘

With his medication overload undetected, **Gary is placed in a nursing home and dies 5 years later.**

WELL, THE **WHITE PILL** LOWERS MY
BLOOD PRESSURE BUT MAKES MY
LEGS SWELL, THE **YELLOW PILL**
LOWERS THE SWELLING BUT **CAUSES**
ME TO PEE, THE **BLUE PILL** STOPS
ME FROM PEEING BUT **MAKES ME**
CONFUSED, THE **TAN PILL** IMPROVES
MY MEMORY BUT **MAKES MY NOSE**
RUN, THE **PINK PILL** STOPS MY NOSE
FROM RUNNING BUT **MAKES ME**
SLEEPY, THE **ORANGE PILL** WAKES
ME UP BUT **INCREASES MY BLOOD**
PRESSURE, SO THE **WHITE PILL**
LOWERS MY BLOOD PRESSURE BUT...



By Edwin Tan (c) 2015
www.facebook.com/edsrant

What are risky medications?

- The potential risks of a medication outweigh the potential benefits.
- A safer alternative treatment for the same condition exists that is equally or more effective.



The cost of risky medications

\$419 million

Canadians spend \$419M per year on potentially harmful prescription medications. This does not include hospital costs.

\$1.4 billion

Canadians spend \$1.4B per year in health care costs to treat harmful effects from medications, including fainting, falls, fractures and hospitalizations.

Older Canadians who take at least one risky medication

How many Canadians **over age 65** take risky medication?

31% of men

42% of women



Older Canadians who take at least one risky medication

How many Canadians over age 85 take risky medication?

39% of men

47% of women



Who is most at risk of harmful effects of medication?

1. People with multiple chronic conditions
2. Women
3. People over age 65





Women are more at risk. Why?

- Longer life expectancy
- Suffer from more chronic conditions
- Take more medication
- Female biology and physiology increases the risk of harmful effects of medication

How medications affect memory

1. Anticholinergic effects
2. Sedation
3. Deficiency in vitamin B₁₂
4. Hypoglycemia
5. Hypotension
6. Increasing risk of stroke

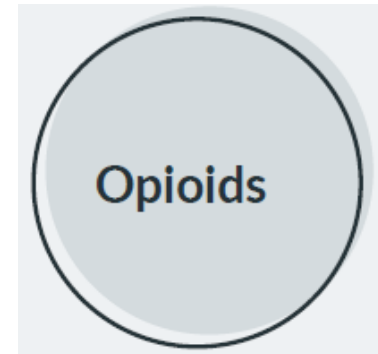


Fourth Canadian Consensus Conference on the Diagnosis and Treatment of Dementia (2014)

*“Diagnostic criteria for **possible** AD - A diagnosis of possible AD should be made when the criteria for AD are met (regarding the nature of cognitive deficits) but the disease follows an atypical course (eg, there is a sudden onset of cognitive impairment and cognitive decline is not gradual), or when criteria for AD are met but there is evidence of a mixed presentation, such as concomitant cerebrovascular disease, or the patient has clinical features of dementia with Lewy bodies, has another comorbidity (medical or neurologic), **or is using medication that could have a substantial effect on cognition.**”*


Medications Most Likely to Cause Harm

- These medications contribute to 60% of emergency room visits for adverse drug reaction among older adults:




Medications Most Likely to Cause Harm


- These medications have been shown to increase the potential for harmful side effects:



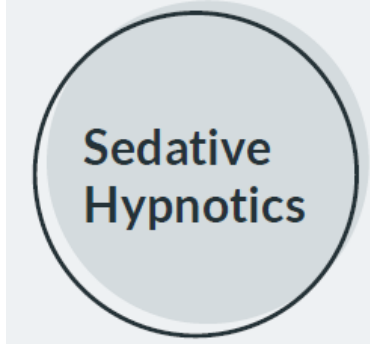
Blood
Pressure
Medication



Over-the-
Counter
Drugs



Antipsychotic
Drugs

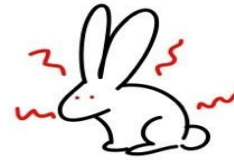


Sedative
Hypnotics

Anticholinergic Effects

- Increased temperature
- Decreased sweating
- Increased heart rate
- Blurred vision
- Dry mouth
- Constipation
- Urinary retention
- Decreased cognition
- Delirium

ANTICHOLINERGIC SIDE EFFECTS



Hot as a hare



Dry as a bone

sketchymedicine.com



Blind as a bat



Red as a beet



Mad as a hatter

Highly Anticholinergic Medications

Drug class	Commercial/Generic names
Antihistamines	Benadryl (diphenhydramine); Gravol (dimenhydrinate); Chlor-Tripolon (chlorpheniramine); Atarax (hydroxyzine)
Tricyclic antidepressants	Elavil (amitriptyline); Aventyl (nortriptyline); imipramine; desipramine
Antimuscarinics	Ditropan (oxybutynin); Detrol (tolterodine); Enablex (darifenacin); Vesicare (solifenacin); Toviaz (fesoterodine)
Antipsychotics	Clozaril (clozapine); Haldol (haloperidol); Zyprexa (olanzapine); Seroquel (quetiapine)
Muscle relaxants	Robaxin (methocarbamol); Orfenace (orphenadrine); Lioresal (baclofen); Flexeril (cyclobenzapine)
Antispasmodics	atropine; Transderm V (scopolamine)
Antiparkinsonians	Cogentin (benztropine)

How Antipsychotic Medications are Used to Help People with Dementia

A Guide for Residents, Families, and Caregivers

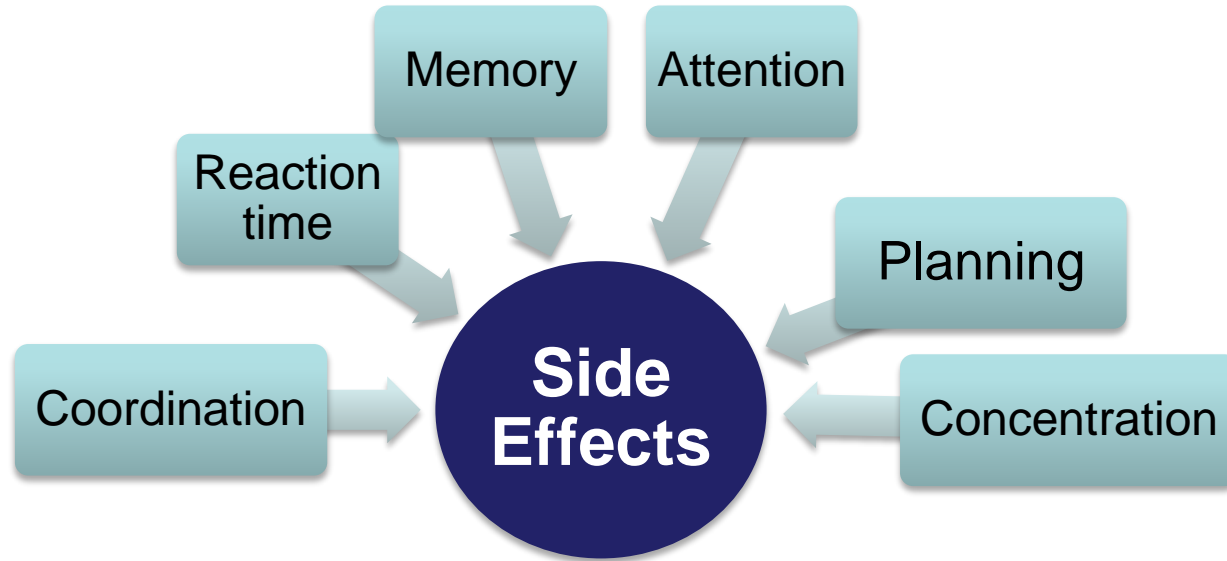


Centre for Effective Practice

Best Evidence • Best Practices • Better Health

<https://cep.health/clinical-products/antipsychotics-and-dementia-primary-care-edition/>

Sleeping pills affect many cognitive processes



Sleeping pills are a risky medication

Help you fall asleep faster

- 14 minutes faster on average

But increase the risk of:



Falls & fractures



Motor vehicle accidents



Memory problems

Denmark's Driver Licencing Incentive Policy



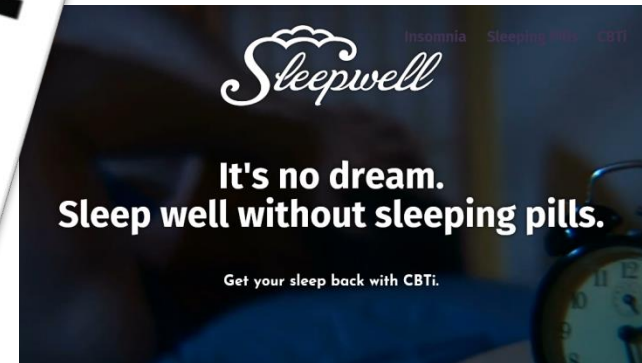
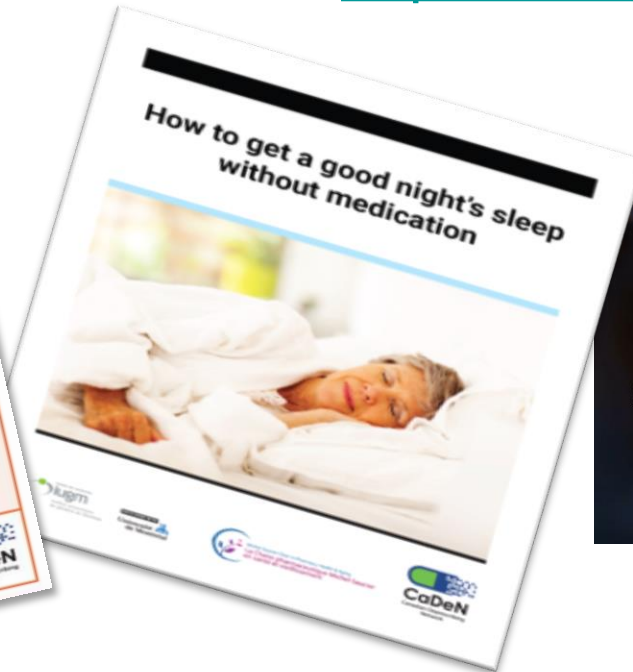
- Seniors on strong sleeping pills not allowed to renew their driving licence
- Seniors on moderate sleeping pills get a 1-year conditional renewal and cognitive testing every year
- New users not allowed to drive for 4 weeks
- Episodic users recommended not to drive the next day



k37162879 fotosearch.com

Resources for Sleep

Download tools and resources at deprescribingnetwork.ca



my **Sleepwell.ca**

**Also available in French*

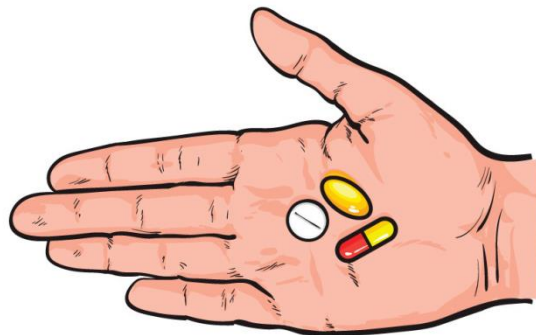
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How do we get...

from here



to here?

What is deprescribing?

Deprescribing:

"The planned and supervised process of

DOSE REDUCTION or **STOPPING**

of **medication** that may be

CAUSING HARM

or

NO LONGER PROVIDING BENEFIT "

Reducing medications safely to meet life's changes

Deprescribing

Deprescribing involves patients, caregivers, healthcare providers and policy makers.



Deprescribing must always be done with the help of your doctor, nurse or pharmacist.

Patient Journey



At age 65, Gary is prescribed medication **for high blood pressure** and **high cholesterol**.



At age 72, Gary is diagnosed with type 2 diabetes and prescribed **medication to control his blood sugar**.



Intervention

Doctor explains both medication and lifestyle-change options. **Gary opts to try lifestyle changes first.**

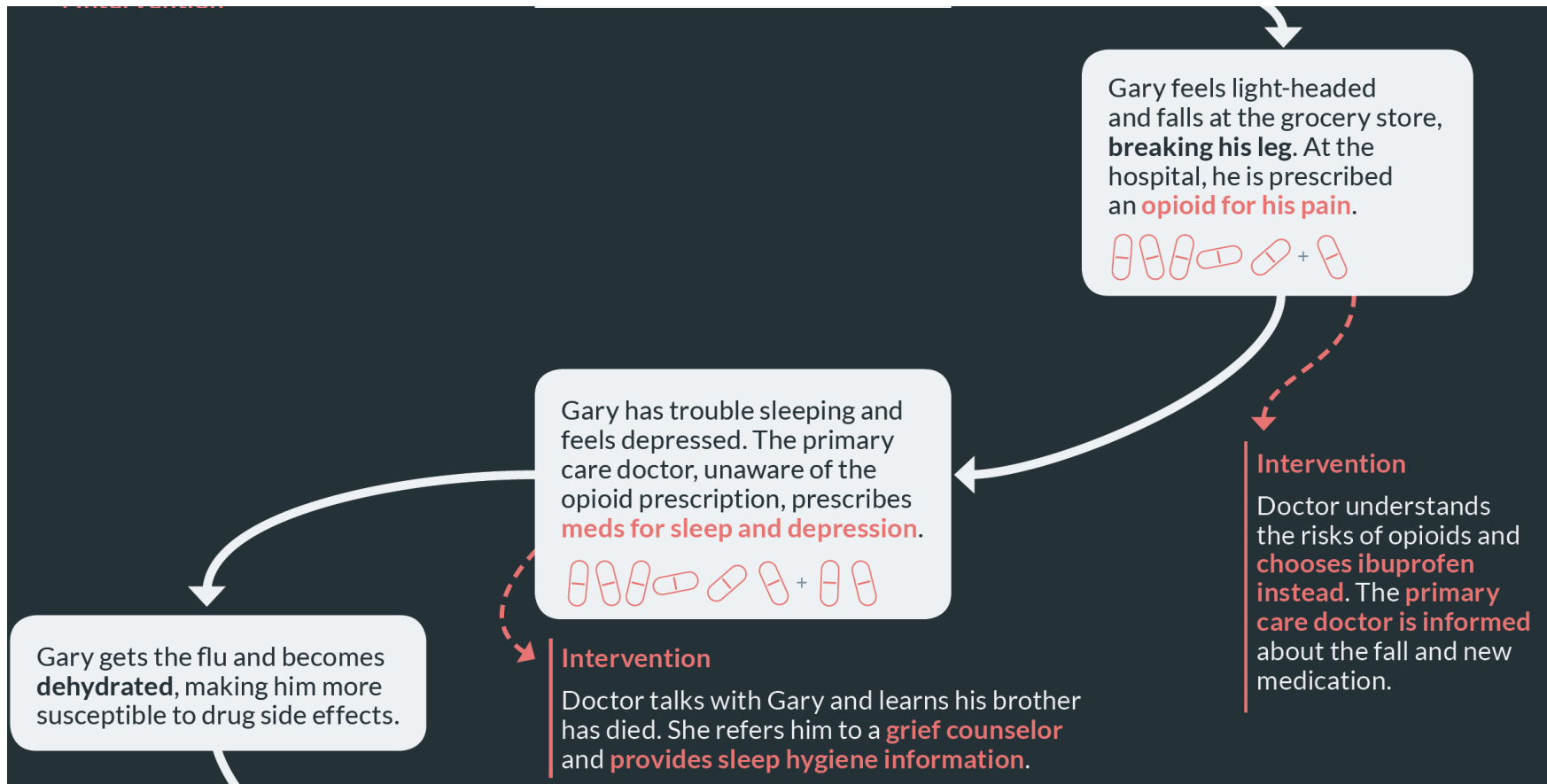
Updated guidelines put Gary's blood pressure in a higher risk category, and he is prescribed another **blood pressure medication**.



Intervention

Doctor notes that older patients like Gary may fall outside the new guidelines. They discuss the risks and benefits of a new medication and **decide NOT to prescribe**.





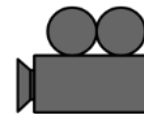
Dizzy and confused, Gary rear-ends the car in front of him at a stop light. His family believes he is showing **signs of dementia** and may not be safe at home.

With his medication overload undetected, **Gary is placed in a nursing home and dies 5 years later.**

Suspecting medication overload, the doctor performs a **prescription checkup** and deprescribes unnecessary meds. **Gary lives 10 more years at home.**



- Canadian group that has developed evidence-based guidelines for deprescribing for 5 classes of medications
- Resources include:
 - Decision-support algorithms
 - Patient pamphlets
 - Infographics
 - Whiteboard videos



Susan's Story



Deprescribing gave me
back my mom

A family's experience with
deprescribing



What can you do?

Make a special appointment with your doctor, pharmacist or nurse to ask if you can reduce your medications.

71% of older Canadians are willing to stop a medication if their doctor says it is possible.



***Always speak to your doctor, pharmacist or nurse before stopping any medication*

Questions to ask your doctor, nurse or pharmacist

1. Why am I taking this medication?



Questions to ask your doctor, nurse or pharmacist

2. What are the potential benefits and harms of this medication for me?



Questions to ask your doctor, nurse or pharmacist

3. Can it affect my memory or cause me to fall?



Questions to ask your doctor, nurse or pharmacist

4. Can I stop or reduce the dose of this medication?



Continue?



Stop or Reduce?

Questions to ask your doctor, nurse or pharmacist

5. Who do I follow up with and when?



Harms?



Monitoring?

What else can you do?

- **Inform yourself** about your medications and why you are taking them.
- **Spread the word** about deprescribing to friends and family, advocacy groups and government representatives.
- **Ask questions, stay informed, be proactive, and participate in making informed choices!**

Medication Card

It's Safe to Ask* About Your Medications ***Vous avez le droit de poser des questions au sujet de vos médicaments***

Share your medication list with your doctor, nurse and pharmacist. Carry this card with you at all times!
Communiquez votre liste de médicaments à votre médecin, votre infirmière et votre pharmacien. Ayez cette carte avec vous en tout temps!

EMERGENCY RESPONSE INFORMATION / INFORMATION POUR LES SITUATIONS D'URGENCE

Name/Nom

Address/Adresse

Birth Date (dd/mm/yyyy)/Date de naissance (jj/mm/aaaa)

Sex/Sexe

☐ M ☐ F

Manitoba Health Registration #/
N° d'immatriculation de Santé Manitoba

Personal Health ID #/N° d'identification personnelle
(9 numbers/chiffres)

Medical Plan #/N° de régime d'assurance médicale
(e.g. Blue Cross/Croix Bleue)

Family Doctor's Name/Nom du médecin de famille

Phone/N° de téléphone

Emergency Contact/Contact en cas d'urgence

Phone/N° de téléphone

Second Emergency Contact/2^e contact en cas
d'urgence

Phone/N° de téléphone

Pharmacy Name/Nom de la pharmacie

Pharmacy phone number/N° de téléphone
(pharmacie)

Medical History (illnesses, surgeries)/Antécédents
médicaux (maladies, opérations)

- ☐ diabetes/diabète
- ☐ high blood pressure/hypertension
- ☐ heart disease/maladie du cœur
- ☐ breathing problems/problèmes respiratoires
- ☐ other medical problems (list below)/
autres problèmes médicaux (veuillez préciser)

My allergies or bad reactions to medications
Allergies ou réactions indésirables aux médicaments

List your medications on other side/Inscrivez vos
médicaments au verso

If you have questions call your pharmacist. / Si vous avez des questions, téléphonez à votre pharmacien.

Download or order resources at www.safetoask.ca

Téléchargez ou commandez des ressources sur le site www.safetoask.ca



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INSTITUT POUR LA SÉCURITÉ
DES PATIENTS DU MANITOBA

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Medication Card

List all medicines that you take. Include herbal medicine and vitamins.

Indiquez tous les médicaments que vous prenez, y compris les plantes médicinales et les vitamines.

Update your list. Cross out old medications. Add new ones! Keep a copy in E.R.I.K.

Mettez votre liste à jour. Rayez les médicaments périmés. Ajoutez les nouveaux médicaments! Conservez une copie dans la T.I.S.U.

[illegible]Rev. 1 June 2012 / Rev. 1^{er} juin 2012

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The Canadian Deprescribing Network is a group of :

- Health care leaders
- Clinicians
- Decision-makers
- Academic researchers
- Patient advocates



Canadian
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MEDICATION?

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Réseau canadien
pour la déprescription

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- Email: info@deprescribingnetwork.ca
- Twitter: @deprescribingnet
- Facebook: @deprescribingnetwork





THE

TAKE-HOME MESSAGE

- The risk versus benefit of medications may change with age
- Taking too many medications (polypharmacy) can sometimes be harmful
- Medications can be reassessed through a process called deprescribing
- Deprescribing involves discussing your medications with your doctor, nurse or pharmacist
- Use trusted resources when looking for information on medications



Questions?

