

Practical Technologies that Can Enable Ageing in Place

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Managing Potential Bias

The Planning Committee has reviewed the presenters' slides and ensured that they are unbiased and free of any inappropriate influence from industry.

Why We're Here Today

- Older Canadians more so than ever before want to maintain their independence as they age and live at home for as long as possible.
- With increasing age, comes a growing risk for falls, and other medical or health emergencies that can occur at home, threatening their long-term health and independence.
- Older adults and their families are open to receiving advice on how to age well in their own homes, but generally are not asking for that advice from their primary or other regular care providers.
- Most healthcare providers are not aware of the rapidly evolving technology solutions, and what to consider recommending, that can better enable their patients and their families to age in place.

Today's Objectives



1

Understand the Risks and Impacts of At-Home Medical Emergencies

2

Appreciate Why Older Canadians Want to Age in Place Now More than Ever Before

3

Understand the Practical Technologies that Can Enable Ageing in Place



1

Understanding the Risks and Impacts of At-Home Medical Emergencies

Falls are the leading cause of injury in Canada for older adults



Risk Factors



Age

Falls are the leading cause of injury-related hospitalizations among Canadians 65 years and older.



Other Health Conditions

Some conditions, including diabetes, obesity, cardiovascular and respiratory diseases, as well as dementia, acute illnesses and a lack of exercise can make maintaining one's balance and mobility more difficult.



Vision and Hearing Impairments

Vision problems, including cataracts and glaucoma, and hearing problems can impact day-to-day tasks that require focus and balance. 25% of older Canadians have these issues.



External Factors

Clutter and other tripping hazards, poor lighting, not using gait aids, and using several medications can all increase one's risk of falling.



1 in 3

**older Canadians fall
each year**

**And 1 in 3 falls
result in serious
injuries**

4 in 5

**hospitalizations due to
injuries amongst older
persons are because of
a fall**

4 in 10

**falls treated in
hospitals involved
broken (fractured)
hips**

50%
of falls occur
at home



Other Potential Emergencies



Medical Emergencies

such as a stroke, heart attack, trouble breathing, severe allergic reaction, etc., especially when unable to call 911.



Consequences of Memory Impairments

or dementia may lead to injuries while taking on daily tasks, such as burns while cooking, forgetting to use gait aids or from wandering.



Sprains + Strains

to arthritic or weakened joints leading to injuries that can limit one's independence



Natural Disasters + Other Emergencies

such power outages, or heat waves, winter storms, flooding, home fires etc.

2

Appreciating Why Older
Canadians Want to Age in
Place Now More than Ever
Before

Nearly **100%** of older Canadians recently surveyed plan to live independently in their own homes as long as possible.¹

30% don't feel prepared should they be alone when a medical emergency occurs their own homes



1. The survey consisted of 1517 Canadians aged 18+. *Pandemic Perspectives on Ageing in Canada in Light of COVID-19: Findings from a National Institute on Ageing/TELUS Health National Survey*

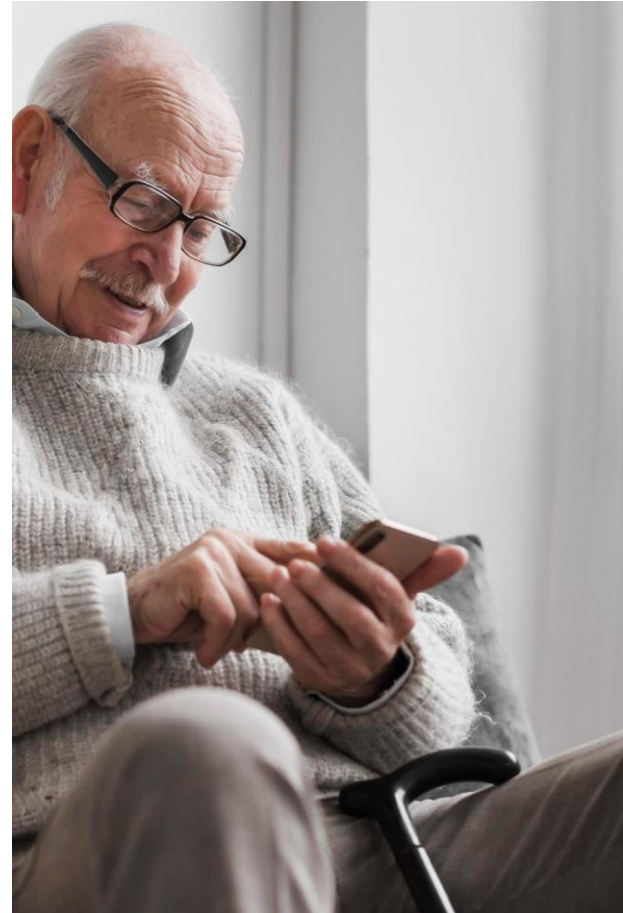


79%

say they have not spoken to their healthcare professionals about what to do if a fall occurs to themselves or a loved one

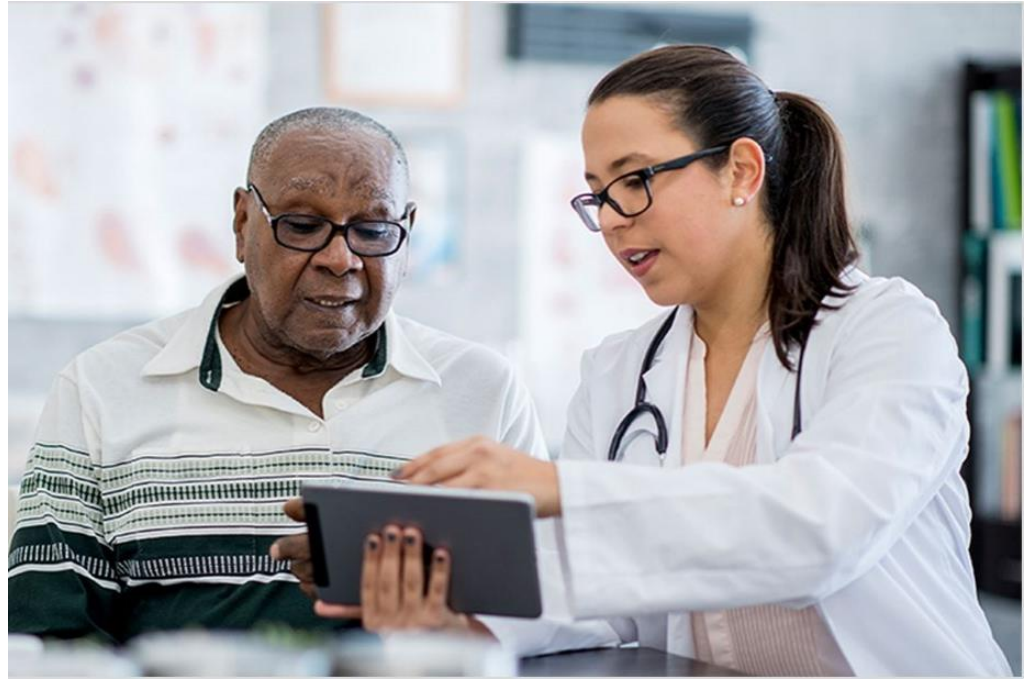
As Healthcare Professionals

we can provide older Canadians and their families with the right information and tools to help everyone age in place, with confidence



83%

of Canadians aged 55+
said they are open to
receiving advice on
how to live safely on
their own



Common Resources to Enable Ageing in Place

- Home Health Care Services (nursing, personal care and therapy support)
- Community Support Services (grocery, meal delivery, transportation, social support and exercise programs)
- Occupational Therapist (OT) Home Safety Assessment





3

Understanding the Practical Technologies that Can Enable Ageing in Place

Supportive Technologies to Enable Ageing in Place



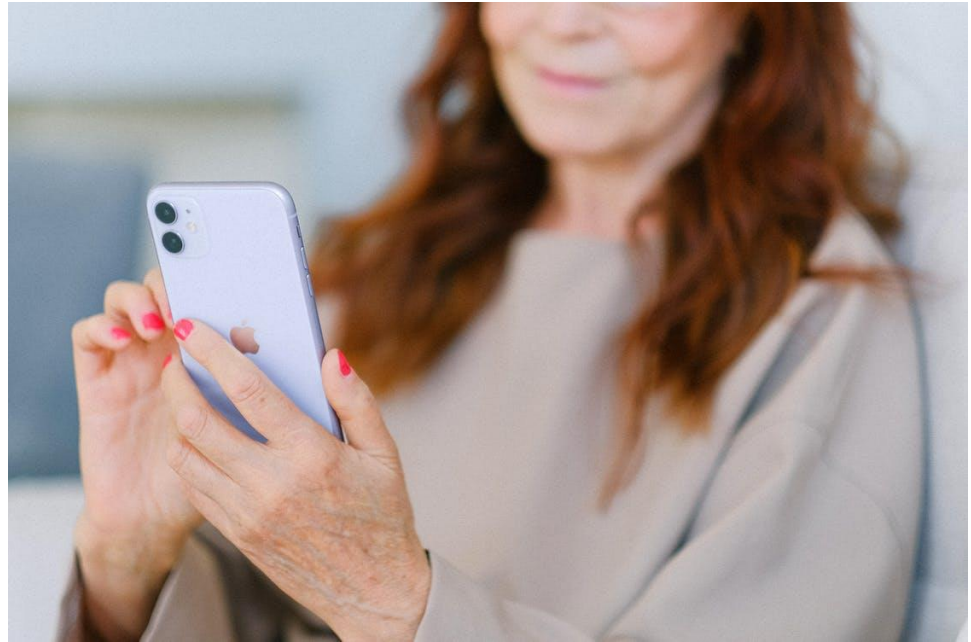
Smart Phones



Virtual Care



Remote Health Monitoring



Supportive Technologies to Enable Ageing in Place



Smart Phones



Fitness Trackers / Smart Watches



Virtual Care



Smart Home Devices



Remote Health Monitoring



Personal Emergency
Response Services (PERS)

PERS 101



Limited Equipment

Electronic hardware connecting to emergency response centre, and dispatch of help.



Easy to Use

Typically worn on-person (pendant, bracelet, smartwatch), with a help button to initiate an alert.



Advanced Features

Fall detection and GPS tracking available, and some allow two-way voice interaction if a user can't reach a phone.



A 2008 BMJ study, found that:



82%

of falls occurred
when the person
was alone

80%

of those who fell were
unable to get up after
at least one fall

30%

had lain on the floor
for an hour or more

Studies have reported positive health impacts of PERS in terms of:

- gaining faster assistance in an emergency and preventing additional complications,
- extending the time users are able to remain living at home,
- increasing users' sense of security, and;
- reducing anxiety about falling and increasing confidence in performing everyday activities (a way of manage unpredictability).

McKenna et al, BMC Geriatrics 2015;15:81

De San Miguel and Lewin, Australas J Ageing. 2008 Jun;27(2):103-5

LivingWell Companion
by TELUS Health starting at
\$15/month

PHILIPS Lifeline
starting at \$36/month

PERS Options

LifeAssure
starting at \$29.99/month

Galaxy MedicalAlert
starting at \$29.95/month

Barriers to Implementing PERS in Primary Care



1. Cost
2. Some features of PERS may not be as effective in older adults with moderate to severe cognitive impairment
3. Language and Geographical Barriers
4. Data Privacy Concerns
5. Lack of Primary Care Provider Awareness / Knowledge/ Time
6. Stigma of devices associated with old age / belief that one may not require or benefit from PERS



Canadians are More Determined than Ever to Age in Place

COVID-19 has led 60% Canadians to change their opinions about the possibility of living in a long-term care or retirement home, amplifying the need for home-based supports to enable ageing in place.

How to Start Enabling Ageing in Place with Your Patients?

Talk About It!

Patients and/or their caregivers are open to receiving advice on how to live more safely on their own, but are often not sure who can help them better understand their options to enable ageing in place.



Ways to Enable Ageing in Place



Assess + Prevent

risks for falls and other hazards around the home

ie. OT Home Safety Assessment



Stay Active (150 mins per week)

to strengthen muscles, increase stability, improve one's mood, prevent dementia and maintain one's overall health



Stay Connected

using digital and non-digital supports and services that keep one connected to loved ones and community, care, and more safe.



Open Communication

to help patients feel comfortable and confident about enabling their own ageing in place solutions, even after some solutions are implemented and as their health evolves.

Bottom Lines



- Ageing in Place is a top priority for every older Canadian, though they are at increased risk for experiencing injuries, medical and other emergencies that may threaten that.
- Older adults and their caregivers can benefit from a number of cost-effective, at-home technology solutions (that can help people stay connected and maintain their independence) but are not having discussions with their regular healthcare professionals to learn about them and prepare themselves.
- Armed with a better level of knowledge and awareness of ageing in place enablers, healthcare professionals can better engage their patients and their families about possible tactics and technologies to support ageing with greater independent and peace of mind.



Questions?



Thanks

For More Information:

sinaigeriatrics.ca/

ryerson.ca/nia

<https://www.pcpcc.org/>

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