Canadian Journal of Health Technologies
August 2024 Volume 4 Issue 8

CADTH Health Technology Review Recommendation

Aging in Place

Appropriate Use Recommendation

Table of Contents

Key Messages

What Is the Issue?

- Canada is experiencing an important demographic transition toward an increasingly diverse aging population with an increased need for care and support during the later stages of life.
- Despite older adults' strong preferences to live in their home or community for as long as possible, health systems are challenged to keep up with growing demands for home care, community care and support services to support conditions to age in place, when appropriate.

What Did Canada's Drug Agency Do?

- Canada's Drug Agency prepared an Evidence Assessment report that identified and described the current context of aging and hinderances to aging in place in Canada, considerations relevant to aging in place for equity-deserving groups, strategies and initiatives intended to address unmet needs and improve outcomes, and systemic considerations related to implementing initiatives supporting aging in place.
- The Health Technology Expert Review Panel (HTERP) used the Canada's Drug Agency Evidence Assessment report to inform deliberations and to develop objective, impartial, trusted pan-Canadian guidance for decision-makers when considering evidence-informed aging-in-place initiatives to support equitable aging in place in jurisdictions in Canada.

What Is HTERP's Position on Aging in Place?

- Everyone has the right to age with dignity. Aging is a normal part of life and may be accompanied by changes in health status and/or abilities to complete everyday self-care tasks.
- Older adults comprise a heterogenous population with a continuum of health care needs and risks, including people living with vitality, those with moderately complex care issues, and those with complex care issues.

- Health and social systems were originally designed to meet the less complex acute care needs of a younger population and operate largely in silos. They cannot adequately or proactively address the continuum of needs of many older adults and their caregivers.
- Aging in place is a dynamic and complex experience that occurs within a larger context that is not limited to health systems.
- Older adults' autonomy and preferences for care are realized by the active role of informal unpaid caregivers.
- The population of older adults in Canada is diverse with varying needs, risks, and cultural norms and values related to aging in place.
- Barriers to aging in place may disproportionately affect members of equity-deserving groups that experience multiple and often intersecting historical, social, cultural, medical, structural, institutional, and environmental barriers to care and support. There must be equity in access to safe, appropriate, and ongoing care to support dignity in living in a place of one's choosing for older adults as they age.

What Is HTERP's Guidance to Support Aging in Place?

- foster a system that prioritizes integrated models of care to address current and future unmet needs and bridge gaps in and between services
- identify interventions that are aligned within an integrated model of care and are responsive to the unique and complex needs of older adults and their unpaid caregivers
- ensure culturally appropriate and equitable opportunities for positive outcomes
- standardize core measures or indicators to guide data collection, analysis, use, and reporting that support robust evaluation and cross- jurisdictional comparisons of interventions.

The Issue: Need for Support for Older Adults and Their Caregivers to Age in Place in Canada

There is an important demographic transition in Canada toward an older and more diverse population, often with an increased need for care and support during the later stages of life.[1] Although the COVID-19 pandemic highlighted older adults' strong preferences to live in their home or community for as long as possible,[2] it also emphasized the fragmentation and ongoing challenges within our current model of health and social systems.[3] Ongoing challenges include limited or reduced access to care and support programs, overcrowded emergency departments, delayed discharge of hospitalized patients awaiting placement, poor communication between agencies and/or providers, staffing shortages, and low workforce capacity.[3] Health systems are unable to keep up with growing demands for home and community care and services to support conditions to age in place when appropriate. These services may be unavailable when needed due to limited private and public funding and shortages of regulated and unregulated health care providers, including family physicians, nurses, personal support workers, therapists, pharmacists, and dieticians as well as geriatricians, psychiatrists, and other specialists.[4-10] The availability of care and support services may be exceptionally limited in rural and remote communities.[5,7,11-14]

Aging in place refers to the ability of older adults to access the health and social supports needed to live safely in their own homes or communities for as long as they wish and are able,[15,16] and which align with their values, needs, and preferences. For older adults and their caregivers, aging in place means having choice in deciding where to live.[12]

Older adults' ability to age with dignity and in a place that aligns with their values, needs, and preferences typically relies on the support of unpaid caregivers,[4,12,17-19] with almost all (96%) individuals receiving home care in Canada indicating they also have an unpaid caregiver.[20] Unpaid caregivers and volunteers play a critical role in enabling older adults to age with dignity and autonomy by supporting their preferences for care. This has led many to take on an immense emotional, physical, and financial burden. Unpaid caregivers may experience distress and burnout as well as challenges in balancing family and work commitments. This is in addition to their own health issues and financial constraints that hinder their ability to sustain caregiving.[11,19,21-23]

Despite the additional responsibilities and costs these individuals incur to support our health and social systems, caregivers face similar challenges with accessing their own supports, such as respite care services, training opportunities, and support groups to address their needs.[11,21] Caregiver burden is further exacerbated by the challenge of navigating supports and coordinating care. It may be especially challenging for racialized and Indigenous caregivers and for caregivers who are immigrants or newcomers, those who have language barriers, live in rural and remote communities, are experiencing economic hardship, with nonbinary gender identities and/or are aging.[11,21,24]

Data from the Canadian Institute of Health Information indicate that more than 10% of new admissions to institutional long-term care are potentially avoidable with access to appropriate home-based support and care.[25] Costing data suggest that Canada spends more on institutional long-term care than home and community care.[22,26] To address these challenges, federal, provincial, and territorial governments in Canada are exploring evidence-based aging-in-place initiatives to enhance the infrastructure and support systems for older adults in Canada.

The Response: Guidance From HTERP

The mandate of HTERP is advisory in nature and is to participate in the development of guidance or recommendations for Canada's Drug Agency projects on medical devices, diagnostic tests, and clinical interventions inclusive of models of care, programs of care, and health systems. Following a request from the Ministry of Seniors and Long-Term Care in Manitoba for guidance to support the implementation of recommendations in *Manitoba, A Great Place to Age: Provincial Seniors Strategy*, and because of the pan-Canadian relevance of the issue, HTERP convened to develop objective, impartial, and trusted pan-Canadian guidance for health care decision-makers to support evidence-informed and equitable aging-in-place initiatives.

The guidance provided by HTERP is intended for senior decision-makers responsible for developing and implementing Canada's federal, provincial, and territorial policies and leading Canada's health systems and the decision-making tables and teams that are tasked with advancing health system priorities. The audience includes federal, provincial, and territorial deputy ministers and assistant-deputy ministers of health

and other senior executives as well as executives at provincial and territorial health authorities, cancer agencies, or other provincial health agencies, hospitals, and health service delivery organizations.

This guidance complements other federal initiatives supporting aging in place. For example, in 2023, the federal government announced new long-term funding for the shared priority to support people in Canada in aging with dignity close to home, with access to home care or care in a safe long-term care facility.[27] Tailored bilateral agreements with provinces and territories lay out action plans to support people in Canada to age with dignity. In June 2024, the National Seniors Council, a group of experts that provides advice to the Government of Canada on matters related to the health, well-being, and quality of life of older adults, also published their recommendations on new and/or enhanced measures that could support older adults aging at home.[28]

HTERP's Guidance Development Process

HTERP comprises 7 core members who serve for all topics under consideration during their term of office: chair, ethicist, health economist, patient member, 2 health care practitioners, and a health technology assessment specialist. In addition to these core members, HTERP also includes up to 5 expert members appointed to provide their expertise on a specific topic. To develop guidance to support aging in place in Canada, HTERP appointed 2 members with expertise in caring for older adults, 2 members with clinical and health care administration experience, and 1 member with living experience as a caregiver. The HTERP members are listed in Appendix 1.

To support decision-making, Canada's Drug Agency prepared an Evidence Assessment report that:

- identified and described the current context of aging and hinderances to aging in place in Canada
- described considerations relevant to aging in place for equity-deserving groups, highlighting perspectives of First Nations, Inuit, and Métis Peoples and communities
- described and appraised strategies and initiatives intended to address unmet needs and improve outcomes of importance to older adults in Canada
- described some systemic considerations related to implementing initiatives supporting aging in place in the country.

HTERP used the Aging In Place Evidence Assessment report to inform their deliberations and to develop this guidance. HTERP members reviewed and discussed the evidence and information, considered public and expert input, and developed the guidance through a series of meetings between March and June 2024. A draft version of this guidance was available for broad public feedback from July 9 to July 23, 2024. The feedback is reflected in this final version.

HTERP's Position on Aging in Place

- Everyone has the right to age with dignity. Aging is a normal part of life and may be accompanied by changes in health status and/or functional abilities, including everyday self-care tasks. People may require assistance, whether temporary or long-term, to support them in aging and maintaining independence in their homes and communities for as long as they wish and are able to do so safely. Older adults' needs change over time, as does what is important to them, and so should the supports around them.
- Older adults comprise a heterogenous population with a continuum of health care needs and risks, including people living with vitality, those with moderately complex care issues, and those with complex care issues. Some individuals will have relatively straightforward needs that can be met through access to excellent primary care or community-based supports, while others will require access to interventions that address more complex physical, environmental, social, and psychological needs.
- Health and social systems were originally designed to meet the less complex acute care needs of a younger population and operate largely in silos. They cannot adequately or proactively address the continuum of needs of many older adults and their caregivers.
- Aging in place is a dynamic and complex experience that occurs within a larger context that is not limited to health systems. Understanding and responding to local needs and contexts in selecting, implementing, and evaluating interventions is essential for identifying optimal strategies for supporting aging in place in a given jurisdiction.
- Older adults' autonomy and preferences for care are realized by the active role of informal unpaid caregivers (e.g., unpaid family members or friends).

- The population of older adults in Canada is diverse with varying needs, risks, and cultural norms and values related to aging in place. Many cultures and communities may not regard aging as in need of intervention, but rather as a natural part of life, with beliefs that it is common and appropriate for family, friends, and communities to provide support. Individuals' values, needs, and preferences for aging in place are also influenced by other aspects of the person's identity, including but not limited to gender identity, sexual orientation, race, ethnicity, religion, and/or language.
- Barriers to aging in place may disproportionately affect members of equity-deserving groups that experience multiple and often intersecting historical, social, cultural, medical, structural, institutional, and environmental barriers to care and support. There must be equity in access to safe, appropriate, and ongoing care to support dignity in living in a place of one's choosing for older adults as they age.

The Importance of Integrated and Coordinated Care to Support Aging in Place in Canada

- HTERP discussed the primary reasons hindering aging in place in jurisdictions across Canada and acknowledged the most prominent are those that relate to preventing, managing, and adapting to health conditions and reasons related to social isolation and loneliness.
- HTERP also identified a lack of integrated and coordinated care as a key barrier to aging in place in Canada.
- HTERP identified the need to transition from the current siloed, episodic acute care approach of addressing individual issues with standalone solutions. HTERP asserts health systems will achieve a meaningful impact on aging-in-place outcomes by implementing continuous, integrated, team-based solutions that span across the traditional budget and governmental silos of health care services, social support systems, and community organizations.
- HTERP asserts that solutions must be contextualized, flexible, and fit for purpose to address the evolving, diverse needs of older adults. Solutions must also be integrated and continuous to address challenges with system navigation and limited availability of and access to care and support services.

HTERP's Guidance to Inform Decision-Making to Support Aging in Place

HTERP has developed the following guidance statements in response to the need for support for older adults and their caregivers to age in place in jurisdictions in Canada for as long as they wish and are able.

Foster a System That Prioritizes Integrated Models of Care to Address Current and Future Unmet Needs and Bridge Gaps in Services

HTERP advises the following:

- Simple or standalone interventions are not sufficient to effectively support aging in place given the dynamic and complex experience of aging. An overall model of care comprised of interdisciplinary, integrated, and coordinated interventions is required that is fit for purpose and tailored to the specific context.
- An integrated model of care needs to acknowledge a continuum of needs supported by acute care, primary care, and community care as well as intermediate, transitional, or reablement care (i.e., to help older adults regain independence and perform daily activities after an illness, injury, or hospitalization).
- Solutions to support aging in place may require the implementation and coordination of multiple strategies and initiatives with a view to systems beyond health care, such as housing, transportation, and social services.
- The needs of older adults change over time and vary from person to person. Individuals may need to engage with some initiatives regularly (e.g., meal programs for nutrition, group-based programs for social connectedness), whereas other initiatives may serve a purpose at a particular moment in time (e.g., rehabilitation after a hip fracture). A model of care must be flexible and adaptive to foster responsiveness to the changing needs of individual older adults and their caregivers, as well as changing conditions within a jurisdiction.
- Focus should be placed on interventions and models of care that prioritize early intervention and preventing or slowing the progression of impairment to mitigate the need for complex care (e.g., preventive home visits, regular physical activity, adequate sleep, proper nutrition, supportive housing).

- A key enabler of continuity of care is the seamless availability of and access to health data between and across different types and levels of care, including regulated and unregulated care and service providers in health, social service, and community settings.
- Older adults with more complex needs would benefit from an interdisciplinary team-based approach. For example, the Patient's Medical Home, a vision of The College of Family Physicians of Canada, describes how family physicians work in teams with other health care professionals to provide accessible, high-quality care for their patients. The vision offers an example of an integrated, interdisciplinary team-based approach to help maximize well-being and maintain independence for older adults with complex care needs.[29-31]
- Evaluation of the process and outcomes of implementing models of care and specific interventions within it is essential to ensure efforts have their intended effect and to assess the potential need for any adjustments in the approach. HTERP recommends evaluation plans that reflect the dynamic nature of the needs of older adults and that aging is a complex experience to ensure flexibility and adaptability as the context changes. HTERP also recommends disseminating the results of evaluations and sharing lessons learned to support the scaling up of effective interventions and disinvesting from ineffective ones.

Identify Interventions That Are Aligned Within an Integrated Model of Care and Are Responsive to the Unique and Complex Needs of Older Adults and Their Unpaid Caregivers

- The complex nature of the aging experience, coupled with the diverse needs and preferences of older adults across jurisdictions in Canada, precludes the ability to recommend any specific intervention(s) to include within a model of care. Instead, interventions should be selected that are aligned within an overall integrated and coordinated model of care and are fit for purpose and adaptive based on a data-driven understanding of the local context and needs of older adults and their caregivers. Data to inform understanding of the local context and needs may include qualitative and quantitative data, such as storytelling and personal experiences, in addition to population and demographic data from Statistics Canada, health service use and health workforce data[32] from the Canadian Institute for Health Information, and health outcome data from the Canadian Longitudinal Study on Aging.[33]

- The main barriers to aging in place — and therefore interventions to overcome these — may be relatively unique to each setting considering the diversity of needs, preferences, and characteristics of older adults and their unpaid caregivers and local resources and programs both within and external to health care.
- Older adults and caregivers must be meaningfully involved in the co-creation of models of care, and identification of specific interventions within, to build trusting relationships and ensure their values, needs, and preferences are respected.
- A learning health systems approach[34] that acknowledges dynamic health systems with multiple influences that actively incorporates community engagement and data-driven methods within an environment of ongoing learning can support the identification of the need for new or different interventions to respond to changing needs and context.
- HTERP acknowledges that numerous interventions have been, and are being, implemented to support older adults to age in place. Many but not all interventions were included in the Canada's Drug Agency Evidence Assessment and some may not be found in the published literature.
- Based on the Canada's Drug Agency Evidence Assessment, HTERP asserts that many interventions described in the published literature demonstrate favourable effects on outcomes important to older adults and many appear to have good value from a payer perspective in the setting in which they were assessed. Further, most interventions demonstrate few or no adverse or negative outcomes, suggesting they may be beneficial if implemented and aligned with a data-driven understanding of the local context and needs of older adults and their caregivers. These strategies and initiatives are presented in Appendix 2.
- In addition to the evidence reviewed by Canada's Drug Agency, other evidence and information sources may be relevant for identifying potential interventions to support aging in place. HTERP recommends looking to the following resources:
  - a list of government-supported programs and initiatives for older adults in Canada
  - work conducted by the National Institute on Ageing[22,35,36]
- promising practices that offer integrated services through partnership with communities identified by Healthcare Excellence Canada (Appendix 3)[37]
- a list of technologies to support aging in place compiled by AGE-WELL and expert opinion (Appendix 4).

- HTERP notes that many aging-in-place initiatives have been assessed individually when in practice interventions tend to be implemented in a dynamic context that includes access to and use of multiple initiatives. While many interventions appear promising, HTERP recommends attention be paid to cultural and local contexts in their implementation and evaluation.
- Complex interactions between individuals, health and social systems, and their broader contexts mean that interventions implemented in a given setting may not produce the same outcomes in a different setting, and thereby may result in unintended or suboptimal outcomes. Understanding and responding to local needs and contexts in selecting, implementing, and evaluating interventions is essential for identifying optimal strategies for supporting aging in place in a given jurisdiction.
- HTERP acknowledges the gaps in evidence resulting from the challenges in studying interventions implemented within complex systems as well as a history of inadequately resourced implementation and evaluation studies. Although there are gaps in the evidence base, it is improbable that it will ever be perfect, and this does not outweigh the need to act. Decisions to implement interventions and models of care must proceed because the benefits of the assessed interventions outweigh the potential harm caused by lack of availability of and access to services.
- HTERP acknowledges a need for research on integration mechanisms, such as interdisciplinary teams, care transitions between teams, and enabling technology such as shared care plans. In addition, economic or cost-benefit analyses are needed that incorporate a societal perspective to capture caregiver costs and outcomes in addition to those of older adults.
- When implementing interventions to support aging in place, HTERP asserts that necessary changes will take time, are complicated, and will require investment in education and training, infrastructure, communication systems, and ongoing monitoring and evaluation. It is important to consider sustainability of interventions at the outset.
- HTERP acknowledges the implementation of interventions is context-dependent and typically requires coordination and cooperation by all levels of government, sectors, communities, partners, and the public. Some interventions may be addressed in a health budget, but not others.

- When considering the needs of older adults, HTERP advises:
  - efforts be placed to ensure awareness of available care and support services within their community and available virtually, such as through a centralized list that includes information about mandates, funding, and eligibility for available services
  - older adults and their caregivers be involved in the co-creation of their care plans when selecting care and support interventions, given that individuals' values, preferences, and personal outcome goals vary
  - proactive documentation and communication of needs, values, and preferences to support implementation of care plans in the case of acute illness or injury (e.g., following a fall)
  - devoting resources toward developing platforms to introduce and connect older adults to assist and support one another and address social isolation and loneliness as well as intergenerational interventions (e.g., home sharing between older adults and younger generations) to enhance social connectivity and decrease ageism
  - investment in the implementation of technology-based interventions can support people's desire to age with dignity in a place that aligns with their values, needs, and preferences by supporting communication and sharing of health information, assisting with activities of daily living, or monitoring those at risk
  - the selection of interventions should include considerations of unique challenges within remote and rural communities, particularly among older adults who do not have family living nearby.
- When considering the needs of unpaid caregivers, HTERP acknowledges the vital role of these individuals and the emotional burden and additional support required by them given they often have other employment and may require time off work to provide care and support. HTERP advises that:
  - responsibilities to support older adults to age in place are not shifted to unpaid caregivers; rather, caregivers must be supported in their roles
  - strategies are implemented that aim to reduce caregiver burden and support caregivers' active participation in care decision-making
  - strategies are implemented that aim to mitigate the additional financial and emotional strain caregivers face accessing services and funding for support and in navigating wait times and administrative barriers.

- When considering the needs of health care providers, HTERP advises the following:
  - An integrated model of care requires a broad range of trained, regulated, and unregulated care providers to address a continuum of needs. The distribution of care and service providers must align with population needs, which can change over time. HTERP acknowledges that some positions are more challenging to recruit for and retain (e.g., personal support workers).[38]
  - Interventions or models of care prioritize the coordination of communication between and across older adults, paid and unpaid caregivers, and different types and levels of care providers, including regulated and unregulated care and service providers in health, social service, and community settings.
  - Primary care, broadly defined, serves as the centre for coordination of care, particularly for older adults living with vitality and those with moderately complex care issues, supported by the development of co-designed individualized care plans that account for individuals' evolving care needs and available supports and services.

Ensure Culturally Appropriate and Equitable Opportunities for Positive Outcomes

- HTERP acknowledges there are varied funding models and public, private, and charitable payers that support aging-in-place interventions and models of care. These include funding and payers from health, social services, and community organizations and sectors. HTERP acknowledges the need for coordinated funding models that minimize the challenges associated with, and support navigation of, siloed or fragmented structures.
- HTERP advises regular collection and use of data on the distribution of population needs, available supports, service use, and outcomes to support identification of any potential health or financial challenges that might differentially impact access to services and whether the distribution of outcomes is fair and just. Data capturing measures of equity, diversity, inclusion, and accessibility are critical for ensuring equity in access to services and in outcomes of care.

- HTERP advises that interventions to support aging in place be developed and implemented with consideration of the inequities that disproportionately affect members of equity-deserving groups, including thorough and thoughtful engagement to ensure needs and preferences are respected. Additional support may be required for older adults who may face challenges accessing services based on their gender, sexual orientation, race, ethnicity, religion, language, socioeconomic status, or where they live, including Northern and rural communities.

Standardize Core Measures or Indicators to Guide Data Collection, Analysis, Use, and Reporting That Support Robust Evaluation and Cross-Jurisdictional Comparisons of Interventions

HTERP advises the following:

- Strategies that aim to standardize and integrate clinical and administrative data collection, analysis, use, and reporting across health, social, and community organizations and systems are needed to improve interoperability and support coordination of an integrated model of care.
- An overarching data strategy should support needs-based planning within a learning health system framework to support the continuous identification, reporting, implementation, and evaluation of innovations that speak to the needs and priorities of older adults and their caregivers and ensure their integration along the entire continuum of care.
- Convening relevant partners, including service providers, older adults, and caregivers is essential to inform a data strategy that reflects needs and priorities in the local context. These efforts can capitalize on work by the International Consortium for Health Outcomes Measurement to develop a set of Patient-Centered Outcome Measures for Older Persons.
- HTERP recommends that this topic be revisited in the future to build upon this guidance and to maintain relevance as new models and strategies are implemented and evidence regarding promising interventions emerges and to align with changing population needs and preferences.

References

1. Aging and chronic diseases: a profile of Canadian seniors. Ottawa (ON): Public Health Agency of Canada; 2020: https://www.canada.ca/en/public-health/services/publications/diseases-conditions/aging-chronic-diseases-profile-canadian-seniors-report.html. Accessed 2024 Jan 30.
2. Iciaszczyk N AA, Brydges M, Marshal M, Cheng SM, Feil C, Sinha S. The NIA's rapid review of ageing in the right place programs and services Toronto (ON): National Institute on Ageing; 2022: https://static1.squarespace.com/static/5c2fa7b03917eed9b5a436d8/t/635970fba6daf02140039299/1666806016235/AIRP+Rapid+Review+-+Final.pdf. Accessed 2024 May 1.
3. Public Health Agency of Canada. Annual report - The Chief Public Health Officer of Canada's 2021 report on the state of public health in Canada: ' A Vision to Transform Canada's Public Health System'. 2021; https://www.canada.ca/en/public-health/news/2021/12/annual-report—-the-chief-public-health-officer-of-canadas-2021-report-on-the-state-of-public-health-in-canada—a-vision-to-transform-canadas-publi.html. Accessed 2024 Jul 1.
4. Bartlett JG, Sanguins J, Chartrand F, Carter S, Temmer J, McKay D. 'There's no place like home' - the experience of Metis aging in place. Winnipeg (MB): Manitoba Metis Federation–Health & Wellness Department; 2021: https://www.mmf.mb.ca/wcm-docs/docs/departments-health-wellness/theres_no_place_like_home_-_the_experience_of_metis_aging_in_place_full_report_final_december_2012.pdf. Accessed 2024 May 1.
5. Roddick J. Evidence synthesis: a review of challenges to the provision of home care and home support services across Canada. Toronto (ON): AGE-WELL National Innovation Hub; 2019: https://agewell-nih-appta.ca/wp-content/uploads/2020/12/Home-Care-and-Support-Services-.pdf. Accessed 2024 May 1.
6. Rosenberg MW, Puxty J, Crow B. Enabling Older Adults to Age in Community. Ottawa (ON): Federal/Provincial/Territorial Ministers Responsible for Seniors; 2022: https://www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/reports/enabling-age-community-en.pdf. Accessed 2024 May 1.
7. Carver L, Crow B, Rosenberg M, Puxty J. Core community supports to age in community. Ottawa (ON): Federal, Provincial and Territorial Forum of Ministers Responsible for Seniors; 2019: https://www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/core-community-supports/core-community-supports-to-age-EN.pdf. Accessed 2024 May 1.
8. Social isolation among older adults during the pandemic. Ottawa (ON): Federal/Provincial/Territorial Ministers Responsible for Seniors; 2021: https://www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/covid-19-social-isolation/covid-19-social-isolation-en.pdf. Accessed 2024 May 1.
9. Shaping the future of care closer to home for older adults: environmental scan and consultation summary report. Ottawa (ON): Healthcare Excellence Canada; 2022: https://www.healthcareexcellence.ca/media/5wvevdqt/20220530_shapingfutureforolderadults_en.pdf. Accessed 2024 May 1.
10. Basu M, Cooper T, Kay K, et al. Updated Inventory and Projected Requirements for Specialist Physicians in Geriatrics. *Can Geriatr J*. 2021;24(3):200-208. PubMed
11. Giving care: an approach to a better caregiving landscape in Canada. Toronto (ON): Canadian Centre for Caregiving Excellence; 2022: https://canadiancaregiving.org/wp-content/uploads/2022/11/CCCE_Giving-Care.pdf. Accessed 2024 May 1.

12. Aging in place reflections from Canadians. Okanagan (BC): Aging in Place Research Cluster 2022: https://aginginplace.ok.ubc.ca/wp-content/uploads/Aging-in-Place-reflections-from-Canadians.-STAKEHOLDERREPORT_final.pdf. Accessed 2024 May 1.
13. Social isolation of seniors: a focus on LGBTQ seniors in Canada. Ottawa (ON): Employment and Social Development Canada; 2018: https://www.canada.ca/content/dam/canada/employment-social-development/corporate/seniors/forum/social-isolation-lgbtq/social-isolation-lgbtq-seniors-EN.pdf. Accessed 2024 May 1.
14. An overview of healthy aging strategies in rural and urban Canada. Regina (SK): Saskatchewan Population Health and Evaluation Research Unit; 2018: https://spheru.ca/publications/files/Healthy%20Aging%20Enviro%20Scan%20Report%20June%202018%20FINAL%2026-Sep-2018.pdf. Accessed 2024 May 1.
15. Employment and Social Development Canada Federal/Provincial/Territorial Ministers Responsible for Seniors Forum. Plan your future today - live the life you want tomorrow. 2016; https://www.canada.ca/en/employment-social-development/corporate/seniors/forum/paip-fs.html. Accessed 2024 May 1.
16. Healthcare Excellence Canada. Shaping the future of care closer to home for older adults: Environmental scan and consultation summary report. Ottawa (ON) 2022: https://www.healthcareexcellence.ca/media/5wvevdqt/20220530_shapingfutureforolderadults_en.pdf. Accessed 2024 May 1.
17. Hillier S, Al-Shammaa H. Indigenous Peoples Experiences with Aging: A Systematic Literature Review. *Can J Disabil Stud.* 2020;9:146-179.
18. Drummond D, Sinclair D, Gratton J. Troubles in Canada's Health Workforce: The Why, the Where, and the Way Out of Shortages. *Commentary-CD Howe Institute.* 2022(630):0_1-40.
19. Canadian Institute for Health Information. 1 in 3 unpaid caregivers in Canada are distressed. 2020; https://www.cihi.ca/en/1-in-3-unpaid-caregivers-in-canada-are-distressed. Accessed 2024 May 1.
20. Marani H, Peckham A. Unpaid Caregiver Costs in Canada: A Systematic Review. *Home Health Care Manag Pract.* 2023;35(4):277-286.
21. National caregiving survey: summary of findings. Toronto (ON): Canadian Centre for Caregiving Excellence; 2023: https://canadiancaregiving.org/wp-content/uploads/2023/11/CCCE_Canadian-Caregiving-Survey_Summary-of-Findings.pdf. Accessed 2024 May 1.
22. Iciaszczyk N AA, Brydges M, Marshal M, Cheng SM, Feil C, Sinha S. Ageing in the right place: supporting older Canadians to live where they want. Toronto (ON): National Institute on Ageing, Toronto Metropolitan University; 2022: https://static1.squarespace.com/static/5c2fa7b03917eed9b5a436d8/t/638e0857c959d1546d9f6f3a/1670252637242/AIRP+Report+Final2022-.pdf. Accessed 2024 Jan 11.
23. Aging and mental health policy framework. Toronto (ON): Centre for Addiction and Mental Health; 2023: https://www.camh.ca/-/media/files/pdfs—public-policy-submissions/camh-aging-and-mental-health-policy-framework-pdf.pdf. Accessed 2024 Jul 1.
24. Kadowaki L, Simard J, Brotman S, et al. Learning from the lived experiences of aging immigrants: final report. Côte Saint-Luc (QC): Centre de recherche et d'expertise en gérontologie sociale; 2020: https://www.creges.ca/wp-content/uploads/2020/11/Learning-from-the-Lived-Experiences-of-Aging-Immigrants_-Final-Report_EN_Nov.2020.pdf. Accessed 2024 May 1.
25. Canadian Institute for Health Information. 1 in 9 new long-term care residents potentially could have been cared for at home. 2020; https://www.cihi.ca/en/1-in-9-new-long-term-care-residents-potentially-could-have-been-cared-for-at-home. Accessed 2023 Jan 18.

26. Profile of residents in residential and hospital-based continuing care, 2020–2021. Ottawa (ON): Canadian Institute for Health Information; 2021: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.cihi.ca%2Fsites%2Fdefault%2Ffiles%2Fdocument%2Fresidential-and-hospital-based-continuing-care-2020-2021-data-tables-en.xlsx&wdOrigin=BROWSELINK. Accessed 2024 May 1.
27. Health Canada. Working together to improve health care in Canada: Aging with Dignity bilateral agreements. 2024; https://www.canada.ca/en/health-canada/corporate/transparency/health-agreements/shared-health-priorities/aging-dignity-bilateral-agreements.html. Accessed 2024 Jul 1.
28. Final report of the expert panel: supporting Canadians aging at home: ensuring quality of life as we age. Ottawa (ON): National Seniors Council; 2024: https://www.canada.ca/content/dam/esdc-edsc/documents/national-seniors-council/programs/publications-reports/aging-home/NSC-ExpertPanel-AgingAtHome-FinalReport-EN-20240621.pdf. Accessed 2024 Jul 28.
29. Katz A, Singer AG. Future of family medicine in Canada: Four evidence-based strategies for health care transformation. *Can Fam Physician.* 2024;70(3):155-157. PubMed
30. The College of Family Physicians of Canada. The patient's medical home. 2024; https://www.cfpc.ca/en/policy-innovation/health-policy-goverment-relations/the-patient-s-medical-home. Accessed 2024 Jul 1.
31. Canadian Nurses Association. Patient's medical home. 2024; https://patientsmedicalhome.ca/. Accessed 2024 Jul 28.
32. Canadian Institute for Health Information. Keeping pace with changing population needs. 2024; https://www.cihi.ca/en/the-state-of-the-health-workforce-in-canada-2022/keeping-pace-with-changing-population-needs. Accessed 2024 Jul 28.
33. Canadian Longitudinal Study on Aging. 2024; https://www.clsa-elcv.ca/. Accessed 2024 Jul 28.
34. Menear M, Blanchette MA, Demers-Payette O, Roy D. A framework for value-creating learning health systems. *Health Res Policy Syst.* 2019;17(1):79. PubMed
35. Enabling the future provision of long-term care in Canada. Toronto (ON): National Institute on Ageing; 2019: https://cnpea.ca/images/futureoflong-termcare_v7_final-09-09-2019.pdf. Accessed 2024 Jul 28.
36. National seniors strategy 2020: third edition. Toronto (ON): National Institute on Ageing; 2020: https://nationalseniorsstrategy.ca/wp-content/uploads/2020/09/NSS_2020_Third_Edition.pdf. Accessed 2024 Jul 28.
37. Healthcare Excellence Canada. Promising practices for enabling aging in place. 2023; https://healthcareexcellence.ca/en/what-we-do/all-programs/enabling-aging-in-place/promising-practices-for-enabling-aging-in-place/. Accessed 2024 May 13.
38. Recommendations for advancing pan-Canadian data capture for personal support workers. Ottawa (ON): Canadian Institute for Health Information; 2023: https://www.cihi.ca/sites/default/files/document/recommendations-advancing-pan-canadian-data-capture-psws-report-en.pdf. Accessed 2024 Jul 28.
39. Nick JM, Roberts LR, Petersen AB. Effectiveness of telemonitoring on self-care behaviors among community-dwelling adults with heart failure: a quantitative systematic review. *JBI Evid Synth.* 2021;19(10):2659-2694. PubMed
40. Wasan T, Hayhoe B, Cicek M, et al. The effects of community interventions on unplanned healthcare use in patients with multimorbidity: a systematic review. *J R Soc Med.* 2024;117(1):24-35. PubMed
41. Mohler R, Renom A, Renom H, Meyer G. Personally tailored activities for improving psychosocial outcomes for people with dementia in community settings. *Cochrane Database Syst Rev.* 2020;8:CD010515. PubMed
42. Lee SH, Yu S. Effectiveness of multifactorial interventions in preventing falls among older adults in the community: A systematic review and meta-analysis. *Int J Nurs Stud.* 2020;106:103564. PubMed

43. Walton K, do Rosario VA, Pettingill H, Cassimatis E, Charlton K. The impact of home-delivered meal services on the nutritional intake of community living older adults: a systematic literature review. *J Hum Nutr Diet.* 2020;33(1):38-47. PubMed

44. Shepperd S, Goncalves-Bradley DC, Straus SE, Wee B. Hospital at home: home-based end-of-life care. *Cochrane Database Syst Rev.* 2021;3:CD009231. PubMed

45. Raemdonck E, Lambotte D, De Witte N, Gorus E. Giving voice to informal caregivers of community-dwelling older adults: A systematic review of empowerment interventions. *Health Soc Care Community.* 2022;30(6):e3354-e3368. PubMed

46. Shekelle PG, Miake-Lye IM, Begashaw MM, et al. Interventions to Reduce Loneliness in Community-Living Older Adults: a Systematic Review and Meta-analysis. *J Gen Intern Med.* 2024;10:10. PubMed

47. Martinez L, Mirza RM, Austen A, et al. More Than Just a Room: A Scoping Review of the Impact of Homesharing for Older Adults. *Innov Aging.* 2020;4(2):igaa011. PubMed

48. Sheth S, Cogle CR. Home Modifications for Older Adults: A Systematic Review. *J Appl Gerontol.* 2023;42(5):1151-1164. PubMed

Appendix 1: The Health Technology Expert Review Panel

The mandate of HTERP is advisory in nature and is to participate in the development of guidance or recommendations for Canada's Drug Agency projects on medical devices, diagnostic tests, and clinical interventions (inclusive of models and programs of care).

HTERP comprised 6 core members to serve for all topics under consideration during their term of office: chair, ethicist, health economist, patient member, 2 health care practitioners, and a health technology assessment specialist. In addition to the core (plus specialist) members, HTERP comprises up to 5 expert members appointed to provide their expertise on a specific topic. For this project, HTERP appointed 2 members with expertise in caring for older adults, 2 members with experience in health care administration, and 1 member with living experience as a caregiver.

HTERP Core Members

Leslie Anne Campbell
Chair, Nova Scotia

Louise Bird
Patient member, Saskatchewan

Brian Chan
Health economist, Ontario

Sandor Demeter
Health care practitioner, Manitoba

Lawrence Mbuagbaw
Health technology assessment specialist, Ontario

Duncan Steele
Ethicist, Alberta

Expert Members

Jenny Basran
Division of Geriatric Medicine at the University of Saskatchewan, Saskatchewan

Alexandra Borwein
Qikiqtani General Hospital, Nunavut

Connie Clerici
Closing the Gap Healthcare, Ontario

Don Juzwishin
University of Victoria, British Columbia

Maggie Keresteci
Lived experience, Ontario

Conflicts of Interest

None identified or reported.

Appendix 2: Strategies and Initiatives With Promise

Strategies and initiatives to support aging in place may be categorized as follows:

- support the prevention and management of health conditions and injuries
- support social connectedness and engagement
- support housing and the built environment
- combine 2 or more types of interventions across these 3 categories.

HTERP acknowledges that additional strategies including solutions targeting health and society-level issues, such as integration between different agencies or ministries, may be considered.

Favourable Strategies and Initiatives With Promise Identified in the Canada's Drug Agency Evidence Review

- Given the dynamic and complex experience of aging, simple or standalone interventions are not sufficient to effectively support aging in place. An overall model of care comprised of interdisciplinary, integrated, and coordinated interventions is required that is fit for purpose and tailored to the specific context.
- HTERP asserts that many interventions described in the published literature demonstrate favourable effects on outcomes important to older adults and many appear to have good value from a payer perspective in the setting in which they were assessed. Most interventions also demonstrate few or no adverse or negative outcomes, suggesting they may be beneficial provided consideration is paid to a data-driven understanding of the local context and needs of older adults and their caregivers in their adoption and implementation.
- The strategies and initiatives in Table 1 are those that have been assessed through the Canada's Drug Agency evidence review as favourable (i.e., those that indicated better effectiveness of an intervention versus a comparator or had a beneficial effect on outcomes).
- When seeking examples of the types of strategies and initiatives that show promise, this published list can also be used as a tool to identify specific solutions available across jurisdictions in Canada.

Table 1

Interventions Supporting the Prevention and Management of Health Conditions and Injuries

Category	Intervention or strategy	Description
Chronic disease prevention and management	**Telemonitoring** to improve self-care behaviours	Telemonitoring interventions include telephone or videoconference support, interactive telemonitoring devices with physiological data collection, and interactive telemonitoring devices without physiological data collection.[39]
	Community-based interventions to decrease emergency department attendance	Community-based interventions took place either in a primary health care setting or in the community and involved holistic management of the patient.[40] Generally, interventions took the form of integrated care plans, care coordination, advance care planning, and palliative care.[40] Most community interventions were multifaceted and emphasized education, self-monitoring of symptoms, and regular follow-ups.[40]
Dementia prevention and support	**Personally tailored activities** to help understand and appropriately respond to changes in mood and behaviour, improve quality of life, and reduce caregiver distress	Personally tailored activities refer to activities that have been developed to the individual interests and preferences of the person. The precise activities offered can vary and are based on the interests, preferences, and capabilities of participants.[41]
Falls prevention	**Multifactorial interventions** to reduce falls	Fall prevention interventions are typically designed to address risk factors for falls.[42] The components included in multifactorial interventions in this review were exercise, education, environmental modification, medication, mobility aids, and vision and psychological management.[42] The intensity of the intervention was classified as either active or referral.[42] Active interventions assessed risk factors and resolved fall-related problems. Referral interventions provided referral to other services or information.[42]
At-home care and support services	**Home meal delivery service** to improve nutritional intake (e.g., related to malnutrition, frailty)	Home delivered meal services provide ready-made meals to a home or to a congregate setting (e.g., community centres) for older adults who require nutritional support.[43]
At-home palliative care	**Home-based end-of-life care** to increase likelihood of dying at home	Home-based end-of-life care entails active and continuous treatment by health care professionals in the patient's home when they would otherwise require inpatient care (i.e., in hospice or hospital).[44]
Reablement	**Home exercise and multicomponent home-based rehabilitation** to improve muscle strength, gait speed, quality of life, mobility, balance, and activities of daily living	Multicomponent home-based rehabilitation interventions are those that incorporate exercise, education, and environmental modifications. Home exercise interventions are those that include exercise components only.[42] The purpose of both types of interventions are to help individuals regain functional independence.[42]
Support for unpaid caregivers	**Empowerment interventions** to improve caregiver burden, physical well-being, psychological well-being, confidence in providing caregiving, caregiver–care receiver relationship, social support, and caregiving situation	Empowerment-oriented interventions are those that aim to enhance the caregiver's control of mind and body, improve proactive care and caregiving capabilities, and equip them with skills to support care receivers' independence and build relationships.[45]

Table 2

Intervention Supporting Social Connectedness and Engagement

Category	Intervention or strategy	Description
Social isolation and loneliness	**Group-based treatment and internet training** to reduce loneliness	The initiatives examined to reduce loneliness were broadly categorized into group-based interventions, individual interventions, training on internet use, and miscellaneous (i.e., those that did not fit into any other established category).[46] Group-based interventions were further subdivided into group-based treatments, group activities, and group exercise.[46] Individual interventions were further subdivided into in-person administration, telephone administration, and internet administration.[46]

Table 3

Interventions Supporting Housing and the Built Environment

Category	Intervention or strategy	Description
Housing	**Homesharing** to provide companionship and support	Homesharing is an exchange-based housing model in which a home provider, often an older adult, shares a spare room in their home with a home seeker in exchange for money, service provision, or a combination of both.[47] This model is often intergenerational in nature in which the home seekers are younger adults, such as students.[47]
Assistive devices and home modifications	**Multicomponent home modification models that use an occupational therapist** to improve patient functional status	Multicomponent models of home modifications include environmental modifications plus 1 or more additional interventions in the categories of clinical, physical activity, behavioural, and social.[48]

Table 4

Interventions Spanning Multiple Categories

Category	Intervention or strategy	Description
Community-based complex interventions	**Individualized care planning with medication optimization and follow up** to maintain independence	Service models for older adults that incorporate tailored care approaches to meet their specific needs, which are routinely assessed and include a regular review of their medications.

Appendix 3: Healthcare Excellence Canada's Promising Practices for Enabling Aging in Place

- Healthcare Excellence Canada has compiled a list of promising practices as part of their Enabling Aging in Place program that can also be used as a resource when identifying promising solutions (Table 5). Healthcare Excellence Canada has indicated that these promising practices lead to improved safety, health, and quality of life for older people who remain at home.
- Healthcare Excellence Canada has also indicated that these promising practices can delay entry to long-term care, reduce emergency department visits, lessen demands on care partners, and make better use of health and social care resources.

Table 5

Healthcare Excellence Canada's Promising Practices for Enabling Aging in Place

Promising practice	Description
Community Paramedicine at Clinic (Ontario)	The Ontario-based Community Paramedicine at Clinic (CP@clinic) Program is an evidence-based initiative that focuses on chronic disease prevention, management, and health promotion. Implemented by local community paramedics, this program supports community social housing with a high concentration of older adults.
Naturally Occurring Retirement Communities (Ontario)	Ontario's Naturally Occurring Retirement Communities (NORCs) represent housing environments in the community (e.g., apartments buildings, condos, trailer parks, residential neighbourhoods) that have organically adapted to the increasing population of older adults. These settings offer a unique opportunity to bring older adults together in 1 area, creating a supportive community that meets their needs.
Nav-CARE (British Columbia and Alberta)	The Navigation: Connecting, Advocating, Resourcing, Engaging (Nav-CARE) program is a social innovation program providing navigation support for adults with declining health at home. Experienced volunteers connect individuals with skilled navigators to access resources and services in their community, while providing companionship and emotional support, enhancing the well-being of those facing health challenges at home.
Nursing Home Without Walls (New Brunswick)	The Nursing Home Without Walls program optimizes nursing home resources to support older adults living in the community. It works to prolong home residency and minimize unnecessary emergency department visits. It also aims to combat social isolation, enhance health-related knowledge, and empower local communities to meet the evolving needs of an aging population in New Brunswick.

Promising practice	Description
Oasis (Ontario)	Oasis Senior Support Living Inc. is an innovative program that started in Kingston, Ontario, specializing in aging within Naturally Occurring Retirement Communities (NORCs). Guided by onsite coordinators and utilizing communal spaces, the program empowers older adults to curate activities tailored to their community's needs.
Ottawa West Aging in Place Program (Ontario)	The Ottawa West Aging in Place program, serving Ottawa, Ontario, offers comprehensive support and home care services for older adults in social housing. This initiative addresses the challenge of premature long-term care admissions by providing affordable assistance, enabling older adults to stay at home for an extended period.
Maple Ridge and Pitt Meadows Community Services Seniors Social Prescribing Program (British Columbia)	The Maple Ridge and Pitt Meadows Community Services Seniors Social Prescribing Program provides a formal pathway for health care providers to address the social determinants of health of their older adult patients. The program connects older adults with community programs, services, and resources that support their mental, physical, and social well-being.

Appendix 4: Examples of Technologies to Support Aging in Place

- HTERP asserts that investment in the implementation of technology-based interventions can support people's desire to age with dignity in a place that aligns with their values and preferences. To complement the evidence on different interventions, Canada's Drug Agency provides examples of technologies identified through AGE-WELL and through expert opinion. Canada's Drug Agency categorized the listed technologies as they relate to the types of initiatives outlined by the National Institute on Ageing.[22]
- Canada's Drug Agency did not perform a comprehensive literature search to identify or critically appraise the evidence regarding the listed technologies. Canada's Drug Agency also recognizes that this list does not provide a comprehensive picture of all the available technologies that support aging in place. The purpose was to identify examples of potentially important technologies not yet widely used in health systems in Canada.
- HTERP acknowledges and encourages the continuing efforts of research groups in Canada, such as AGE-WELL, to drive innovation and close the gap between ideas and technologies, and testing in home settings.

Table 6

Technologies to Support Aging in Place

Type of technology	Examples
Chronic disease management and prevention	
Mobile health	Apps that support and incentivize healthy habits for certain conditions and mental health
	Apps for users to track their health status and adhere to their care plan
	Remote biomarker-monitoring devices that allow users and health care providers to view collected data and insights
	Remote biomarker-monitoring systems that allow users and health care providers to view data and access virtual care or support
	Artificial intelligence–based digital health assistants
Medication management	Smart medication trackers or dispensers to manage and help adherence to medication plans
	Apps that send customizable reminders about medications

Type of technology	Examples
Dementia support	
Assessment tools	Devices that help providers assess pain using facial analysis technology
	Tablet-based tools that help detect cognitive impairment using speech analysis
	Virtual cognitive assessment platforms
Mobile health	Apps designed for individuals with dementia or mild cognitive impairment that help them self-manage care
Brain engagement	Tailored digital therapies for cognitive training
	Platforms to log and preserve memories for older adults
Falls prevention	
Assessment	Digital tool to evaluate risks for falls and identify potentially appropriate rehabilitation interventions to prevent falls
Mobility	Portable lift and rollator walker with adjustable height and a seat
Activity monitoring	Monitoring systems that can help detect falls and emergencies, some of which use artificial intelligence to enhance the user's privacy and detect unusual behaviour or deviations from routines
Assistive devices and home modifications	
Hand support	Wearable glove that stabilizes hands
	Device for users with limited fine motor skills to help perform tasks involving their hands (e.g., writing, drawing) by promoting the use of shoulders instead of hands
Hearing support	App that listens for noises and alerts when immediate attention is needed (e.g., fire alarms)
	App to eliminate background noise
Vision support	Glasses for macular degeneration
	Sensor-activated lights to guide users when they move around during the nighttime
Reablement	
Digital rehabilitation and mobility	Devices that use sensors for real-time feedback for rehabilitation
	Devices that deliver noninvasive functional electrical stimulation therapy to the upper body
	Platforms for digital physical therapy
	Smartphone apps for rehabilitation programs
	Devices that simulate biking using augmented reality that users "pedal" to travel
Home care support services	
Care coordination	Software that supports care management and coordination
Care delivery and customer relationship management	Online platforms to find and hire home care providers or support workers

Type of technology	Examples
End-of-life care	
End-of-life planning	Funeral planning platforms
	Care planning for users with conditions in advanced stages
Support for unpaid caregivers	
Support and online community	Platform to access digital tools, personalized guidance, and an online community to help alleviate stress and burnout for caregivers
	Online communities for caregivers
Training	Platforms that provide training for caregivers
Assistive devices	Automated systems to help caregivers transfer patients, for example from a chair to a bed
	Wearables to monitor posture and provide immediate feedback to avoid injury
Housing	
SMART technologies	Service that integrates home technologies into 1 system
	System to help users with mobility issues control their home environment
Home share	Platform for older adults to find a roommate or to rent a room or apartment
	Website designed for older adults to book stays during trips
Transportation	
Smart technology	Sensors that can transform wheelchairs into a "Smart" wheelchair
Other	Platforms to help users access transport services and order necessities for delivery
	Smartwatch apps that monitor mobility and predict health outcomes
Social isolation and loneliness	
Digital and robot companions	Virtual companions that also help self-manage care
	Robots as a social companion
	Remote companions for users to access for support
Social media and communication	Platforms to facilitate communication with loved ones and their care team
	Platforms to meet others

Canada's Drug Agency
L'Agence des médicaments du Canada

Disclaimer: The information in this document is intended to help Canadian health care decision-makers, health care professionals, health systems leaders, and policy-makers make well-informed decisions and thereby improve the quality of health care services. While patients and others may access this document, the document is made available for informational purposes only and no representations or warranties are made with respect to its fitness for any particular purpose. The information in this document should not be used as a substitute for professional medical advice or as a substitute for the application of clinical judgment in respect of the care of a particular patient or other professional judgment in any decision-making process. Canada's Drug Agency does not endorse any information, drugs, therapies, treatments, products, processes, or services.

While care has been taken to ensure that the information prepared by Canada's Drug Agency in this document is accurate, complete, and up-to-date as at the applicable date the material was first published by Canada's Drug Agency, Canada's Drug Agency does not make any guarantees to that effect. Canada's Drug Agency does not guarantee and is not responsible for the quality, currency, propriety, accuracy, or reasonableness of any statements, information, or conclusions contained in any third-party materials used in preparing this document. The views and opinions of third parties published in this document do not necessarily state or reflect those of Canada's Drug Agency.

Canada's Drug Agency is not responsible for any errors, omissions, injury, loss, or damage arising from or relating to the use (or misuse) of any information, statements, or conclusions contained in or implied by the contents of this document or any of the source materials.

This document may contain links to third-party websites. Canada's Drug Agency does not have control over the content of such sites. Use of third-party sites is governed by the third-party website owners' own terms and conditions set out for such sites. Canada's Drug Agency does not make any guarantee with respect to any information contained on such third-party sites and Canada's Drug Agency is not responsible for any injury, loss, or damage suffered as a result of using such third-party sites. Canada's Drug Agency has no responsibility for the collection, use, and disclosure of personal information by third-party sites.

Subject to the aforementioned limitations, the views expressed herein are those of Canada's Drug Agency and do not necessarily represent the views of Canada's federal, provincial, or territorial governments or any third-party supplier of information.

This document is prepared and intended for use in the context of the Canadian health care system. The use of this document outside of Canada is done so at the user's own risk.

This disclaimer and any questions or matters of any nature arising from or relating to the content or use (or misuse) of this document will be governed by and interpreted in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein, and all proceedings shall be subject to the exclusive jurisdiction of the courts of the Province of Ontario, Canada.

About

Canada's Drug Agency is a pan-Canadian health organization. Created and funded by Canada's federal, provincial, and territorial governments. We're responsible for driving better coordination, alignment, and public value within Canada's drug and health technology landscape.

cda-amc.ca

August 2024