



Long-Term Care Models in Select OECD Countries and Policy Implications for Canada: A Focused Qualitative Systematic Review

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ABSTRACT

The COVID-19 pandemic highlighted many problems with Canada's older adults (OA) long-term care (LTC) model. The demographic changes in the next two decades require a novel approach to LTC. This study aimed to conduct a focused qualitative systematic review (SR) of the publicly supported LTC models and policies in select advanced economies. The authors used PubMed, Embase, and Medline to conduct an SR following the preferred reporting items for systematic reviews and meta-analyses (PRISMA) 2020 guidelines. Fully published articles in the English language related to LTC for Germany, Sweden, Australia, Denmark, France, and the Netherlands were included. Predefined data on the LTC models, including eligibility criteria, coverage, funding, and delivery methods,

were extracted. Out of 1,682 screened articles/websites, 28 publications, websites, and reports were included. Despite differences in LTC models, there were two primary funding sources for LTC in the selected countries: general tax and LTC insurance. Aligned with the OAs preference, there was an emphasis on providing LTC at home. The care services were need-based and often defined by healthcare professionals or specialized teams. To address the growing number of OAs and to fulfill their needs, the Canadian LTC system requires a major shift to LTC at home and keeping the institutional LTC as the last resource. A sustainable LTC at home also requires a new legislative framework and financial levers.

KEYWORDS: Older Adults; Long-Term Care; Care at Home; Policy; Canada.

KEY PRACTITIONER MESSAGE

1. Older adults prefer receiving long-term care (LTC) at home instead of in nursing homes.
2. Several OECD countries implemented LTC models that prioritize care at home, resulting in improved efficiency.
3. Globally, new regulations to facilitate LTC at home are required if policymakers are to keep up with the soaring demand for LTC.

INTRODUCTION

The COVID-19 pandemic shed light on global long-term care (LTC) shortcomings (Danis et al., 2020). The pandemic-related mortality was higher in LTC facilities. For example, the mortality per million in Belgium, France, and Sweden was 413.3, 201.6, and 173.7, respectively (Danis et al., 2020). Similarly, a combination of underfunding, understaffing, and inadequate legislative standards led to high COVID-19-related mortality among residents of LTC homes (LTCH) in Canada (Canadian Institute for Health Information, 2022). Due to severe staffing shortages and the prohibition of visitors, residents were forced to live in isolation without quality care (Badone, 2021). Although COVID-19 exacerbated these deficiencies, in Canada, the need for a major overhaul of caring for older adults (OAs) has long preceded the onset of the pandemic (Bliss, 2010).

LTCHs provide ongoing care to eligible OAs who cannot independently manage daily activities and require round-the-clock care (Fleming, 2006). There are 2,076 LTCHs in Canada, and 46% are publicly owned; of the privately-owned LTCHs, 29% are for-profit facilities (Canadian Institute for Health Information, 2021). In comparison, in 2017, there were 64,471 LTCHs with 3,440,071 beds in the European Union/European Economic Area (Suetens et al., 2018). Admission to LTCHs is subject to strict eligibility criteria and substantial co-payment and out-

of-pocket payments (Ontario Ministry of Long-Term Care, 2022). While there is no absolute minimum age requirement, eligible OAs are typically over 65. In Ontario - the largest province in Canada - those over 65 account for approximately 93% of LTCH residents (Ontario Long-Term Care Association, 2019).

LTC services are not part of Canada's universal healthcare system (Medicare) (Canada Health Act, 1985). Provincial governments have the right to decide LTC service delivery, funding, and eligibility criteria, leading to interprovincial variations (Landry et al., 2008). For example, the LTCHs in Ontario are operating under the Ontario Long-term Act (Long-Term Care Homes Act, 2007). The Ontario Ministry of Long-Term Care (MOLTC) currently funds 626 LTCHs with over 78,000 residents. Between 2011 and 2019, the LTCH waitlist increased by 78%, while the number of LTC beds increased by 1%. As a result, in 2019, 35,000 OAs were waitlisted for LTC beds (Financial Accountability Office of Ontario, 2019).

The lack of capacity planning and inadequate provincial funding has prevented OAs from accessing the LTCHs and forced them to stay home without support. Consequently, the family members become de facto (unpaid) carers for OAs. It is estimated that 35% of working Canadians, often family members, provide, on average, 17-19 hours per week of unpaid caregiving duties to OAs, causing substantial distress (Sinha et al., 2019).

Studies have shown that 90% of OAs desire to live at home and maintain their independence for as long as possible with some support (Muscedere et al., 2019). Accordingly, some Organisation for Economic Co-operation and Development (OECD) countries prioritize delivering LTC to OAs at a person's home instead of LTCH. An LTC at-home model broadly describes how the LTC services are organized, funded, and delivered to OAs in their homes (Gray & Farrah, 2019). In contrast to those OECD countries, many OAs fail to get adequate care at home in Canada. One study estimated that annually, approximately 11% of OAs admitted to LTCHs have low-level care needs could benefit from LTC at home (Labrie, 2021).

Prioritizing care provision in a higher-cost LTCH setting may have contributed to Canada trailing behind other OECD countries in providing successful quality care for OAs (Canadian Institute for Health Information, 2020). The inadequacies and inefficiencies of the Canadian LTC system raise the question of the efficacy and sustainability of the current system. Hence, exploring new models and policies pertaining to LTC delivery is reasonable. The authors theorized that Canada would require a public LTC system that focuses on providing LTC at home as the primary means of caring for OAs while keeping institutional care as a last resort option. This study aims to conduct a focused, systematic review,

examine publicly funded LTC at-home models in select OECD countries, and offer a road map for policy changes for the Canadian LTC system.

METHODS

Literature Search and Review

A literature search strategy using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement was developed to map the current publicly funded and regulated LTC models with a focus on LTC at home (Page et al., 2021). The authors used PubMed, EMBASE, and MEDLINE databases using the following keywords: (Long-term care at home, home care, care at home, nursing at home, home nursing, stay-at-home care, age in place), AND (Canada, Australia, the United Kingdom, England, Scotland, Wales, Northern Ireland, Netherlands, Sweden, Denmark, France, Germany), AND (government-supported, Medicare, national health service, aged care), AND (policy, model, fund, payment), AND (elderly, senior citizens, older adults). Government-associated websites and the reference sections of relevant studies were also searched for grey literature. The primary search was conducted from the inception of each database up to December 2022 and updated on March 1, 2023.

Authors independently screened titles and abstracts of retrieved articles and websites to identify articles and reports for full-text review.

Exclusion criteria included (1) articles published in a non-English language, (2) studies ascertained for age groups below 65, (3) studies concerned with private systems, and (4) no direct relation with the topic. Twenty-eight articles and online reports were included in the review (see [Figure-1](#)). The summary scope of selected sources is abridged in [Table-1](#).

Adopting the general description of the “model of care” in this study, the LTC model was broadly defined as how LTC services are organized and delivered (Brereton et al., 2017). The relevant parameters of an LTC model include eligibility criteria, decision-makers, workforce management, health and social care integration efforts, and coverage and funding frameworks. The information on the LTC at-home model for Australia, Denmark, France, Germany, Sweden, the UK, and the Netherlands was extracted ([Table-2](#)). The specific OECD countries were chosen because they value the provision of LTC at home and have organizational models that may be useful to Canada’s system.

RESULTS

The literature search yielded 1,682 results. After careful review, 22 journal articles and six websites were included. Fifteen journal articles were specific to one country, and seven were international or regional comparisons of LTC systems. Four reports from government websites provided general

information and data on LTC, and two websites reported specific policies ([Table-1](#)).

There were major organizational differences among international models of LTC at home, including the terminology used to refer to LTC at-home services, eligibility criteria, governance, coverage and funding, and policies ([Table-2](#)). However, the models had some similarities, including the provision of comprehensive LTC at-home services, which enable institutional care to remain a last resort option. Such programs cover a broad scope of round-the-clock services that are provided for as long as needed, including personal support, home management, nursing, rehabilitative, and end-of-life care.

While most LTC models focused on the universality and assuring access to LTC at home to all eligible OAs based on their needs (needs-tested), some restrictive criteria often exist (e.g., means-tested). Australia, France, and Germany LTC models outline specific eligibility levels and criteria (Courbage & Roudaut, 2008; Eagar et al., 2020; Nadash et al., 2018). These countries have specific eligibility for various care needs based on assessments from healthcare professionals, social workers, and other care teams. In contrast, some other LTC models (e.g., Denmark, Sweden, Netherlands) allow for a degree of flexibility at the decision-maker's discretion, including assessment teams, case

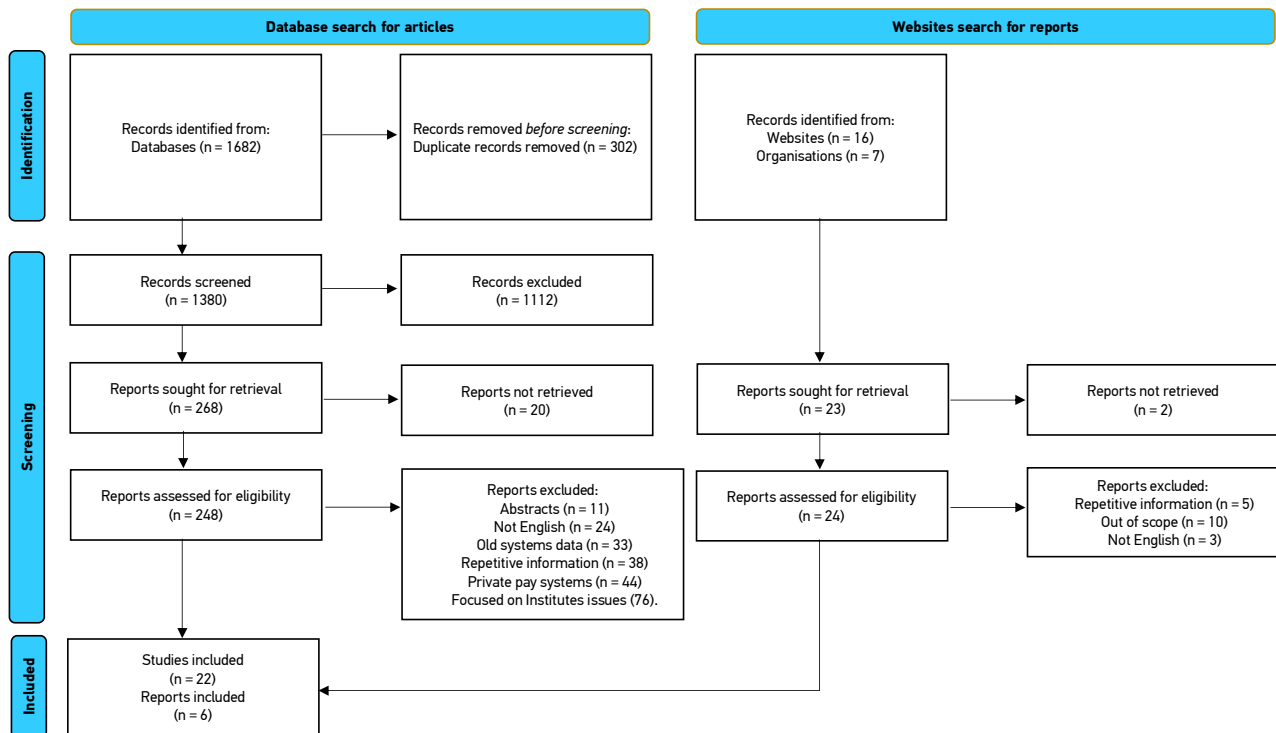


Figure-1. Literature search screening and selection flow-chart

managers, or healthcare professionals (Schulz & Berlin, 2010; Szebehely & Trydegård, 2012; Veghte, 2021). Additionally, LTC models in Australia and the Netherlands consider access to informal caregivers when determining the extent of an OA's needs, while the other LTC models do not (Dyer et al., 2020; European Commission, 2021).

The philosophy behind care for OAs varies between countries. Sweden and Denmark consider LTC for OAs as a public responsibility rather than the responsibility of individual families (Schulz & Berlin, 2010). Therefore, there is a lower percentage of informal caregivers in these countries. For example, less than 8% of Denmark's population has informal caregiving duties (Dyer et al., 2020).

There were three categories of coverage and reimbursement, including direct cash payments (e.g., France), in-kind services that are capped based on needs (e.g., Australia's subsidy-based care packages), and unlimited in-kind services (e.g., Denmark). Certain LTC models, such as the one in Germany, also have the option to choose between receiving services in-kind or in cash (Nadash et al., 2018). In France, Germany, and the Netherlands, in-cash benefits allow informal caregiver reimbursement. Aside from the models in Germany and the Netherlands, which are mainly funded through mandatory LTC insurance policies and payroll tax, most models are funded through general taxation and means-tested with co-payments (Veghte, 2021).

Table-1. Summary scope of articles and websites included in the study

Authors	Year	Country	Scope / Summary
Journal Articles			
Alders	2019	Netherlands	Review the LTCI reform and provides solutions to overcome incentives, misalignment and fundings problems
Bihan	2018	France	Discuss personal autonomy allowance LTC model to increase autonomy based on care plan needs
Courbage	2018	France	Analyse the Survey of Health, Ageing, and Retirement in Europe database to estimate the probability of purchasing LTC insurance in France
Curry	2019	UK	Comparative analysis of UK and Germany LTC system and implications for UK
Da Roti	2010	EU	Analyse policies and systematic review assessing differences among Austria, France, Germany, Italy, the Netherlands & Sweden's cash-for-care schemes for LTC
Dussuet	2019	France	Analyse French LTC system bureaucracy, policy implementation and decisions focusing on gender differences
Dyer	2020	International	Review of international approaches LTC provides learnings for Australia's aged care system and situates it within the appropriate global context.
Eager	2020	Australia	A cross-sectional study of resident characteristics in 30 non-government residential facilities in 3 regions to develop a case-mix classification to support the funding model
Genet	2012	EU	Reporting all aspects of the home-care sector in 31 EU countries comparing organisation, financing, and provision of home care across Europe
Kiersey	2017	EU	Analyse legislation, national standards, accreditation, eligibility and needs assessment, and financing of formal home care services in four European countries
Labire	2021	EU	Analysed German, Japan, the Netherlands, and Sweden's LTC system financial sustainability to meet the needs of OAs adequately
Lagergren	2018	Sweden & Japan	Project LTC cost 2010 - 40 for different assumptions of population change, LTC need by age group and gender, and LTC provided per level of need and cost in Japan and Sweden
Muscedere	2019	Denmark	Comparing LTC in Denmark and Canada in an attempt to address the shortcomings of the Canadian LTC model
Nadash	2018	Germany	Reviews legislative and programmatic changes using program data, as well as legislative documents and program reports
Powell	2021	UK	Explores the extent of the debate in England over the LTC funding involved learning from abroad
Shulz	2010	Denmark	Overview of the LTC, number of beneficiaries and the LTC policy in Denmark based on the Assessing Needs of Care in European Nations project by the EU Commission
Sinha	2019	Canada	Explore LTC across Canada and contextualise it globally with comparable countries with significant demographic transitions as they redevelop their transitions and systems of care
Sinha	2020	Canada	Review Ontario LTC landscape and regulations and proposes leveraging virtual care to support OAs in a more cost-effective way
Szebehely	2012	Sweden	Analyse Swedish eldercare policies and legislative changes and impact of marketizing the services, and the interplay of market trends and recipients of the services
Watt	2018	UK	Analyse the future pressures that the current system of publicly funded adult social care will face, provide options for funding the additional costs by changes in the level of national and local taxes or benefits.
Veghte	2021	Germany & EU	Review the range of existing approaches abroad to the provision of universal LTC and then considers lessons from an in-depth case study of the German program
Yakerson	2019	Canada	Examines the history of Ontario's home care reform and current challenges with health equity. Assess the impact of market-based health care reforms on gendered experiences and access to home care services.
Websites			
CIHI	2021	Canada	Statistical data on healthcare and LTC
EU Com.	2021	EU	Statistical data on LTC
OECD	2021	International	Statistical data on healthcare and LTC
OECD	2011	International	Review of LTC
WHO	2021	International	Review of LTC
RCAC	2021	Australia	Review of Australia's LTC system

Notes. LTC: Long-term care, LTCI: Long-term care insurance, EU: European Union, OA: Older adults, CIHI: Canadian Institute of Health Information, OECD: Organisation for Economic Co-operation and Development. WHO: World Health Organization, EU Com.: EU Commission, RCAC: Royal Commission into Aged Care Quality and Safety

Since funding varies between countries, many individuals rely on private insurance to receive additional care for more complex needs in some countries like France (Dussuet & Ledoux, 2019).

Furthermore, most assessed models do not have policies pertaining to minimum training levels, service hours, and staff-to-patient ratios in terms of labor and quality legislation. Lastly, in line with the integration of health and social care for OAs, Sweden, and Denmark employ specific care management teams and leverage technology to share and monitor patient information, which has resulted in substantial decreases in emergency department visits, duration, and the number of hospitalizations (Labrie, 2021; Muscedere et al., 2019).

DISCUSSION

Advances in medicine and technology have created an era where people live longer (Sadri, 2020). Approximately 25% of Canada's population is expected to be over 65 by 2041, and the current LTC system cannot serve their growing needs (Yakerson, 2019). The LTC limitations are a global problem. Despite well-structured LTC systems, some OECD countries have, to some extent, failed to keep up with the needs of the increasing aging population (Kiersey & Coleman, 2017). However, the current Canadian system has fallen further behind by focusing on underfunded, understaffed,

and costly LTCHs as the primary means of OA care (Kuluski et al., 2012). In line with the models reviewed in this study, the Canadian LTC system can benefit from reform by adopting a system that primarily provides LTC at home while keeping institutional LTC as a last resort option. In this review, in order to provide a policy framework guidance that is useful to Canadian policymakers, the authors analyzed the LTC model from countries that, despite providing a comprehensive LTC at home, they had relatively different systems to ensure that each LTC model presents valuable information. In contrast, their socioeconomic, healthcare delivery, and funding models apply to the Canadian system. As such, LTC systems that seemingly operate effectively for their citizens. However, their fundamentals did not apply to Canada because the socioeconomic, cultural, social construct, and healthcare system delivery were excluded. (Iwagami & Tamiva, 2019; Rhee et al., 2015).

The UK LTC model was excluded from the policy analysis because following the review of several relevant articles, it was determined that the LTC system in the UK and, in particular, England is similar to Canada, specifically Ontario, in terms of eligibility criteria, funding, and scope of services.

Canadian policymakers can leverage the experience of existing LTC at-home models in other jurisdictions, including appropriate eligibility criteria, sustainable

Table-2. Characteristics of long-term care models in select OECD countries

Geography	Reference	Model	Eligibility Criteria & Levels	Decision	Funding	Delivery & Benefit Rates
GERMANY	Da ROIT and Le BIHAN, 2010	Mandatory Long Term Care Insurance (LTCI) program.	Needs assessed for ADL, universal LTCI for 60+ (earlier if needed) for 6 months. 5 levels: PG1: No ADL need; PG2: Need personal hygiene, feeding, or mobility for min. 2 activities/day, house helps several times/week for 90 min + 45 min basic care; PG3: PG2 + daily assistance in 2 basic ADLs 3 times/day, help IADLs several times/week 3 hrs/day + 2 hrs basic care; PG4: PG3 + daily assistance in min 2 ADLs round-the-clock, help in IADLs several times/week 5 hrs/day + 4 hrs basic care; PG5: PG4 + for daily assistance, min 7 hrs/day with min 2 hrs at night or need basic care provided by >1 person simultaneously.	HCP & case manager	Payroll taxes - 3.05% split equally between employer & employee. Retirees pay the total contribution. Workers with no children contribute an extra 0.25%.	In-kind or opt-out for in-cash or a combination. It can be used to pay informal caregivers. Insurance companies directly pay providers through a fixed per diem payment structure for in-kind. Fixed monthly benefit rates, irrespective of income: PG 1 - N/A; PG 2 - \$1067 in-kind, \$490 in cash; PG 3 - \$2010 in-kind, \$845 in cash; PG 4 - \$2498 in-kind, \$1128 in cash; PG 5 - \$3090 in-kind, \$1427 in cash.
	Nadash, Doty and von Schwabenflügel, 2018 Labrie, 2021					
FRANCE	Colombo et al., 2011 Doty, Nadash and Racco, 2015 Bihan and Martin, 2018 Dussuet and Ledoux, 2019	Maintaining Autonomy for Continuing Care	Needs assessed. Universal access for ages 60+; 4 eligibility levels: Level 1 - confined to bed/chair; severe mental impairments, require 24/7 care; Level 2 - confined to bed/chair, some level of mental impairment, require support for most daily activities or require constant monitoring; Level 3 - mental autonomy, need help several times a day for personal care; Level 4 - some mobility limitations, need help for personal care, or no mobility problems but need help for body care & meals.	HCP & social worker	The majority is funded through national & local taxation; the remainder is from co-payments. Co-pay is income-related & the amount is deducted from the allowance.	Direct monthly cash allowances are given to OAs/guardians. It can be used to pay informal caregivers, excluding spouses. Monthly cash allowance rates: Level 1 - \$2038; Level 2 - \$1744; Level 3 - \$1310; Level 4 - \$876.
DENMARK	Schulz and Berlin, 2010 Dyer et al., 2020 European Commissions, 2021	A comprehensive, universal program.	Needs assessed. Universal access for all Danish residents, irrespective of age. All >75 are entitled to min. 2 annual preventative visits.	Municipal home care council case managers.	LTC public spending = 3.5% of GDP in 2019, 90% from local taxes; <5% from co-payments; the remainder from block grants & temporary subsidies from the national government.	Complete in-kind coverage for permanent home care needs. Temporary home care services require means-tested co-payments. Meal prep is subject to a max. Co-payment of \$10.75/meal.
AUSTRALIA	Eagar et al., 2020 Royal Commission, 2021	Aged Care; 2 subsidy-based programs. Home Care Packages Program - high-level needs; Commonwealth Home Support Program (CHSP) - lower-level needs/waiting for HCP	Needs assessed. Universal access for ages 65+ (50+ for Indigenous people); 4 eligibility levels: Level 1 - basic care; Level 2 - low-level care; Level 3 - intermediate-level care; Level 4 - high-level care.	Independent, qualified Aged Care Assessment Teams (ACATs).	75% from general taxation & the remainder from means-assessed co-payments deducted from subsidies.	Individually approved annual subsidies are given to providers to cover the services outlined in the care plan. Annual subsidy rates: Level 1 - \$8,720; Level 2 - \$15,380; Level 3 - \$33,500; Level 4 - \$50,800.

Table-2. Continued...

Geography	Reference	Model	Eligibility Criteria & Levels	Decision	Funding	Delivery & Benefit Rates
NETHERLANDS	Alders and Schut, 2019					
	European Commissions, 2021					
	Labrie, 2021 Veghte, 2021					
		Universal LTC coverage is provided through 3 social insurance programs. Long Term Care Act (WLZ): institutional & intensive homecare. Health Insurance Act (ZVW): home nursing care & personal care (e.g., personal hygiene, eating). Social Support Act (WMO): home maintenance services (e.g., cleaning, laundry, shopping).	Needs assessed. Universal access for all Dutch residents, irrespective of age. WLZ: the need for 24/7 supervision & intensive health & personal care. ZVW: Healthcare practitioner referral needed. WMO: Assessment of physical/psychological impairments.	WLZ: Regional Care Assessment Agencies. ZVW: HCP. WMO: Municipal "WMO consultants."	WLZ: payroll tax from employees & retirees (9.65% of income). ZVW: 45% employer payroll tax (6.7% of income); 45% premiums paid by employees & retirees; the remainder from general tax. WMO: Majority funded through general taxation & block grants; the remainder from income-adjusted monthly co-payments.	In-kind or in-cash. In-kind coverage has a yearly mean-tested deductible. In-cash benefits are called Personal Care Budgets (PCB) & can be used to pay formal/informal caregivers. Maximum PCB rates for formal caregivers: Personal care - \$55.75/hr & \$4.65/5 min.; Nursing at home - \$82.50/hr & \$6.87/5 min. Maximum PCB rates for informal caregivers: Personal care/nursing at home - \$34.25/hr & \$2.85/5 min. PCB is income-adjusted.
SWEDEN	Da ROIT and Le BIHAN, 2010					
	Szebehely and Trydegård, 2012					
	Lagergren, Kurube and Saito, 2018 OECD Health Statistics, 2021					
		A comprehensive, universal tax-funded program.	Needs assessed. Universal access for all Swedish residents, irrespective of age. The Allowance Program requires a min. Need of 17 hrs/week to allow employment of extra care for those with extensive needs.	Municipal care managers.	LTC public spending = 3.4% of GDP in 2018, 85% from local taxes, 10% from national taxes, 5% from co-payments. Means assessments determine the co-pay amount if required.	In-kind coverage. Max. Cash payments of \$700/month are given through the Allowance Program. It can be used to pay informal caregivers
UK	(Watt et al., 2018; Curry, Schlepper and Hemmings, 2019; Dyer et al., 2020; OECD, 2021; Powell, 2021)					
		A blend of health and social care, provided in a combination of institutional & community care.	Needs assessed. OAs with low-level needs do not qualify but may receive cash benefits. In Scotland, personal care is free. Informal caregiver services are considered in the needs assessment.	GPs, practice nurses and the wider primary care workforce	Largely private (50%), 37% fully funded, 12% partially funded by NHS.	Mostly delivered by private for-profit independent facilities (86%) with the choice to accept publicly funded residents.
		Managed separately by Wales, England (majority service use), Scotland and Northern Ireland.	Social care for 65 plus (frailty) and people with disability. Needs and means-tested. OAs with low-level needs do not qualify but may receive cash benefits. In Scotland, personal care is free. Informal caregiver services are considered in the needs assessment.		National authorities determine the amount and obligations of local authorities	Local authorities provide publicly funded care to eligible OAs

Notes. OECD: Organisation for Economic Co-operation and Development, LTC: Long-term care, HCP: Healthcare professional, GDP: Gross domestic product, OA: Older adults, ADL: Activities of Daily Living, IADL: Instrumental Activities of Daily Living. NHS: National Health Service

financing, informal caregiver support, workforce management, and integration efforts, to design a practical LTC at-home model tailored to the Canadian OA's needs. Plausibly, there is a need for legislative changes to expand the scope of existing LTC and home care regulations to cover the LTC at-home options for OAs. Alternatively, the policymakers could draft legislation exclusively focusing on providing LTC at home.

Another important factor is creating provincially mandated guidelines and oversight to ensure provider compliance and avoid intra-provincial inequities (Brassolotto et al., 2020; Kornelsen et al., 2021). Nevertheless, maintaining regional authority teams governed by the relevant authorities (e.g., the Ministry of Long-Term Care in Ontario) is equally important to accommodate local needs.

A central aspect of a successful new LTC at-home model is harmonization with the principles of the Canada Health Act: equity and universality (Canada Health Act, 1985). OAs should have access to LTC at-home services for as long as needed, regardless of income, assets, or access to informal caregivers, which is the main differentiator between the current home care system and the proposed LTC at-home model. The current homecare system has limited funds available for homecare services through regional planning teams governed under the Home Care and Community Services Act (HCCSA)

(Homecare Ontario, 2019). These services are short-term and meant to assist in post-hospital discharge recovery and support families coping with an older family member's need. However, these services have a narrow scope, non-standardized eligibility criteria, limited care hours, and poor quality due to insufficient funding and under-trained workers (Sinha & Nolan, 2020). As a result, approximately 150,000 OAs pay out-of-pocket for 20 million visits/hours of private home care services per year (Homecare Ontario, 2019).

Universality alludes to providing access to LTC services without imposing strict eligibility criteria (Labrie, 2021). The current Canadian means-tested model contradicts the universality principle, depriving thousands of OAs of receiving adequate publicly funded LTC due to strict and non-standardized eligibility criteria. A successful LTC at-home model should include a set of needs-based criteria similar to the eligibility level guidelines in France, Australia, and Germany (Table-1).

In response to the COVID-19 pandemic challenges, Canadian provinces have introduced programs to increase the LTCH beds. However, increasing funding for the current LTC system is not justifiable (Falk, 2021). The main criterion of an efficient and sustainable LTC system is to put OAs' needs and preferences at the center of decision-making. In order to accommodate the greater number of care

recipients, efforts should be made to increase LTC at home and homecare providers instead of making costly investments in LTCH beds.

A potential Canadian LTC at-home model can adopt one of the three types of coverage recognized in this study to provide standardized public support for OAs, based on the extent of their needs. First is direct cash payment, similar to France and Germany, which allows OAs/guardians to make decisions regarding their care and budget allocation freely. However, limited care manager intervention means that OAs/guardians accept the risks and responsibilities of care planning, which can be time-consuming and tedious (Flood et al., 2021). The burden of caregiving may increase the risk of elder abuse, especially financial exploitation (Pillemer et al., 2016). As a preventative measure to minimize the risk of financial exploitation, this model requires mechanisms to ensure proper cash utilization, including submitting monthly statements and unused funds to guarantee the appropriate use of the OA's agreed-upon care plan (Naylor et al., 2012). Another possibility is the subsidy-based care packages used in Australia, which are capped based on the level of need and given directly to the older adult's homecare provider. Several private homecare organizations are active in Canada, which can be leveraged for the LTC at-home model. In this model, the care planning is delegated to care management teams,

facilitating user experience, and allowing for skillful planning and service recommendations. The third option is providing universal coverage, similar to Canada's healthcare system, through general tax. An example is the Nordic countries, where a broad scope of LTC at-home services is predominantly free to OAs. Healthcare in Sweden and Denmark encompasses LTC at home. Thus, coverage is funded through their tax system. Besides using the general tax for cash payments or subsidies, Canada can fund LTC at home by implementing mandatory LTC insurance similar to Germany and the Netherlands. Insurance companies pay providers fixed per diem to allow efficient budget allocation. This model is viable in Canada as employers and employees are accustomed to payroll deductions for various social services, including unemployment or complementary health insurance (Sadri & Sadri, 2022). However, since payroll tax funds this model, contribution rates and coverage fluctuations can occur depending on employment rates and age distribution (Nadash et al., 2018).

Expectedly, employing such coverage for LTC at home is costly. However, the potential cost savings from delivering care in a lower-cost environment can be allocated towards further supporting the LTC workforce, accommodating more OAs, and increasing the quality and scope of services provided in the home. For example, in Denmark, 80% of LTC is

provided at home, and in Sweden, the “aging in place” strategy caused LTCH usage to decrease by a third from 2007 to 2020 (Dyer et al., 2020; Labrie, 2021). Limiting institutional LTC funding allowed Denmark to spend 64% of its LTC funding on providing home care services in 2017, while in Canada, only 13% of budgets are allocated to home care (Sinha & Nolan, 2020). The case is different for the Netherlands, where the majority of LTC is provided at home, even though a greater proportion of LTC funding is spent on institutional care (Comas-Herrera et al., 2021). Furthermore, the shortage of LTC beds has increased the alternate level of care (ALC) patients, who occupy over 15% of the hospital beds in Ontario, costing the province \$170 million annually (Sibbald, 2020). The ALC patients no longer require the intensity of services provided at the hospital but continue to occupy a bed due to limited access to post-acute care services (Sutherland & Crump, 2013). An efficient LTC at-home system will save the ALC beds significantly for the provincial governments. The issue of ALC beds has also been reported in other healthcare systems (Edwards, 2017).

While various factors can affect budgeting proportions in each country, specifically for Canada, the daily cost per person of providing LTC at home, at an institution, and care for an ALC patient is \$103, \$201, and \$730, respectively (Sinha & Nolan, 2020). As such, increasing the scope of and accessibility to

LTC at-home services may, at a minimum, decrease early LTCH admissions and unnecessary acute care bed occupancy (ALC) by OAs. Moreover, similar to other care planning, a sustainable LTC at-home model requires precise cost estimates for optimal resource allocation (Sadri et al., 2021).

One of the benefits of LTC at home is formally accommodating a greater number of needs, thus diminishing the care provided by informal caregivers. However, increasing support for those who provide care is important, especially working full-time. Currently, up to eight weeks of unpaid leave is available under the Employment Standards Act and is subject to strict eligibility requirements regarding caregiving duties (Employment Standards Act, 2000). Some LTC at-home models acknowledge informal care by allowing cash benefits to employing informal caregivers. The downside of this approach is that it limits legal care outsourcing (Genet & European Observatory on Health Systems and Policies, 2012). Moreover, since females comprise the majority of caregivers, this policy adversely affects female participation in the labor market (Statistics Canada, 2018). Therefore, a policy similar to Sweden’s system may be beneficial where cash benefits for reimbursing informal caregivers are only given when OAs require support in addition to their publicly provided services (WHO Centre for Health Development, 2021).

To further increase the quality of LTC, both at the

institution and home, there is a need to design and implement policies to improve the LTC workforce skills. Currently, personal support workers who work in LTC or home care services have no formal training requirements (Saari et al., 2017). Similarly, in most provinces, the long-term care legislations (e.g., Long-Term Care Homes Act in Ontario) which govern LTCH do not require a minimum staff-to-resident ratio, leading to inadequate care (Badone, 2021). It is important to set provincial mandates within Canada's LTC at-home model for minimum training levels, staff-to-patient ratios for service providers, and weekly care hours needed based on eligibility levels. Furthermore, the pandemic exacerbated the shortage of human health resources, impacting all care levels, including LTC (Sadri & Fraser, 2022). Appropriate policies to address training and recruiting qualified health human resources are necessary for the success of a new LTC at-home model.

Integrating health and social care for OAs is important because proper provider communication allows efficient resource utilization and limits early admission to LTCH. Canadian provincial authorities can benefit from employing and overseeing regional care management teams, similar to that of Sweden and Denmark, who are solely responsible for integrating care for OAs by completing assessments to determine eligibility, connecting individuals to the proper care services, and capitalizing on technology

to monitor and share patient information between service providers. This approach allows for a more cohesive and standardized care delivery compared to standalone local teams responsible for care provision and integration without government intervention, as is currently the case in Ontario. Integration efforts will help provide seamless and individualized care to OAs and allow for better resource allocation in balancing home care, institutional care, and hospital care.

Limitations

Similar to other international comparison studies, this study has limitations that may limit its generalizability. International comparisons between systems have their shortcomings, making transferring ideas difficult. This study was a narrow-scope qualitative systematic literature review focusing on select countries with advanced LTC at-home models. Understandably, many different care models for OAs in other nations were not examined. The countries analyzed in this study have different social constructs and healthcare systems with varying degrees of complexity, further limiting the linear transferability of their experiences. The proposed policy changes require a national willingness to change and may be hindered by political forces in a federation. Further research is necessary to systematize the suggestions made in this study and critically evaluate feasibility based on Canada-specific data, such as funding mechanisms.

CONCLUSION

There are various LTC at-home models among OECD countries with different structures and funding sources. In order to address the growing demand and the challenges of care for OAs, Canada needs to reform its LTC system. Canada's current focus on institutional care cannot adequately fulfill the aging population's needs, resulting in inequitable and suboptimal care. Aligned with the LTC at-home models of select OECD countries explored in this study, Canada's viable option is to prioritize the provision of LTC at home.

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