OPTIMIZING HEALTH INFORMATION EXCHANGE DURING PATIENT TRANSITIONS INTO LONG-TERM CARE

OPTIMIZING HEALTH INFORMATION EXCHANGE DURING PATIENT TRANSITIONS INTO LONG-TERM CARE: A MULTI-PHASE PRACTITIONER-FOCUSED RESEARCH PROGRAM TO SUPPORT INFORMATIONAL CONTINUITY

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TITLE: Optimizing health information exchange during patient transitions into long-term care: a multi-phase practitioner-focused research program to support informational continuity

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Lay Abstract

Continuous and consistent care delivered and coordinated by a healthcare professional, usually a family physician, is linked to higher quality of care, better health outcomes and satisfaction with care. However, most older adults who enter long-term care (LTC) lose the continuous relationship with their family physician, impeding the aforementioned benefits. Although patient-relevant healthcare information is sent to LTC facilities, this information is often insufficient. To address this information gap, this research examines the information exchanged and valued by family physicians and LTC providers, the barriers to sharing information that supports maintaining continuity in care, and opportunities for improvements. Paperwork and records often fall short, but better communication between care settings and educating caregivers can help. Still, problems like unclear rules, doubts about the usefulness of the information, technology issues, and poor teamwork persist. The study points out ways to improve the process, especially with better application of technology, teamwork and better communication among care providers and families, educational opportunities related to LTC, and improved funding. The hope is that this work will motivate the government, clinical, and educational leaders to fix these problems and inspire further research, especially on digital tools and the views of patients and families.

Abstract

Background: Older adults are the highest healthcare users, and their rapidly growing population mounts increasing pressures on the healthcare system, including the demand for long-term care (LTC) beds. Most older adults lose contact with their family physicians on entering LTC as new providers assume responsibility for their care. System fragmentation, including impacts of policies like of *Bill 7* – permitting temporary placement in LTC facilities nearly 150km away one's preferred location – exacerbates this problem. Disruption of care continuity creates challenges for the healthcare workforce and patient care outcomes. This dissertation aims to describe the information exchange activities that occur during primary care to LTC transition, and to explore opportunities to leverage policy to optimize informational continuity during the transition process.

Methods: This work includes a three-stage research program comprising a scoping review of the literature pertaining to continuity of care during LTC transition in Canada, followed by a multiple case study design to elicit insights from various LTC providers on the information continuity discourse. The third study was a qualitative descriptive study on family physicians' perspectives concerning informational continuity practices during LTC transitions.

Results: Informational continuity is perceived as a valuable and viable solution to mitigating disrupted relational continuity. However, the information shared currently is inadequate to support informational continuity. Systemic barrier (e.g., document designs, time constraint) and provider perception about the information shared (e.g., redundancy, obsoleteness) contribute to suboptimal information exchange. Health professions education interventions, document revision, the automation of form completion, collaborative documentation practice, warm handoff standards, and efforts to better empower patient families would be needed to optimize informational continuity.

Conclusion: Informational continuity remains a promising means to address disrupted continuity. This work calls on policymakers, practitioners, and educators to address practices and systemic issues hindering informational continuity. It encourages further research into digital solutions, stakeholder perspectives, and context-specific continuity frameworks.

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List of All Abbreviations

Abbreviation	Term
ANHIO	Associated Nursing Homes Incorporated of Ontario
CFPC	College of Family Physicians of Canada
CHC	Community Health Centre
CHST	Canada Health and Social Transfer
CLSC	Centres locaux de services communautaire
CPP	Cumulative patient profile
EHCS	Extended Health Care Services
EHR	Electronic health record
FFS	Fee-for-service
HSO	Health Service Organization
IC	Informational continuity
LTC-HAF	Long-Term Care Health Assessment Form
LTC	Long-term care
MOHLTC	Ministry of Health and Long-term Care
MRP	Most responsible physician/provider
OH@H	Ontario Health atHome
OT	Occupational therapist
PT	Physiotherapist
RAI-MDS	Resident Assessment Instrument-Minimum Data Set
RC	Relational continuity
RN	Registered Nurse

Declaration of academic achievement

This dissertation is a sandwich thesis comprised of an introductory chapter (Chapter 1), three original studies presented in the form of publishable manuscripts (Chapters 2-4), a synthesis chapter (Chapter 5), and a final conclusion chapter (Chapter 6). Chapter 2 has been published in BMC Health Services Research. Permission to reprint this article is provided under Springer Nature's Reprints and Permissions guideline. At the time of submitting this dissertation, Chapters 3 and 4 were under consideration for peer-reviewed publication.

I, Augustine Okoh, declare that the work presented in this dissertation is my own. I am the sole author of Chapters 1, 5, and 6 and am the lead author of the three original studies presented in Chapters 2-4. I led this research with supervision from Dr Lawrence Grierson and my supervisory committee members—Drs Henry Siu, Michelle Howard, and Ellen Badone. I conceived and designed each study with Dr Grierson and my committee providing guidance in refining the ideas, specific research objectives and methodological approach. I led data collection and analysis. Regis Gu and Alfina Shahu assisted with data screening and abstraction for the scoping review in Chapter 2. I also received support from one research coordinator (Aimun Shah) and four undergraduate project students (Naisha Dharia, Paranshi Gupta, Christine Lin, and Caroline Caswell) in for-credit learning experiences, working under Dr Grierson's supervision, during data collection and analysis for Chapters 3 and 4, particularly in transcription and double coding of interview transcripts. I wrote the first draft of the manuscripts in Chapters 2-4. Dr Grierson and my committee reviewed and provided thorough feedback on multiple iterations of the manuscripts and other chapters. I declare that I am accountable for all aspects of this work, including its accuracy and integrity.

Chapter 1: Introduction

This chapter introduces a doctoral dissertation that consists of three original research studies in Chapters 2-4. This doctoral dissertation presents a research program examining a critical juncture in healthcare for older adults, that is, their transition from independent living and care in the community to long-term care (LTC) at their later years. This entails a transfer of healthcare and accountability from their primary care provider—often a family physician—to the LTC team who assumes primary responsibility for the individual's health and personal care. While most Canadian seniors experience the loss of relational contact with their primary care provider, very little is known about the continuity-based practices that occur during LTC transitions in Canada to mitigate the impact of the transition and factors that shape these practices. Hence, this work sought to explore continuity of care during the transition process as maintaining consistent and coherent care across the care continuum yields better experience and care outcomes.

This introductory chapter begins with describing the knowledge gaps and research objectives. This is followed by a literature review that unpacks the complexity of the healthcare policy landscape in the study jurisdiction (Province of Ontario, Canada), describing key policy legacies that have shaped the Canadian primary healthcare system, and the evolution of long-term care in Ontario. Next is an overview of the key construct, continuity of care, describing the types of continuity of care, and distilling its significance to the LTC transition discourse. The chapter also includes a description of the long-term care transition process in Ontario. The latter sections of the chapter contain descriptions of the theoretical frameworks that guided this work, justification for focusing on care providers, and the significance of the work.

1.1 Knowledge gaps and rationale for the current research

The College of Family Physicians of Canada articulated the Patient's Medical Home (PMH) vision for Canada as a blueprint in the pursuit of delivering high-quality coordinated care. The PMH describes a family physician-led team-based model that centres on the patient's needs in the delivery of comprehensive care [1]. The seventh pillar of the PMH model, *Continuity of Care*, emphasizes how patients who maintain longitudinal provider-patient relationships experience better overall health outcomes. In situations where a patient requires the services of different health professionals or care in a different setting, the family physician provides a referral to or engages in consultation with other providers and then returns to the direct relationship when the need for other support is complete [1]. However, when older adults transition from living independently in the community to institutionalized living in LTC at their later years, their continuous relationship with their family physician is often disrupted and not typically resumed [2]. This is often the case in Canada. For example, a study reported that 87.9% of LTC residents in Ontario do not retain their family physician when they enter a long-term care facility [2]. Accordingly, continuity of care usually takes on an informational form [3], which entails sharing details about patients' medical conditions, health history, illness experiences, preferences, values, and circumstances to plan and implement healthcare services [4]. Specifically, LTC providers rely on information sharing during care transitions to design the new resident's care plan.

Disruptions of relational continuity are most prevalent in metropolitan cities and urban locations, wherein LTC facilities operate a "closed" physician staffing model that sees LTC-contracted physicians assume primary responsibility of care for all residents [2]. The disruption can be further exacerbated when older adults are placed in an LTC facility that is geographically distant from their family physician's office, a reality many faced when the Government of

Ontario enacted Bill 7 – *More Beds, Better Care Act (2022)* – which authorized temporary LTC placements as far as 150km away from the patient's preferred LTC home [5]. In these situations, maintaining informational continuity becomes critical to meeting the LTC policy goals defined in the *Fixing Long Term Care Act, 2021* – fostering resident dignity, ensuring their security and comfort, and adequately meeting their physical, psychological, social, spiritual, and cultural needs [6].

Notably, close to two-thirds of Canadian family physicians feel their practice is unprepared to manage patients who need LTC services [7], and there are fewer than 500 family physicians Canada-wide with enhanced skill certification in Care of the Elderly, highlighting a significant gap in provision of specialized care for this vulnerable population [8]. This suggests that several family physicians in community practice may not be appropriately oriented to the information that their LTC counterparts would benefit from receiving during a patient's transition. Anecdotal reports from clinicians and researchers in the LTC space allude to the inadequacy and limited utility of the information currently transmitted during this process. Yet, there is little empirical evidence about the documentation transmitted during the LTC transition and its utility to the quality-of-care residents receive in the LTC facilities. One recent US-based study, however, shows a substantial limitation in the completeness, timeliness, and usability of the information provided by the discharging care providers to support older adults' LTC transitions [9]. Through a large nationally representative survey, the investigators found that key information related to functional, mental, and behavioural status or follow-up were missing in more than 60% of transition-to-LTC cases [9]. It is likely that similar patterns occur in Canada too. Hence, it is essential to ensure that informational continuity is optimized to cover the information gap.

The transfer of comprehensive and good-quality information is necessary for the delivery of high-quality, person-centred care in LTC facilities. With insufficient information about new patients, LTC providers are at risk of making medical errors that result in adverse care outcomes [10]. Furthermore, a lack of informational continuity can create inefficiencies for the healthcare workforce [11]. Providers must fill in the gaps in their knowledge, a process that increases the cost of and time allocated to administrative tasks. Workflow slows down, collaboration is hampered, and productivity is diminished [12]. This may contribute to lower job satisfaction, higher burnout rates, and reduced provider retention in LTC practice [13, 14]. Notably, no empirical research has studied in-depth the information exchange processes and factors that influence care provider's practice behaviours during LTC transitions in Canada. Our work sets out to fill this important gap in knowledge, which will stimulate practical benefits for Canada's LTC care continuity workforce, the population they serve, and efforts to improve the efficiency of the healthcare system [15, 16].

1.2 Overarching research objectives

This doctoral thesis contemplates informational continuity in the care of the elderly and its implications for healthcare providers working in the service of aging patients in LTC facilities. It focuses on family physicians and LTC healthcare providers. These groups were chosen because family physicians are the main providers of primary care for 70% of Canadians [17] and because an overwhelming majority of patients end their longitudinal relationship with their primary care provider and begin to receive healthcare from LTC providers upon their transition into LTC [2]. Developing our understanding of continuity of care disruptions and optimized information exchange thus benefits from a targeted approach that centres these two

professional groups. This work sets out to produce findings, recommendations, and knowledge products on informational continuity during LTC transitions that have relevance to Ontario.

The overarching goal is to describe the information exchange activities that occur during primary care to LTC transition, and to explore opportunities to leverage policy to optimize informational continuity during the transition process. This goal is supported through pursuit of a set of three study-specific research objectives:

i. To identify and synthesize evidence on continuity of care during LTC transition in Canada, highlighting the key factors and knowledge gaps that impact continuity of care.

ii. To describe the information LTC care teams in Ontario consider to be most important to support informational continuity during LTC transitions, information they receive and do not receive, the strategies they employ to seek out missing information, and factors influencing their ability to seek out the information.

iii. To describe the information family physicians in Ontario provide to LTC, would like to provide to enhance informational continuity for patients transitioning to long-term care, and the factors that influence their ability to provide the desired information.

1.3 Literature review

1.3.1 Increasing aging population and the need for LTC

Canada is experiencing a significant demographic shift: by 2035, one in four Canadians will be over the age of 65, and in Ontario, the population aged 80 and older is expected to double [18, 19]. This aging population will place unprecedented pressure on community, social, and health services – many of which are already struggling to meet current demands [20]. As governments and policymakers at all levels plan to build capacity to meet the growing needs and

expectations of older adults, all partners across the seniors' care continuum, including LTC, need to collaborate to ensure that older adults receive high-quality, timely care in the most appropriate setting. While most older adults wish to "age in place" with services provided in their homes and communities, many will eventually require more complex care than can be safely delivered outside of institutional settings [21, 22]. In fact, about one in five seniors over the age of 80 will need the level of support provided in LTC facilities [20]. The typical LTC resident has some form of cognitive impairment, some form of functional impairment (e.g., not able to ambulate independently; urinary incontinence), multiple chronic diseases, and may be widowed – the majority are often elderly women with an average age of 85 years [23].

Demand for LTC already exceeds current capacity, with over 48,000 older adults on waitlists in Ontario alone, with an average wait time of more than six months and some waiting over two years [24]. This gap creates significant strain on families and the broader health system. In 2021, individuals waiting for LTC accounted for about 39% of all acute Alternative Level of Care days in Ontario hospitals (i.e., where patients occupy hospital beds despite no longer requiring acute care) [5, 20]. Municipalities, as the order of government closest to people's daily lives, play a vital role in responding to this challenge. They operate approximately 16% of all LTC homes in Ontario, bringing local knowledge and responsiveness that contribute to high resident satisfaction and care outcomes [20]. Additionally, municipalities are essential to the planning and development processes for new and redeveloped LTC facilities across private, municipal, and non-profit sectors. With this responsibility comes a significant opportunity: by partnering with the Province of Ontario and sector stakeholders, municipalities can help ensure that every community has access to the high-quality seniors' care services it needs, especially improving timely access to a local LTC facility [20].

1.3.2 Policy legacies shape the healthcare system

Canada consists of ten provinces and three territories. It has a 'marble-cake' federalism governance structure, with the provinces and territories having substantial political power and policy responsibility [25]. The Canadian federalism is enshrined in the *British North America Act (Constitution Act), 1867*, which empowers each jurisdiction to administer their healthcare system [25-27]. The federal government exerts its influence on the provincial and territorial health systems through funding transfers based on standards defined in the *Medical Care Act* and *Canada Health Act* [25, 27]. *Medicare* was introduced through the *Medical Care Act, 1966. Medicare* is a collection of provincial and territorial health insurance plans subject to national standards, although is not a national system [25]. The standards entail coverage of core hospital and medical services, centring on public payment and private healthcare delivery for the services. It entrenched the principle of universal public insurance coverage for privately delivered medical and hospital services, instituted the dominance of private fee-for-service practice, and ratified a federal/provincial cost-shared program for universally insured services in Canada [27, 28]. *Medicare* was developed based on the continuation of physicians' fee-for-service remuneration, clinical autonomy, and control over the location and organization of their medical practice [29]. Also, the heavy medical focus of *Medicare* discouraged other professionals' involvement in primary care delivery [29] since it covered only core physician and hospital services.

The *Canada Health Act, 1984,* preserves the privileged position of hospital and physician services. The *Act* clarifies the standards for federal/provincial cost sharing. The standards are universality (all insured residents are covered on uniform terms and conditions), portability of coverage among provinces (insured residents remain covered when moving from one jurisdiction to another), accessibility (physician and hospital services are free at the point of use to preclude

barriers to access), comprehensiveness (plan must covered all insured, medically necessary hospital and physician services), and public administration (operated on non-profit basis by a public authority) [25, 27, 28]. The confinement of comprehensiveness to hospital and physician services consolidated hospital- and physician-centered healthcare and limited the prospect for healthcare innovations centered on alternative settings and providers [27]. For instance, the medico-centric legacy reinforced accessing psychotherapy through physicians rather than psychologists since the latter would warrant paying out of pocket [30].

It is important to note that LTC is not covered under the Canada Health Act, meaning residents are charged a means-tested accommodation fee [31]. On average, 78.4% of LTC costs are funded by provincial, territorial, and municipal governments, while the remaining 21.6% is paid by residents, either out of pocket or through private insurance [26]. In Ontario, for example, the provincial government provides funding based on the number of residents in a LTC facility to support costs related to food, nursing and personal care supplies, staffing, social and recreational programs, and support services. Physicians are covered under the Ontario Health Insurance Plan (OHIP), but residents typically pay privately for services like foot care and dental care. Residents also pay an accommodation fee that goes toward non-care expenses, including utilities, building maintenance, mortgages, insurance, and administrative staff [32, 33].

1.3.3 Evolution of LTC in Ontario

As stated above, Canadian federalism empowers each province and territory to govern, fund, and organize their health system. Therefore, health systems in each jurisdiction differ [25]. This thesis focuses on Ontario, which has the highest number (over 30%) of LTC facilities in Canada [34] and presents an insightful account of how policies at different junctures shape the LTC sector. On the average, government and non-profit facilities often have higher staff-to-

resident ratio and superior quality performance score than for-profit LTC facilities [35]. According to Banerjee [36], ownership type might influence the amount of care provided in a LTC facility. The study reported that non-profit organizations provide the highest levels of direct care per day. Government-run LTC facilities offer the highest level of professional nursing care, while the highest proportion of direct care delivered in non-profit LTCFs are provided by aides or workers other than registered nurses or registered nursing assistants. However, Ontario runs the most commercialized LTC sector in Canada based on the number of providers and beds. An analysis of the evolution of Ontario's LTC policy landscape since the 1940s details how for-profit LTC facilities' dominance emerged in the sector as well as quality compliance issues. Daly's historical analysis divided LTC evolution in Ontario into four eras.

First era: the period of *Minimal regulation with private provider proliferation (1940 to 1966)*. Although for profit LTC facilities existed earlier, Ontario's first public municipal LTC facilities officially commenced operation in 1949 and had 700 residents. They had a focus on the poor rather than sick seniors, they housed younger, less affluent, and more ambulant than the typical present-day clientele. The municipalities built and renovated LTC facilities with provincial cost-sharing between 1950 and 1970. Regulation progressed slowly and haphazardly, including for licensing and inspection. For instance, by 1957, only 12 municipalities engaged in private LTC facility licensing – though not stringent. It is no surprise that the lax regulatory practices were unable to address issues like poor conditions, poor care, and anomalous death rates. Later in 1957, the Associated Nursing Homes Incorporated of Ontario (ANHIO) was formed, which aimed to lobby the provincial government to fund, regulate, and license private LTC facilities [37]. While public LTCs were emerging, by 1959, the province funded 80% of the

direct costs of housing elderly welfare recipients in private LTC facilities and led to the expansion of the private LTC facilities sector [37, 38].

Second era: the period of *expansion of the province's funding and regulatory role (1966–1993)*. The *Ontario Nursing Homes Act* of 1966 was enacted to regulate private for-profit LTC providers – setting standards for medical and nursing care, housekeeping, and facility maintenance. Under this act, the provincial funding did not go directly to LTC facilities, rather, it went to the regions who equally retained responsibility for regulation and inspection. Regulations improved in 1972 as the *Nursing Homes Act* was amended to include standards for the physical building, medical care, staffing intensity, activation, the dispensing of medications, and record keeping [37]. The regional authorities ramped up on inspections and created office for regional field officers. The *Extended Care Plan* was passed in Ontario later in 1972 involving a private delivery/public funding/medicalized model, funded through the Ministry of Health and required residents to receive at least one and a half hours of skilled nursing and personal care per day [37, 38]. The passage of the Extended Care Units program in 1972 entrenched a medicalized model [38]. Although the number of for-profit providers increased, funding levels appeared to favour public and non-profit LTC facilities (governed by the *Homes for the Aged Act* and the *Charitable Institutions Act*) as they were entitled to receive more public funds via deficit funding and extended care per diems [37, 38].

The *Extended Health Care Services* (EHCS) program was also mentioned in the *Canada Health Act* [36]. The *Canada Health Act, 1984,* provides universal health insurance coverage for medically necessary hospital and physician services; but funding arrangement for services it defined as *extended care* services is under the discretion of the provinces and territories. These include long-term care, adult residential care, home care, and ambulatory care services [39]. The

Canada Health and Social Transfer (CHST) replaced the EHCS program in 1996. The CHST merged the lump sum of federal transfers to the provinces for health, postsecondary education, and welfare, and excluded targeted federal funding for long-term institutional care.

Third era: the period of *Ministerial consolidation, funding parity, and the shift to medicalized long-term care* (1993–2007) [the passage of *Bill 101 (1993)* and its funding envelope system]. Ontario Nursing Homes Association's 7-year push to achieve funding parity for all LTC facilities was realized with the passage of *Bill 101* in 1993 [37, 38]. *Bill 101* introduced an envelope model that covered funding for nursing and personal care supplies and staff as well as support services such as therapy, pastoral care, recreation, and volunteer coordination. It also covered raw food, housekeeping, laundry, and building upkeep and maintenance [37]. However, *Bill 101* was criticized for replacing public and non-profit LTC facilities' global funding with a constrained funding model that favours care delivery only by following rules. With the introduction of envelope model, the Ontario Nursing Homes Association further lobbied for a shift to a case-mix formula for funding in 1994, which rewarded caring for more medically complex individuals. This cemented the inclusion of LTC in the healthcare system. The increasing government interest to build more LTC beds led to creation of a capital investment budget and debt servicing operators which was also accessible to for-profit LTC facilities. It favoured the expansion of large commercial LTC providers. Also, the 1994 North American Free Trade Agreement paved the way for international corporations to own facilities and operate in the Canadian LTC sector, thereby increasing competition from the private sector and weakening the position of non-profit providers [38].

Fourth era: the period of *Regulatory rigidity, austerity, and commercial consolidation* (2007–present) [the *Long-Term Care Homes Act* (2007)]. The province merged three legislative

Acts [*Nursing Homes Act, Homes for the Aged and Rest Homes Act,* and *Charitable Institutions Act*] into the 2007 *Long-Term Care Homes Act*. The *Long-Term Care Homes Act, 2007,* initiated regulatory and compliance parity between commercial, non-profit, and public providers to match up with the funding parity. The large commercial providers have the capacity to spread cost over a much greater business volume and to develop capacity to meet up with stringent regulatory requirements compared to small, owner-operated businesses and non-profit organizations, which do not as much leverage. Thus, superior access to funding and expansion capacity entrenched unbalanced growth that favoured the consolidation of larger commercial providers.

More recently, the *Fixing Long Term Care Act, 2021,* was enacted (replaced the *Long-Term Care Homes Act, 2007*) and aims to increase hours of care, improve accountability, and enhance planning for emergency/crisis [38]. The *Fixing Long Term Care Act, 2021,* symbolizes the Government of Ontario's recent commitment to address lapses in the LTC sector. It became pertinent because LTC facilities recorded the worst cases of the coronavirus disease 2019 (COVID-19) pandemic in Canada, with LTC residents accounting for over 80% of the deaths [23]. Frail and multimorbid older adults are at high risk of mortality from COVID-19. Specifically, LTC residents in Canada were at high risk of contracting the coronavirus because of the congregate living arrangements and contact with staff with asymptomatic or pre-symptomatic SARS-CoV-2 infection [23].

Furthermore, these LTC facilities were underequipped and underprepared to protect their residents. Screening protocols may not detect infected staff who are asymptomatic or minimally symptomatic. Larger LTC facilities tend to require more staff, and therefore, increases the number of potential vectors. Stall and colleagues [23] reported that for-profit LTC facilities are reported to perform poorer relative to the public and non-profit LTC facilities based on criteria

like levels and quality of staffing, complaints from residents and family, rate of emergency department visits, acute care hospital admissions, mortality rates, infection control, and hygiene practices. However, they found that the risk of an outbreak of COVID-19 at an LTC facilities is not based on its for-profit status but rather related to the COVID-19 incidence rate in the geographical region where it is situated, the number of beds, and older design standards (having ward-style accommodation and centralized common spaces for all residents to interact). Newer design standards involve less crowded, larger spaces, and more private rooms. Municipal LTC facilities were better staffed and maintained than for-profit and non-profit. For-profit LTC facilities may have recorded more COVID-19 outbreaks and deaths than non-profit and municipal LTC facilities because they have more homes with outdated design standards because regulations to require updating to newer standards were not enforced [31].

Summarily, the COVID-19 pandemic exposed that the long-standing issues in the funding, operation, and regulation of LTC facilities was unabated up to the pandemic era. The effectiveness of the recent policy framework (*Fixing Long Term Care Act, 2021*) to address the financial, operational, and governance issues in Ontario's LTC sectors is yet to be determined. However, a recent study suggested that the success of the *Act* depends on how it is applied, arguing that it may fail to produce intended results if there is no proper enforcement [40].

1.3.4 A move toward interprofessional practice

Innovation Drivers

According to Hutchison and colleagues [28], policy levers that steered reforms from practicing in siloes toward integration and introduction of interprofessional teams include regulation and legislation; providing funding or resources for care providers that reflect on their income, quality of working life, or satisfaction; contractual agreements with providers; educational funding that moderate the number and types of human resources produced for

primary healthcare; and changes in governance structures. Improved fiscal climate and federal funding ushered in a new era for visible reforms by late 1990s and early 2000s after decades of economic downturn that stifled progressive change. The First Ministers created a $800M Primary Health Care Transition Fund in 2000, which aimed to encourage pan-Canadian and jurisdictional primary healthcare innovations [29]. Thereafter, the 2003 First Ministers Health Accord led to a $16B federal investment in the Health Reform Fund that encompassed primary healthcare, home care, and catastrophic drug coverage. In 2004, the First Ministers made a commitment for the actualization of 24/7 access to multidisciplinary team-based primary healthcare for half of the Canadian population by 2011 and to expedite the implementation of electronic health records [28, 29].

Taking a cue from shortcomings of a siloed practice structure such as poor access to care, governments across the board engaged with physician professional associations constructively to drive incremental reforms. Notwithstanding some cross-jurisdictional difference, the reforms share some common objectives such as improvement pertaining to safety, person centeredness, timeliness, cost control, efficiency, effectiveness, and equity. [28]. Some key developments include widespread acceptance of interprofessional primary healthcare teams, development of primary healthcare governance mechanisms, steady shift from solo practice to group practices and networks, patient rostering to a primary care provider, financial incentives and blended-remuneration schemes, quality improvement training and support, marked increase in the number of the primary healthcare providers, and electronic medical records implementation [28].

Primary Care Innovations

Government efforts in primary care innovations are often driven by economic conditions, cost control and expansion of access, and to a lesser degree, quality of care [27]. The first wave

of innovation occurred in the 1970s and was driven mainly by cost control and expansion of access. It involved establishing alternative organization and funding models to the conventional solo and group general practice. It included the Centres locaux de services communautaires (CLSCs) in Quebec, Health Service Organizations (HSOs) and Community Health Centres (CHCs) in Ontario and, to a lesser extent, other provinces. They included salaried and capitation hybrid funding models and incorporated other health professionals in the practice. The hybrid or blended funding model refers to a combination of any of the following: fee-for-service, capitation, salary, infrastructure funding, program funding, performance payments, and benefit packages. HSOs maintained physician leadership, while CLSCs and CHCs have community governing boards [27].

The second wave started in the mid-1980s and continued to the 1990s. This era ushered in the expansion of the range of primary care providers. It marked the legalization of midwifery practice first in Ontario, followed by other jurisdictions. Their services are now publicly financed in British Columbia, Ontario, and Quebec. Nurse practitioners gained license to operate primary care practices in this period. Ontario clarified and expanded the scope of practice of optometrists and physiotherapists and other health professionals [27]. The third wave commenced in mid-1990s and featured primary care reform pilot and demonstration projects. Different provinces have tinkered with an array of organization, funding, and delivery models ever since [27], such as Quebec's Family Medicine Groups created in 2002, Alberta's Primary Care Networks launched in 2003, and Ontario's Family Health Teams established in 2005 [41].

In furtherance of the vision to realize interprofessional primary care teams that are better prepared to meet the population needs, the College of Family Physicians of Canada proposed the Patient's Medical Home (PMH) model. The PMH model describes a family physician-led team-

based model that centres on the patient's needs in the delivery of comprehensive care [1]. The PMH model was first introduced in 2011 and revised in 2019 in response to the evolving needs of family physicians and their teams and support continued implementation of the model. The model consists of 10 pillars; they are described in *Table 1*. The pillars are mapped into three themes. The first theme, Foundations, refers to the underlying, supporting structures that enable a practice to exist, and facilitate providing each PMH function. The second theme, Functions, describe the core of the PMH and the care provided by PMH practices. The third theme, Ongoing development, refers to a requirement for each PMH to strive for ongoing development to better achieve the core functions.

Table 1. The 10 Pillars of the revised PMH vision [1]

Themes	Pillars	Description
Foundations	1. Administration and Funding	Practices need staff and financial support, advocacy, governance, leadership, and management to function as part of the community and deliver exceptional care.
	2. Appropriate Infrastructure	Physical space, staffing, electronic records and other digital supports, equipment, and virtual networks facilitate the delivery of timely, accessible, and comprehensive care.
	3. Connected Care	Practice integration with other care settings and services, a process enabled by integrating health information technology.
Functions	4. Accessible Care	By adopting advanced and timely access, virtual access, and team-based approaches, accessible care ensures that patients can be seen quickly.
	5. Community Adaptiveness and Social Accountability	A PMH is accountable to its community, and meets their needs through interventions at the patient, practice, community, and policy level.
	6. Comprehensive Team-Based Care with Family Physician Leadership	A broad range of services is offered by an interprofessional team.
	7. Continuity of Care	Patients live healthier, fuller lives when they receive care from a responsible provider who journeys with them and knows how their health changes over time.
	8. Patient- and Family-Partnered Care	Family practices respond to the unique needs of patients and their families within the context of their environment.
Ongoing Development	9. Measurement, Continuous Quality Improvement, and Research	Family practices strive for progress through performance measurement and continuous quality improvement and research activities.
	10. Training, Education, and Continuing Professional Development	Training and education ensure that the knowledge and expertise of family physicians can be shared with the broader health care community, by creating learning organizations where both students and fully practising family physicians can stay at the forefront of best practice.

On the 10th of January 2025, the Federal Government introduced the *Canada Health Act Services Policy*, which was contained in a correspondence the Minister of Health issued to the Provinces and Territories. The new policy—which will come into effect on April 1, 2026—permits public coverage for pharmacists, nurse practitioners, and midwives provision of physician-equivalent services [42]. This gears toward increasing access to primary care but may also attenuate physician hegemony established by the legacy policies such as *Medical Care Act and Canada Health Act*. Addressing power imbalances and operating based on a more horizontal power relation enable the building of a high-performing interprofessional team [43]. Also, recently, the Government of Ontario committed to investing $1.8 billion to improve access to publicly funded family physician or primary care team by 2029 [44]. The primary care action team led by Dr. Jane Philpott is tasked to connect every Ontarian to primary healthcare through efforts to bring interprofessional primary care closer to the doorsteps of every person in Ontario [45]. These federal and provincial interventions offer yet another window of opportunity to strengthen interprofessional team-based care delivery arrangements.

The nature of interprofessional collaboration

An interprofessional team approach has several benefits, such as reduced provider burnouts, increased access to care, improved care outcomes, and better satisfaction with care [43]. However, the performance of an interprofessional team depends on the nature of their collaborative practice [41]. The types of interprofessional collaboration in increasing hierarchy of collaboration are multidisciplinary, interdisciplinary, and transdisciplinary [46, 47]. The hierarchy delineates an increasing level of communication, cooperation, and power relations between various practitioners. Multidisciplinary collaboration refers to siloed team efforts and goals, that is, different practitioners providing care for a patient but doing so within boundaries of their

professional scope. Each practitioner keeps their own care plan. Interdisciplinary collaboration goals a step further by ensuring that the practitioner develop and work with shared goals, but assessments and inputs in patient's care are delivered within their disciplinary boundaries [48]. Transdisciplinary practice transcends traditional professional boundaries; involves shared knowledge, skills, and decision-making; promotes patient-centred care, joint assessment, role release and an integrated comprehensive care framework [43, 48, 49].

1.3.5 Transitions of care

Transitions of care can be defined as "a set of actions designed to ensure the coordination and continuity of healthcare as patients transfer between different locations or different levels of care within the same location" [50]. Examples of the locations are hospitals, primary and specialty care offices, sub-acute and post-acute nursing facilities, LTC facilities, the patient's home, etc. Care transitions are vulnerable exchange points; if not coordinated effectively, the transitions could lead to negative clinical outcomes, preventable adverse events, avoidable hospital readmissions, reduced quality of care, and increased costs [2]. Suboptimal or fragmented care transitions may pose harm to the safety and quality of care chronically ill individuals receive. Optimizing care transition is crucial for older adults who tend to utilize care transition services more often than younger population [51]. Smooth navigation across different care settings and providers may be hampered by factors like inaccuracies in information exchange, ineffective care coordination or planning between care providers, and lack of follow-up [50].

Transition is not just a physical shift but also includes an emotional dimension that entails altering or transforming one's perception of self and the world. Transitions is also "a passage through time, beginning with a stable period, moving next to a confusing unstable period, and ending with making new beginnings to reach a stable end" [52]. It is initiated by the occurrence

of an external trigger event which creates an awareness that a shift or change in one's life or wellbeing has occurred, for instance, a physical, social, mental, financial, or geographical change. The awareness or realization is followed by a confusing period. Next to the confusing period is the process of making new beginnings and finally, a period of stable end. The bridge between the confusion period and the stable end could be facilitated by one's 'ability to bridge' which could include things like obtaining new skills, relationships, and roles [52]. Unlike for younger people, older people's ability to bridge from the confusion period to a stable end is not yet fully understood [52], however, they may take up new social activities as a coping strategy.

The increasing elderly population means that more people—the oldest of the old (85+ years)—may need LTC services. In the LTC context, the transition from the community to LTC can be physically and emotionally stressful, leading to changes in health, especially further deterioration of functional and mental health [2, 53]. This could be because older adults do not maintain the same level of autonomy, elements of an accustomed lifestyle, meaningful possessions, and the home comforts they had while living in the community [52]. Hence, transitions bring about changes or modifications in their life, health, relationships, and environments. The impact of undergoing a transition into LTC is profound because it is usually triggered by unwanted health changes and results in radical life changes. The emotional stress associated with the transition to LTC could lead to increased morbidity and mortality, especially within the first three months of admission into an LTC facility [52]. Some common negative changes that may occur within this period are mental health decline, declining quality of life, loss of identity, and an overall increase in adverse health outcomes [52].

According to Sullivan and Williams [52], older adults are better able to navigate the LTC transition process, with better autonomy, life satisfaction, and quality of life, if they get adequate

support. The support would require recognizing residents' cultural traditions, beliefs, and lifestyles. They may need a personal space to keep items they have a sense of attachment and hominess with close to them. It is important to create a friendly atmosphere that encourages them to communicate freely with other LTC residents and staff and be treated with dignity and respect. Thus, it is pertinent to maintain continuity of care as older adults transition across the continuum of care, such as from primary care to LTC. This process requires a responsible care provider who coordinates the transition process to ensure coherence and consistency of care across the care continuum. Even within the LTC settings, as part the transition process, a person-centred approach that recognizes the seniors' unique needs and preferences and supports them to adjust to the new environment would produce better emotional and physical wellbeing.

1.3.6 Continuity of care

Patients require care that is continuous, coherent, and consistent as they journey through the life trajectory. Continuity of care is one of the core principles of family medicine. It is concerned with the connectedness of the healthcare an individual receives over time [3]. Continuity of care can be defined as "the process by which the patient and the physician are cooperatively involved in ongoing healthcare management toward the goal of high quality, cost-effective medical care" [54]. It is said to foster trust, better communication, and a sustained sense of responsibility in the provider-patient relationship [2]. Continuity of care can be conceptualized as either a 'continuous caring relationship' between doctor and patient or a 'seamless service' [54]. Continuity of care with respect to continuous caring relationship between doctor and patient considers aspects such as interpersonal communication and delivery of personal care tailored to the patient's need. Continuity of care as a seamless service may be understood as a process of

orderly, uninterrupted mobility of patients through the diverse aspect or segments of the healthcare delivery system.

According to Uijen and colleagues [55], continuity of care can be perceived in seven dimensions: individual, relationship, communication, longitudinal dimension, cross-sectional continuity, flexibility, and accessibility. The individual dimension recognizes the importance of planning care according to patient's needs. The relationship dimension centres on fostering an ongoing relationship between a patient and a care provider. The communication dimension refers to interactions between the most responsible provider and patients as well as other care providers. The longitudinal dimension deals with enabling patients to move orderly through services or across the continuum of care. The cross-sectional continuity dimension promotes the availability of a broad range of services in a particular geographical context. The flexibility and accessibility dimensions refer to being able to move between services flexibly or without any restrictions and having easy access to available care services respectively.

A Canadian Health Services Research Foundation's review specified three distinct types of continuity of care: relational continuity, management continuity, and informational continuity [54]. Initially, a patient's personal doctor embodied these core dimensions: they build and maintain a close relationship with the patient (relational continuity); they keep records—memory and paper—of the patient's health and healthcare history (informational continuity); and solely managed and occasionally referred the patient to specialists (management continuity) [3]. The types of continuity are defined in Table 2.

Table 2. Types of Continuity

Relational continuity	*A longitudinal therapeutic relationship between a patient and one or more providers, entailing ongoing personal interactions between patient and provider across the life course.*
Informational continuity	*The use of information about patient's preferences, values, context, conditions, and personal circumstances to make current care appropriate for each individual. It involves the flow of patient health information across the continuum of care.*
Management continuity	*A coherent approach to the management of a health condition that is responsive to a patient's changing needs. It is especially relevant to the management of complex, chronic conditions that require multi-provider inputs working in a timely and complementary manner.*

Healthcare delivery is evolving from solo practice to care provision involving different organizations and professions which may produce fragmentation [56]. Management and informational continuity through guidelines, care pathways, and electronic health records are some of the policy responses to addressing fragmentation. Informational continuity is necessary to link care between providers and fosters—but may not guarantee—management continuity (coherent and consistent care plan) in patients with multimorbidity [3, 54]. Relational continuity is invaluable as evidence suggests that patients who see the same doctor are more satisfied having developed relationships with their doctor and record better quality of care, disease control, and lesser hospital admission [3]. Relational continuity can enhance *efficiency* since patients do not need to repeat complex histories, *patient-centredness* due to better patient involvement in decision making, and *trust* for their doctor because of patients' belief that their doctor will take responsibility for their current and future care. Generalist clinicians, usually doctors but may also be nurses or case managers, are often responsible for the coordination of holistic care and advocacy for patients with complex needs. Under the Patient's Medical Home

model, a physician would be responsible for the patient's care and coordination across the continuum of care to ensure coherent, integrated, and effective care [1, 3].

As the availability of informal caregivers shrinks, LTC options that are equitable, effective, and sustainable are becoming essential in order to meet the needs of the growing elderly population [57]. LTC provides a full range of round-the-clock care and support for seniors when they get older, frailer, and require more assistance with daily life activities [58]. Older adults may encounter personal challenges with accessing care in a fragmented system due to memory problems, a dependence on multiple caregivers, and difficulties scheduling appointments. Therefore, continuity of care is essential to facilitate coherent, connected and consistent care for older adults across a range of health and social care services [55]. Several studies have shown that good relational continuity is associated with improved preventive care, lower hospitalization rates, lower emergency department visits, fewer medical errors, lower cost, and better patient satisfaction [59]. Relational continuity also engenders trust and leads to better compliance with treatment program. The sustenance of relational continuity may be difficult in a multidisciplinary care paradigm without a most responsible provider coordinating patient care. Patients receiving care from such uncoordinated multi-provider groups experience more emergency admissions, higher average total stays in hospital, and lesser satisfaction than those with a more coordinated care.

Care coordinators or case managers should have an overview of all the patient's care needs, their care plan and those involved in implementing the plan. Case manager may be either a social worker, a nurse, or a physician [55]. Case managers can facilitate integration of care by functioning as a communication interface between different care providers. Specifically, case management functions entail coordinating and/or matching services but may include broader

range of activities such as case identification, assessment, planning, implementation, linking, facilitation, coordination, integration, providing a continuing relationship between patient and care provider, advocacy, referral, monitoring and evaluation [60].

1.3.7 The long-term care transition process in Ontario

In Ontario, the LTC governance, funding and delivery arrangement are guided by the *Fixing Long-Term Care Act, 2021*, which advocates for the dignity, security and comfort of LTC residents, as well as adequately addressing their physical, psychological, social, spiritual, and cultural needs [6]. Accordingly, the legislation empowered the Ontario Health atHome (OH@H) to coordinate LTC transitions, including assessments and information flow from one care provider or setting to another [6, 61]. Various stakeholders participate in different ways during the LTC transition process (*Table 3*).

Table 3. Roles of various stakeholders during LTC transitions

Stakeholders	Roles
Patients and family caregivers	Initiates the transitions and provides context and history to the care coordinator and LTC staff. The family plays pivotal roles in cases where the patient has cognitive impairments like those with dementia. They may also serve as intermediaries between primary care and LTC providers for information gathering.
Care coordinators	These are staff of Ontario Health atHome who may be a social worker, nurse or case manager who conducts physical assessments and coordinates the transition from primary or acute care to LTC.
Family physicians	They fill out the LTC-HAF and other related documents. The hospital nurse or social worker may complete the documents for patients who move to LTC from the hospital.
Other care providers	These are hospitalists, homecare nurses, physiotherapists and occupational therapists who were involved in patient care and contribute to the success of some LTC transitions. The hospital nurse or social worker may complete the LTC-HAF and send the discharge summaries over to LTC.
LTC providers	Ultimately receive the transferred information. The LTC staff involved in the information exchange include the director of care, LTC physician, registered nurse, social worker.

OH@H coordinates in-home and community-based care for thousands of patients across the province each day, ensuring access to the services needed to support health, recovery, and independence. The organization assesses individual care needs, delivers in-home and community-based services, provides referrals to other community supports, and manages Ontario's LTC placement process. Working in collaboration with primary care providers, hospitals, Ontario Health Teams, and other health system partners, OH@H facilitates high-quality, integrated care planning and delivery. Its role includes supporting patients to remain safely at home, recover after hospital discharge, access primary care providers, locate services for independent living, transition to LTC or supportive housing, and receive end-of-life care in their preferred setting. The organization works in close partnership with the Ministry of Health, Ministry of Long-Term Care, Ontario Health, contracted service providers, and thousands of other partners to ensure patients, families, and caregivers receive the guidance and support they require, including during LTC transitions [62].

The OH@H [61] described six stages of the LTC transition process – referral, LTC home tours, assessment and forms, waitlist/wait times, bed offer, admission day. These stages happen at variable timeframes for different LTC candidates since LTC placements may take a few weeks for some and several months for others. In the first stage (Referral stage), the older adult or their family would contact the OH@H to initiate the LTC move, and the OH@H care coordinator would determine their eligibility for LTC. The referral may emanate from a family physician, nurse, or community worker. Second (Home tours stage), the family—the older adult may be involved if they are able to—visits the LTC facilities they would like to consider. They can select or be matched to a maximum of five LTC facilities, the older adult will be offered a bed in only one of them.

During the third (Assessment and forms stage), care providers will assess the older adult and filling out two standardized forms—LTC Health Assessment Form (LTC-HAF) and Resident Assessment Instrument-Minimum Data Set (RAI-MDS). A care coordinator from OH@H completes assessments (capacity/cognitive, physical or functional, behavioural) using the RAI-MDS and shares the information with the LTC facilities to determine whether the older adult can meet their needs [62]. Prior to the LTC transition most older adults received care from their family physician who is the most responsible provider journeying with them over several years and knows their health changes over time [28]. Informational continuity contemplates physician ability to transfer relevant biomedical and psychosocial information they accumulated over the years to the LTC providers to support high-quality, patient-centred care in LTC facility. In Ontario, family physicians are expected to communicate this information using the LTC-HAF. For individuals who do not have a family physician, a nurse practitioner or nurse in the community will fill out the LTC-HAF. In situations where the older adult is transitioning from the hospital, a hospitalist—social worker, nurse, discharge planner, physician—completes the LTC-HAF and sends it alongside the hospital discharge summaries. The LTC-HAF is transmitted to LTC through the care coordinator who serves as an intermediary. The family may also serve as a source for any additional information or information missing in the admission documents.

Fourth *(Waitlist stage)*, the older adult is placed on the waitlist of up to 5 LTC facilities until an LTC bed is offered to them. The wait time may depend on their specific care needs or type of accommodation sought for. Fifth (Bed offer stage), the care coordinator notifies the older adult and/or their family of any bed offers, and they have 24h to accept or decline the offer. Upon declining a bed offer, the older adult will be removed from all waitlists and would have to reapply for LTC after 12 weeks. If the bed offer was accepted, the older adult is required to move

into the LTC facility within five days of acceptance. Lastly *(Admission day stage)*, the older adult will move in with their current medication list or bottle, their provincial health card, assistive devices, and any permitted personal items.

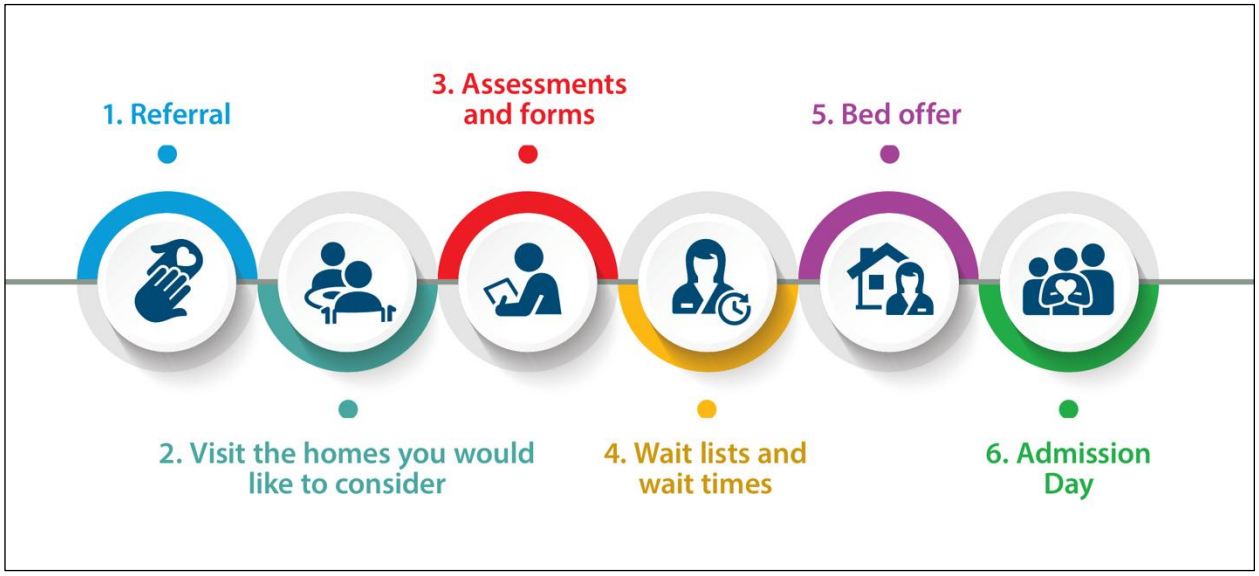

Figure 1. The long-term care transition process in Ontario
Adapted from OH@H [61]

1.3.8 Shift in philosophy of care during LTC transition

The transition to LTC marks a profound shift not only in a person's living environment but also in the philosophy of care. The entry into LTC often signifies a move away from curative medical interventions toward a palliative approach focused on maintenance, comfort, and symptom relief [63]. This transition reflects the complex health profiles and frailty of many LTC residents, most of whom are in the final stage of life [52]. This shift is evident in the goals of care conversations that take place upon admission. Many LTC residents have advance care directives in place, such as Do Not Resuscitate orders and consent agreements that limit hospital transfers during acute health episodes [64]. Instead, care is provided in the LTC facility using

comfort-focused treatments [63]. For instance, a resident with pneumonia may be managed with oral antibiotics, oxygen, and palliative support within the LTC facility, rather than being transferred to a hospital for aggressive treatment.

The Canadian LTC landscape illustrates how these decisions are increasingly formalized within care planning. A study by CIHI [64] found that over two-third of LTC residents had an advance care directive documented, and roughly 60% were categorized as requiring palliative care at the time of assessment. The high prevalence of dementia, mobility impairment, and multiple chronic conditions in LTC populations is indicative of the limited potential for curative outcomes. Thus, the focus shifts to enhancing quality of life, managing pain and discomfort, and supporting emotional and psychological well-being [63, 65]. The philosophy of care in LTC is largely palliative by necessity, given the complex needs and nature of prognosis of most residents. Yet, without the comprehensive supports typical of hospice care, many LTC facilities fall short of delivering the quality of end-of-life care that residents deserve.

Although LTC often mirrors long-term palliative care, it does not always incorporate the holistic, life-enriching elements associated with hospice care, namely, dedicated emotional and spiritual support, tailored psychosocial services, and specialized environments designed for dignity in dying. Critics argue that LTC facilities are under-resourced and not adequately staffed or structured to provide true palliative care despite the growing need [66]. Improving this situation requires not only system-level investments but also a cultural shift in how society views aging and end-of-life care. Political will and public support are crucial to ensuring that LTC facilities can deliver compassionate, person-centred care that respects the wishes and dignity of residents. Policy reforms that support good-quality palliative approach in LTC are needed, including better staff training and integrated palliative care models. Addressing the care gap will

also require targeted investments, better workforce planning, and a broader societal commitment to valuing the lives and experiences of frail older adults [67].

1.4 Focus of each study

In support of the stated objectives, a multi-method research program comprising three studies was developed. **Study 1** addresses **objective i** and consists of a rigorous scoping review of the evidence pertaining to optimizing continuity during LTC transition in Canada. The findings of this review form an analytical framework that guides the two subsequent inquiries, which are operationalized in parallel. **Study 2** (**objective ii**) applies a multiple case study methodology [6] and focuses on the informational continuity experiences and perspectives of the receiving LTC teams. **Study 3** (**objective iii**) applies a qualitative description methodology [68] to understand the discharging family physician experiences and perspectives of promoting informational continuity for patients transitioning into LTC. Lastly, the outcomes of the empirical studies are integrated to produce policy recommendations geared toward enhancing informational continuity during the transition to LTC (as depicted in Figure 2).

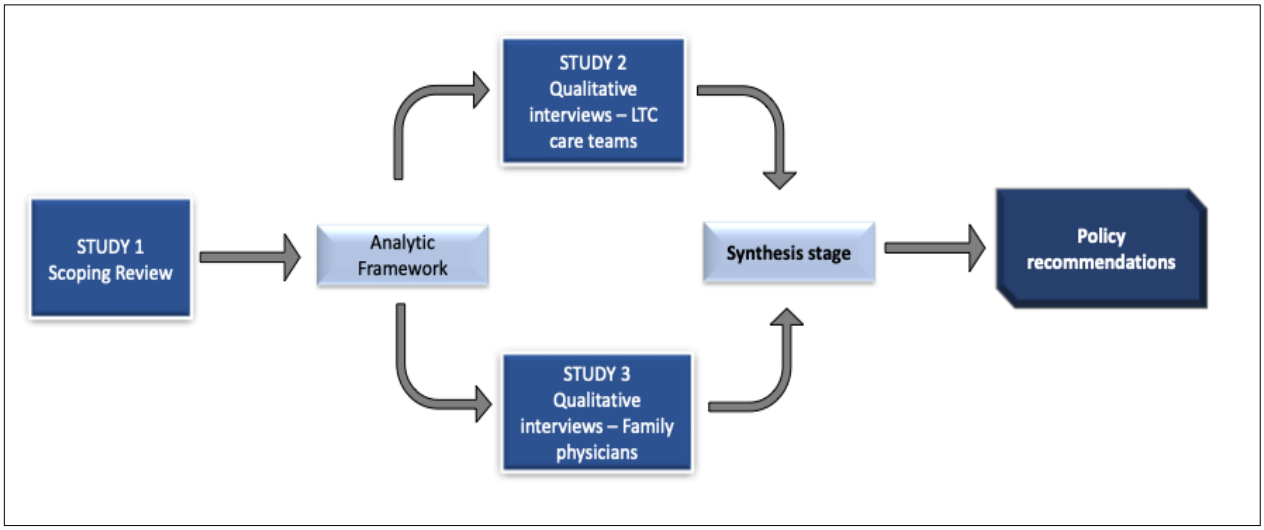

Figure 2: A schematic representation of the research process

1.5 Theoretical frameworks

Theory plays multiple roles in qualitative health research, including connecting new investigations to broader bodies of knowledge, guiding methodological choices, and providing a foundation for analysis [69]. This work started with Transitions theory, which guided data collection and analysis, which guided data collection and analysis. A Transdisciplinary paradigm was also applied, ensuring that insights were drawn from diverse disciplinary lenses to provide a comprehensive exploration of the subject matter.

Transitions Theory

Transitions Theory, developed by Meleis and colleagues [70], is a middle-range nursing theory that seeks to understand and support individuals as they experience life changes that affect their health, relationships, roles, or environment. These changes or transitions can be developmental (e.g., aging), situational (e.g., moving home to LTC facility), health-illness related (e.g., dementia diagnosis), or organizational (e.g., changes in LTC admission policy). Transitions are complex processes that entail moving from one life stage or condition to another. Transitions can be planned or unplanned, and continuity of care is crucial for successful transitions across the health care system. Transitions Theory promotes holistic care and optimization of patient outcomes. As shown in Figure 3, Meleis describes the key components of Transitions Theory: Nature of transitions (causes, emotional, social, temporal, and practical aspects of change); Transition conditions (facilitators and barriers that affect the experience and outcomes of transitions); Pattern of response (evaluates how well someone is managing the transition).

In the Canadian context, for instance, LTC admission may be necessary for an older adult with debilitating cognitive and functional impairments (health-illness related) and when there are no suitable community care options to support aging in place (situational). Transitions Theory aids understanding of the facilitators and barriers to a smooth transition. Institutionalized living

(For e.g., in LTC facilities) is *culturally* permissible in Western society (e.g., Canada) unlike several countries in the global south where culture and norms emphasize intergenerational reciprocity and disapprove placing seniors in such facilities [71]. In addition to the dominant Western culture in Canada, the availability of effective tools, guidelines, and a healthcare workforce that is attuned to transitional care services would facilitate smooth LTC transitions and vice versa. Regarding the response pattern, effective transitions would encourage *interactions* between stakeholders and result in care providers developing *mastery* of transitional care activities or services.

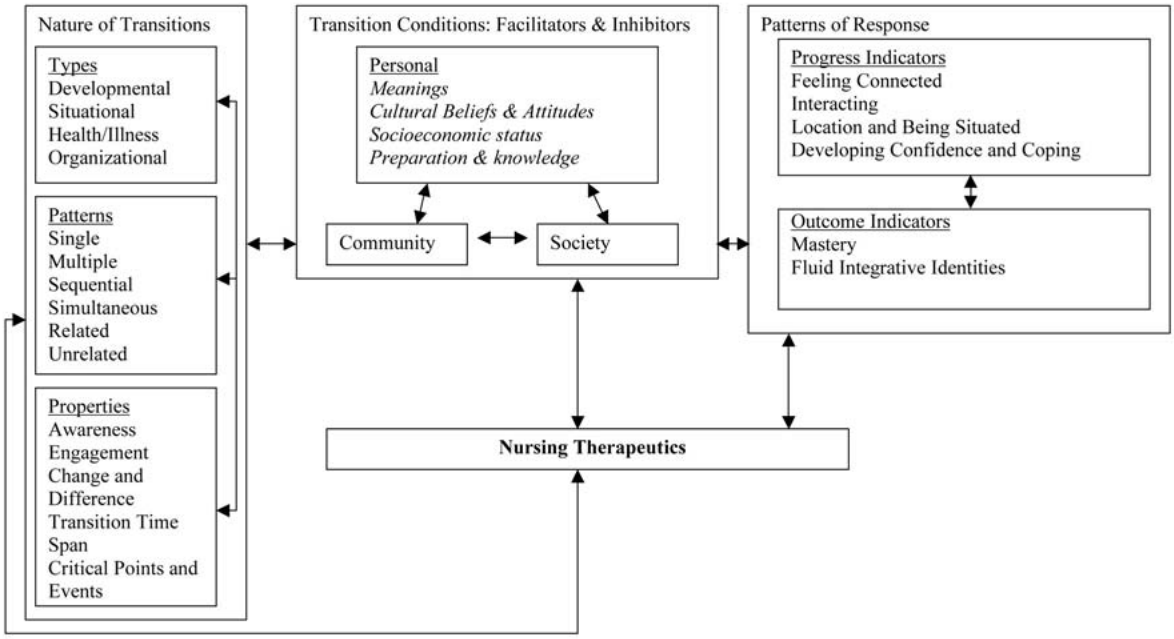

Figure 3: Transitions Theory
Adapted from Meleis [70]

Transdisciplinary Paradigm

The transdisciplinary research paradigm integrates methods and knowledge from different disciplinary perspectives [72]. Transdisciplinarity, in healthcare, transcends traditional boundaries of medicine, nursing, social work, physiotherapy, etc. It involves shared knowledge,

skills, and decision-making; promotes patient-centred care, joint assessment, role release and an integrated comprehensive care framework [43, 48, 49]. It pushes back on power imbalances over professional identity and control and promotes inclusivity and collaboration [43, 47]. The transdisciplinary approach is theorized to improve service coordination, communication and cooperation, and establishes a shared vision for everyone in the circle of care [47]. As depicted in Figure 4, Okoh et al. [43] developed a transdisciplinary model for the care of older adults comprising five key features: *consolidated consultation* (joint assessments involving care providers in partnership with patients and/or their families), *consolidated care documentation* (an integrated digitally-shared care plan with multi-provider input on the same platform), *care plan accessibility* (to relevant stakeholders), shared care decision (among stakeholders), and a *case manager* (which is a crosscutting element that ensures ongoing and effective communication and activity coordination in the team).

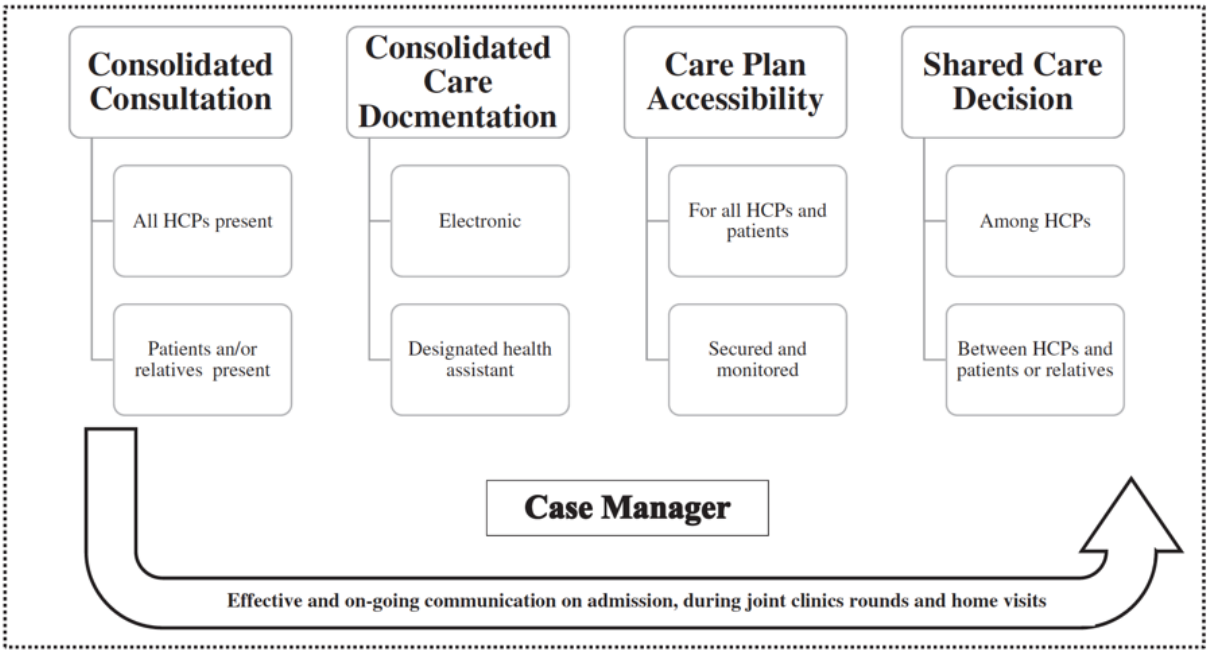

Figure 4: Transdisciplinary framework in care of the elderly
Adapted from Okoh et al. [29]

1.6 Justification for focusing on care providers

This work focuses on various care providers from the discharging and the receiving sides of LTC transition. Although it is important to include various stakeholders in research and patients due to patient-centredness, there were some rationales for not including the voices that were left out in this work (particularly patients and family caregivers). A study's design would be ineffective in addressing the research objective if it involves people who lack the relevant experiential knowledge [73]. This dissertation's research objectives focus specifically on care provider activities during the transition process. While there was a lack of scientific evidence on the topic prior to this current work, personal communication with some care providers offers that patients and family caregivers do not play prominent roles in the information exchange process during LTC transition in Ontario. Staley and colleagues [73] argue that including people who do not contribute to meeting a study's research objective(s) would be tokenistic involvement.

Furthermore, these care providers have credible knowledge and professional expertise to offer rich insights since they have practical experience with the information exchange mediums and process. This work involves inquiry into provider-material interactions and provider-provider interactions during LTC transitions. By focusing on care providers, this work is able to provide valuable information about how these providers conduct the information exchange currently, challenges they grapple with in the process, and how the process can be improved. The research knowledge produced from this provider-focused inquiry could lead to developing practical and relevant solutions or interventions for the healthcare workforce for efficient information exchange. Nonetheless, based on the utilitarianist perspective [74], improving the effectiveness of care providers would maximize benefits for the healthcare system, leading to improved care delivery and ultimately result in better patient outcomes. For instance, a study on care providers' education or training is reasonable since it could translate to better patient care.

Lastly, the provider focus does not ignore the value of patient-centredness since the providers, especially those who maintain longitudinal care relationship with the patient (e.g., family physicians), are often knowledgeable about the patient's healthcare and personal circumstances. The Patient's Medical Home model noted that family physicians have a good knowledge of the patients as they journey with the patient over protracted time and across the continuum of care [1]. The PMH model gears to foster patient-centredness where the patient is at the centre of the healthcare arrangement. Moreover, physicians are obligated to be moral agents or patient advocates serving in their best interest and treating them with dignity [75]. Summarily, although the study participants in this work are care providers (primary care and LTC), it culminates to fostering patient-centred care by addressing the information needs during LTC transitions and improving LTC residents' care outcomes.

1.7 Significance statement

The *Resident Bill of Rights* described in Ontario *Fixing Long-term Care Act, 2021,* requires that LTC facilities are operated in a manner that fosters residents' dignity; ensures their security, safety, and comfort; and meets their physical, psychological, social, spiritual, and cultural needs adequately [6, 76]. The maintenance of consistent and coherent care during transitions from family practice into LTC is crucial for ensuring these outcomes. The findings and recommendations produced in this dissertation contribute to this endeavour. This work contributes to the sparse literature pertaining to continuity of care during LTC transition, providing insight into the education antecedents that will prepare providers to optimize continuity, elucidating practice and systemic features that shape approach to information sharing, and illuminating areas for future research concerning the informational continuity across the continuum.

This research details the key actors and their roles in informational continuity during transition to LTC. It highlights points of congruence and incongruence between the literature and contemporary family physician practices in Ontario, and eventually in relation to LTC provider strategies. This work is anticipated to generate insights on methods that would improve the transmission and uptake of information from the patient's previous healthcare team. This includes the development of recommendations that facilitate the tailoring of approaches to informational continuity to LTC facilities and communities in Ontario, streamlining information exchange, and bring about more efficient workflows for care providers. This work highlights the barrier posed by fragmented health information architecture in Ontario and an imperative to consider more fully the integration of data for connecting acute care hospitals, LTC facilities, and primary care practices.

Ultimately, I assemble the findings across the three original studies in an integrative piece to develop a comprehensive LTC transition informational continuity framework. The framework would guide and enhance the exchange of quality information during the LTC transition process. I conceptualized quality information as gathering a comprehensive set of tailor-made information pertaining to a resident's past health and healthcare events and facilitates maintaining or delivering consistent and high-quality care in the LTC setting. It would be pertinent to direct family physicians who are managing transitions to provide the most valuable set of information, to help LTC providers in finding the right information, and to support social workers and other practitioners who are managing transitions for patients entering LTC from hospital or assisted living environment. Improved access to comprehensive patient care information during LTC transition could improve workflow and system efficiency and translate to improved provider satisfaction and retention rate in the LTC workforce, and better LTC resident care outcomes.

1.8 References

1. Cfpc: **a New Vision for Canada**. In: *https://patientsmedicalhomeca/files/uploads/PMH_VISION2019_ENG_WEB_2pdf*. 2019: 40-40.
2. Staykov E, Qureshi D, Scott M, Talarico R, Hsu AT, Howard M, Costa AP, Fung C, Ip M, Liddy C *et al*: **Do Patients Retain their Family Physicians after Long-Term Care Entry? A Retrospective Cohort Study**. *Journal of the American Medical Directors Association* 2020, **21**(12).
3. Guthrie B, Saultz JW, Freeman GK, Haggerty JL: **Continuity of care matters**. *BMJ (Clinical research ed)* 2008, **337**.
4. Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair CE, McKendry R: **Continuity of care: A multidisciplinary review**. In: *British Medical Journal.* vol. 327; 2003.
5. Casey L: **$400 fees, long-range patient transfers: What you need to know about Ontario's new long-term care rules**. In: *The Canadian Press.* 2022.
6. Government of O: **Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1**. In.; 2021.
7. Osborn R, Moulds D, Schneider EC, Doty MM, Squires D, Sarnak DO: **Primary care physicians in ten countries report challenges caring for patients with complex health needs**. *Health Affairs* 2015, **34**(12).
8. Correia RH, Grierson L, Allice I, Siu HYH, Baker A, Panday J, Vanstone M: **The impact of care of the elderly certificates of added competence on family physician practice: results from a pan-Canadian multiple case study**. *BMC Geriatrics* 2022, **22**(1).
9. Adler-Milstein J, Raphael K, O'Malley TA, Cross DA: **Information sharing practices between US hospitals and skilled nursing facilities to support care transitions**. *JAMA network open* 2021, **4**(1):e2033980-e2033980.
10. Naylor M, Keating SA: **Transitional care: Moving patients from one care setting to another**. *The American journal of nursing* 2008, **108**(9 Suppl).
11. Friesen MA, White SV, Byer JF: **Handoffs: Implications for Nurses. In: Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses**. In: *Rockville (MD): Agency for Healthcare Research and Quality (US).* 2008.
12. Ayamolowo SJ: **Job Satisfaction and Work Environment of Primary Health Care Nurses in Ekiti State , Nigeria : an Exploratory Study Omolola Irinoye , PhD Mayowa Antony Oladoyin , PhD**. *Internatinal Jouranl of Caring Science* 2013, **6**(3).
13. Shi L, Song K, Rane S, Sun X, Li H, Meng Q: **Factors associated with job satisfaction by Chinese primary care providers**. *Primary health care research & development* 2014, **15**(1).
14. Vermeir P, Degroote S, Vandijck D, Mariman A, Deveugele M, Peleman R, Verhaeghe R, Cambré B, Vogelaers D: **Job Satisfaction in Relation to Communication in Health Care Among Nurses: A Narrative Review and Practical Recommendations**. *SAGE Open* 2017, **7**(2).
15. Crawford R, Stoye G, Zaranko B: **Long-term care spending and hospital use among the older population in England**. *Journal of Health Economics* 2021, **78**:102477-102477.
16. Laine J, Finne-Soveri H, Björkgren M, Linna M, Noro A, Häkkinen U: **The association between quality of care and technical efficiency in long-term care**. *International Journal for Quality in Health Care* 2005, **17**(3).

17. Stewart M, Ryan B: **Ecology of health care in Canada**. *Canadian Family Physician* 2015, **61**(5):449-453.
18. Statistics C: **The Daily — Canada's population estimates: Age and sex, July 1, 2021**. In: *Canada's population estimates: Age and sex, July 1, 2021.* 2021.
19. Cihi: **Infographic: Canada's seniors population outlook: Uncharted territory**. In: *Canadian Institute for Health Information.* 2025.
20. Hushion SP, Srusti; Blazekovic, Daniel; Gamboa, Fidel: **Meeting the Needs of Ontario's Aging Population Across the Seniors' Care Continuum: A Case for Municipal Support for Long-Term Care**. In. Toronto, ON; 2022: 1-22.
21. Lum J, Deber R, Kuluski K, Peckham A: **Aging at Home: Integrating Community-Based Care for Older Persons Experiences of family caregivers View project Transitions in Care for Older Adults with Hip Fracture and/or Delayed Discharge View project**. 2009.
22. Government of O: **Archived - Aging with Confidence: Ontario's Action Plan for Seniors**. In.; 2021.
23. Stall N, Maltsev A, Jones A: **COVID-19 and Ontario's long-term care homes. Science Briefs of the Ontario COVID-19 Science Advisory Table**. In.; 2021.
24. Oltca: **The Data: Long-Term Care in Ontario**. In: *Ontario Long-Term Care Association.* 2024.
25. Martin D, Miller AP, Quesnel-Vallée A, Caron NR, Vissandjée B, Marchildon GP: **Canada's universal health-care system: achieving its potential**. *The Lancet* 2018, **391**(10131):1718-1735.
26. **Long-Term Care Facilities in Canada: How Are They Funded and Regulated?** [https://hillnotes.ca/2025/01/16/long-term-care-facilities-in-canada-how-are-they-funded-and-regulated/]
27. Hutchison B, Abelson J, Lavis J: **Primary care in canada: So much innovation, so little change**. *Health Affairs* 2001, **20**(3):116-131.
28. Hutchison B, Levesque JF, … ESTM, undefined: **Primary health care in Canada: systems in motion**. *Wiley Online Library* 2011, **89**(2):256-288.
29. Marchildon GP, Hutchison B: **Primary care in Ontario, Canada: New proposals after 15 years of reform**. *Health Policy* 2016, **120**(7):732-738.
30. Mulvale G, Abelson J, Goering P: **Mental health service delivery in Ontario, Canada: how do policy legacies shape prospects for reform?** *Health Economics, Policy and Law* 2007, **2**(4):363-389.
31. Badone E: **From Cruddiness to Catastrophe: COVID-19 and Long-term Care in Ontario**. *Medical Anthropology* 2021, **40**(5):389-403.
32. **About Long-Term Care** [https://www.oltca.com/about-long-term-care/]
33. National B: **Long-term care home rates in Ontario | National Bank**. In.; 2020.
34. Cihi: **Long-term care homes in Canada: How many and who owns them?** In: *Canadian Institute for Health Information.* 2021.
35. Brown KA, Jones A, Daneman N, Chan AK, Schwartz KL, Garber GE, Costa AP, Stall NM: **Association Between Nursing Home Crowding and COVID-19 Infection and Mortality in Ontario, Canada**. *JAMA Internal Medicine* 2021, **181**(2):229.
36. Banerjee A: **An overview of long-term care in Canada and selected provinces and territories**. In: *Women and Health Care Reform.* 2007: 1-31.

37. Daly T: **Dancing the two - Step in Ontario's long - term care sector: Deterrence regulation = consolidation**. In: *Studies in Political Economy.* vol. 95; 2015.
38. Halpern L, Phillips SD, Grasse NJ: **Non-Profit Long-Term Care in Ontario: How Financially Robust Is the System?** *Canadian Public Policy* 2022.
39. Manis DR, Bronskill SE, Rochon PA, Sinha SK, Boscart V, Tanuseputro P, Poss JW, Rahim A, Tarride JÉ, Abelson J *et al*: **Defining the Assisted Living Sector in Canada: An Environmental Scan**. *Journal of the American Medical Directors Association* 2022, **23**(11):1871-1877.e1871.
40. Lai P: **How enforcement shapes compliance with legal rules: the case of long-term care homes in Ontario**. *Canadian Journal of Law and Society / Revue Canadienne Droit et Société* 2024, **39**(1):110-131.
41. Wranik WD, Price S, Haydt SM, Edwards J, Hatfield K, Weir J, Doria N: **Implications of interprofessional primary care team characteristics for health services and patient health outcomes: A systematic review with narrative synthesis**. *Health Policy* 2019, **123**(6):550-563.
42. Zborovski S, Trimble I: **Federal Government Announces Policy on Canada Health Act Status of Payments to Regulated Healthcare Professionals Providing Physician-equivalent Services**. In: *Stikeman Elliott Business Law firm.* 2025.
43. Okoh AE, Akinrolie O, Bell-Gam HI, Adandom I, Ibekaku MC, Kalu ME: **Nigerian healthcare workers' perception of transdisciplinary approach to older adults' care: A qualitative case study**. *International Journal of Care Coordination* 2020, **23**(2-3):92-106.
44. Ministry of H: **Ontario's Primary Care Action Plan, January 2025**. In: *Government of Ontario.* 2025.
45. Ontario N: **Province Appoints Dr. Jane Philpott as Chair of New Primary Care Action Team**. In: *Government of Ontario.* 2024.
46. Choi BCK, Pak AWP: **Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness**. *Clinical and Investigative Medicine* 2006, **29**(6):351-364.
47. Weiss D, Cook B, Eren R: **Transdisciplinary Approach Practicum for Speech-Language Pathology and Special Education Graduate Students**. *Journal of Autism and Developmental Disorders* 2020, **50**(10):3661-3678.
48. Martin AK, Green TL, McCarthy AL, Sowa PM, Laakso EL: **Healthcare Teams: Terminology, Confusion, and Ramifications**. *Journal of Multidisciplinary Healthcare* 2022, **15**:765-765.
49. Van Bewer V: **Transdisciplinarity in Health Care: A Concept Analysis**. *Nursing Forum* 2017, **52**(4):339-347.
50. Wieczorek E, Kocot E, Evers S, Sowada C, Pavlova M: **Do financial aspects affect care transitions in long-term care systems? A systematic review**. *Archives of Public Health* 2022, **80**(1):1-15.
51. Canadian Institute for Health I: **Seniors in Transition: Exploring Pathways Across the Care Continuum**. In: *CIHI (Ottawa).* 2017.
52. Sullivan GJ, Williams C: **Older adult transitions into long-term care: A meta-synthesis**. *Journal of Gerontological Nursing* 2017, **43**(3):41-49.

53. Dyer SM, Suen J, Williams H, Inacio MC, Harvey G, Roder D, Wesselingh S, Kellie A, Crotty M, Caughey GE: **Impact of relational continuity of primary care in aged care: a systematic review**. *BMC Geriatrics* 2022, **22**(1):1-18.
54. Gulliford M, Naithani S, Morgan M: **What is 'continuity of care'?** *Journal of Health Services Research & Policy* 2006, **11**(4):248-250.
55. Uijen AA, Schers HJ, Schellevis FG, Van den bosch WJHM: **How unique is continuity of care? A review of continuity and related concepts**. *Family Practice* 2012, **29**(3):264-271.
56. Cheng SM, Catallo C: **Conceptual framework: factors enabling collaborative healthcare and social services integration**. *Journal of Integrated Care* 2020, **28**(3):215-229.
57. McKearney P, Amrith M: **Care**. *Cambridge Encyclopedia of Anthropology CEA* 2021.
58. Huyer G, Brown CRL, Spruin S, Hsu AT, Fisher S, Manuel DG, Bronskill SE, Qureshi D, Tanuseputro P: **Five-year risk of admission to long-term care home and death for older adults given a new diagnosis of dementia: A population-based retrospective cohort study**. *CMAJ* 2020, **192**(16):E422-E430.
59. Worrall G, Knight J: **Continuity of care for older patients in family practice: how important is it?** *Canadian Family Physician* 2006, **52**(6):754-755.
60. Lukersmith S, Millington M, Salvador-Carulla L: **What Is Case Management? A Scoping and Mapping Review**. *International Journal of Integrated Care* 2016, **16**(4):2-2.
61. OH@H: **Guide to Placement in Long-Term Care Homes**. In: *Ontario Health atHome.* 2024.
62. Mltc: **Apply for long-term care | ontario.ca**. In: *Ontario Ministry of Long-Term Care.* 2024.
63. White-Chu EF, Graves WJ, Godfrey SM, Bonner A, Sloane P: **Beyond the Medical Model: The Culture Change Revolution in Long-Term Care**. *Journal of the American Medical Directors Association* 2009, **10**(6):370-378.
64. CIHI: **Access to palliative care in Canada**. In. Ottawa, Ontario; 2023.
65. Ontario HQ: **The Reality of Caring** In. Toronto, Ontario; 2016.
66. Marrocco FN, Coke A, Kitts J: **Long-Term Care COVID-19 Commission: final report and progress on interim recommendations**. In.; 2022.
67. Estabrooks CA, Straus SE, Flood CM, Keefe J, Armstrong P, Donner GJ, Boscart V, Ducharme F, Silvius JL, Wolfson MC: **Restoring trust: COVID-19 and the future of long-term care in Canada**. *FACETS* 2020, **5**(1):651-691.
68. Sandelowski M: **What's in a name? Qualitative description revisited**. *Research in Nursing and Health* 2010, **33**(1).
69. Giacomini M: **Theory Matters in Qualitative Health Research**. *The SAGE Handbook of Qualitative Methods in Health Research* 2014:125-156.
70. Meleis AI: **Transitions theory**. *Nursing theories and nursing practice* 2015, **4**:361-380.
71. Coe C: **Transnational migration and the commodification of eldercare in urban Ghana**. *Identities* 2017, **24**(5):542-556.
72. Archibald M, Kitson A, Frewin D, Visvanathan R: **Transdisciplinary Research In Frailty: Knowledge Translation To Inform New Models of Care**. *The Journal of frailty & aging* 2017, **6**(2):62-64.

73. Staley K, Elliott J, Stewart D, Wilson R: **Who should I involve in my research and why? Patients, carers or the public?** *Research Involvement and Engagement* 2021, **7**(1):1-8.
74. Varkey B: **Principles of Clinical Ethics and Their Application to Practice**. *Medical Principles and Practice* 2020, **30**(1):17-17.
75. Syd L, Johnson M: **Shifting the Moral Burden: Expanding Moral Status and Moral Agency**. *Health and Human Rights* 2021, **23**(2):63-73.
76. Mohltc: **A guide to the long-term care homes act, 2007 and regulation 79/10**. In: *Ministry of Health and Long-Term Care.* 2007.

Chapter 2: Continuity of care during long-term care transitions: A scoping review of the Canadian literature

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This chapter presents a scoping review describing the available evidence on continuity of care during LTC transitions in Canada, including factors related to family physicians, patients and family caregivers that influence continuity of care. This chapter is designed to address the first objective posed at the outset of this dissertation: *to identify and synthesize evidence on continuity of care during LTC transition in Canada, highlighting the key factors and knowledge gaps that impact continuity of care.* The paper has been published in *BMC Health Services Research.*

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2.0 Abstract

Background: Patients who maintain longitudinal provider-patient relationships experience better overall health outcomes. However, most older adults in Canada lose contact with their family physician when they enter long-term care (LTC) as new providers assume responsibility for their care. There is relatively little known about the contextual factors, processes, knowledge, and health professions education antecedents that promote the benefits of relational, management, and informational care continuity during LTC transitions.

Methods: Using a rigorous scoping review method, we searched multiple databases systematically to identify and scrutinize peer-reviewed articles pertaining to continuity of care during LTC transitions in Canada. Guided by Transitions Theory, two independent reviewers screened citations and extracted data. A descriptive analytical method was employed to categorize content into themes.

Results: Eight articles met the inclusion criteria. Our findings confirm that instances of relational continuity are very few during LTC transitions, suggesting barriers associated with practice models and the influence of physician characteristics. Notably, the review also highlights that the involvement of interprofessional team members, patients, and their partners-in-care in transition planning could improve informational and management care continuity for patients as they move into LTC.

Conclusion: Patient and family involvement, provider training, and practice and funding arrangements are all critical to improving relational, management, and informational care continuity during LTC transition. We recommend more studies to understand processes and policies to optimize informational continuity as a panacea for the often-disrupted relational continuity.

Keywords: Long-term care; transitions; continuity of care; relational continuity; informational continuity; management continuity.

2.1 INTRODUCTION

The population of older adults in Canada is growing rapidly [1], with the number of individuals 65 years and older predicted to increase to 22.7% of the population by 2031 [2]. Moreso, the population aged 85 years and older is one of the fastest-growing age groups, recording a 12% increase since 2016 and comprising about 2.3% of the general population in 2021 [2]. This growth translates to an increased need for long-term care (LTC) [3], which provides services to people who require specialized daily personal care as well as 24-hour nursing care and supervision [4]. A significant number of older adults admitted to LTC have cognitive impairment or a dementia diagnosis [5]. LTC transitions may originate from the hospital or the patient's home. Transitions through the hospital occur when the patient no longer requires the level of care provided in acute care, but their care needs cannot be met in the community. This is often due to deteriorating cognitive function, functional decline, complex medical needs (e.g., wound care, intravenous therapy), or inadequate social support for a safe return home [6, 7]. Transitions from home occur due to frequent falls, declining cognitive and functional status, increased caregiver burden, and limited or no access to home care support [8].

Like most high-income countries, Canada is confronted with the challenge of meeting these complex care needs [5]. Coordination of care across the continuum is crucial to achieve efficiency and effectiveness within fragmented healthcare systems. Continuity of care is an integral part of effective coordination [10]. Continuous family physician-patient relationships are associated with the provision of coherent and consistent care, resulting in better overall health outcomes for patients [11]. Facchinetti and colleagues [3] described three types of continuity of care. *Relational continuity* refers to a longitudinal therapeutic relationship between a patient and one or more providers, entailing ongoing personal interactions between patient and provider across the life course. *Informational continuity* refers to the longitudinal use and development of

information about a patient's personal preferences, values, context, conditions, and circumstances by providers to make current care appropriate for that individual. *Management continuity* refers to a coordinated approach to managing a health condition by adapting to a patient's changing needs. It is crucial for complex, chronic conditions requiring input from multiple providers. The focus is on maintaining a consistent treatment plan rather than provider continuity, ensuring all involved healthcare providers align with the established care plan regardless of when they join the patient's care.

Several studies report that strong care continuity is associated with better prescribing; reduced rates of hospital admissions, emergency department visits, and mortality [12, 13]; better compliance with therapy; improved physician and patient satisfaction; improved preventative care; and lower healthcare costs [14, 15]. However, when older adults in Canada transition from independent living in the community to LTC, their ongoing relationship with their family doctor is disrupted and not typically maintained. This is because most residents in Canadian LTC homes receive care from staff physicians and other care providers contracted and employed, respectively, by the LTC homes [16]. In this regard, we recognize that a substantial proportion of Canadian older adults entering LTC experience a disruption of relational continuity with their healthcare team.

The current standard of information exchange during LTC transitions in Canada involves the submission of LTC Health Assessment Form by the patient's family physician (in the case of transitions from community) or nursing/social work team (in the case of transitions from the hospital) [17, 18]. The form ensures the LTC home receives information pertaining to allergies and drug sensitivities, current medications, and a brief medical history, but does not provide an opportunity for the healthcare professional to report on non-medical care, medications that were

tried and abandoned as well as the rationale, and patient values and preferences. Using a form that contains both non-medical and medical information about a LTC resident may enable smoother and more consistent care.

While some research studies have explored the continuity of care during LTC transitions in Canada, no rigorous review has been completed on this topic. Accordingly, we posed the following research questions: *What is the evidence about continuity of care during LTC transitions in Canada*? *What processes, practices, and factors related to family physicians, patients and family caregivers influence (relational, informational, management) continuity of care during LTC transitions in Canada*? The following scoping review, thus, aimed to map the evidence on the practices and factors influencing continuity of care during LTC transitions in Canada. We limited this review to Canada as having a better understanding of the collected evidence in this space, through the current scoping review, will inform the generation of contextually [Canada] relevant policies and practices and highlight pervasive knowledge gaps that require targeted research. We are relying on Meleis's *Transitions Theory* [9] for this review. The theory is important because it considers health events that prompt transitions from one care setting to another (e.g., primary care to LTC), the nature of transition, and facilitators and barriers of successful transitions. *Transitions Theory* also serves as a sensitizing framework for the review; it draws our attention to the roles of various actors in a patient's transition and the organizational features of family medicine practices and LTC facilities that affect this transition.

2.2 METHODS

Research Design

With our research questions articulated, this comprehensive scoping review was conducted according to the framework outlined by Arksey and O'Malley [19], which includes

steps of identifying relevant studies; study selection; charting the data; and collating, summarizing and reporting the results. Scoping review designs are particularly appropriate to answer broad questions [20]. We all followed the Joanna Briggs Institute guidelines, which are consistent with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (the PRISMA-ScR) [21].

Identifying relevant studies

A comprehensive literature search was conducted in May 2024. We retrieved literature from six databases – Ovid Medline, EMBASE, EMCARE, AGELINE, CINAHL and PsycINFO. The search was limited to peer-reviewed papers and grey literature published in English, and specific to continuity of care during transitions to LTC in Canada. Grey literature via government and Canadian health organizations' webpage did not yield any relevant information on continuity of care during LTC transitions. We did not set a date limit because we did not anticipate encountering a large quantity of literature on the topic. Our search strategy was developed with the help of a Health Sciences librarian at McMaster University based on three core concepts: Long-term care, Continuity of care, and Canada. The search strategy included a combination of medical subheadings (MeSH) and keywords – "nursing home" OR "nursing home care" OR "skilled nursing facilities" OR "long-term care" OR "long-term services and supports" AND "continuity of patient care" OR "patient care continuity" OR "patient handoff" OR "patient transfer" OR "retention in care" OR "transition to adult care" OR "transitional care" OR "Care continuity" OR "continuity of care" OR "informational continuity" OR "relational continuity" OR "patient handover" AND "Canada" OR "Alberta" OR "British Columbia" OR "Manitoba" OR "New Brunswick" OR "Newfoundland and Labrador" OR "Nova Scotia" OR "Northwest

Territories" OR "Nunavut" OR "Ontario" OR "Prince Edward Island" OR "Quebec" OR "Saskatchewan" OR "Yukon" – for each database.

Study selection

We included studies if: i) they focused on continuity of care [3] during transition to LTC; ii) participants included family physicians, older adults, and/or family partners-in-care; iii) the study was conducted in the Canadian context; and iv) the paper used either quantitative, qualitative, or mixed-methods study design but not a review, commentary or case series. Delimitation to Canada ensured we elicited evidence that is relevant to the Canadian healthcare system. We excluded any papers that studied continuity of care outside of transitions from home and/or hospital to LTC.

Screening began with review and appraisal of titles and abstracts. Articles deemed suitable after this assessment were then forwarded to full-text review. Initial title and abstract screening and full paper review were conducted by two independent reviewers (AS, RG). Disagreement in screening decisions was resolved through discussion with a third research team member (ACO) during regular team meetings. Covidence (Veritas Health Innovation Ltd., Melbourne), a tool designed to manage and streamline the process of conducting systematic reviews, was used to organize the screening process and create an audit trail for decisions [22].

Data charting

Two research team members (AS, RG) conducted data charting independently, and a third team member (ACO) confirmed the data. We approached data charting with consideration for *Transitions Theory*, which draws our attention to the types and patterns of healthcare transitions and the properties of transition experiences for patients and providers when making sense of the facilitators and inhibitors of effective transition outcomes [9]. In the context of this study, it

prompted us to contemplate the roles of the various agents in a patient's transition, the health concerns that prompt transitions, and the relevance of organizational features of the family medicine practices and LTC facilities at either end of the transition trajectory [9]. Accordingly, our data extraction framework supported the collation of study information on patient characteristics, provider characteristics, caregiver characteristics, LTC home characteristics, types of continuity studied (i.e., relational, informational, management), transition pattern (i.e., moving from hospital to LTC or home to LTC), and study outcomes alongside information about article characteristics: publication details (authors, title, publication year), study design, and geography (*vis-a-vis* provincial or territorial context).

Collating, summarising, and reporting results

After organizing the information in the data charting form, we employed a descriptive qualitative analytical method [21] to synthesize data derived from the included studies and to produce a thematic construction of the LTC transition evidence [19]. The first author (ACO) developed the first set of themes and subthemes. Guided by *Transitions Theory* [9], the initial coding involved extracting concepts from the included studies pertaining to transitions to LTC. The next stage involved finding patterns across concepts and aggregating concepts to developed themes and subthemes. The themes and subthemes were refined through iterative discussions with another author (LG). The themes and subthemes and interpretation of results were reviewed by the full research team, who have expertise in primary care and care of the elderly research, for accuracy and relevance to the Canadian practice and policy context. Also, if a paper did not mention the type of continuity explicitly, the research team determined the type of continuity through close reading of the text with reflection on Facchinetti and colleagues' [3] definitions of relational, informational, and management continuity. Two research team members (ACO, LG)

were involved in this process. We created summaries and reported the results following the PRISMA-ScR checklist [23].

2.3 RESULTS

Our search yielded 1,950 articles. After deduplication, 1,562 citations underwent abstract and title screening, and 35 studies were eventually advanced to full-text screening. Ultimately, eight articles were deemed appropriate for inclusion in the review (Figure 1). No new publications were included after reviewing the references of the included papers and the grey literature.

Description of Included Studies

Research Designs: This scoping review included one quantitative study [24], five qualitative studies [25–29], and two mixed-methods studies [30, 31].

Geography: One study was conducted in Alberta [27], two in British Columbia [26, 29], and four in Ontario [24, 25, 28, 31]. One study did not indicate the study setting [30].

Populations: The study population in the included papers comprised older adult patients [24, 25, 28, 31], family partners-in-care [29, 30], and family physicians [24–28]. While the continuity of care discourse focuses on patient-physician relations, the papers recognized other healthcare providers were also mentioned as members of the interprofessional team.

Transitions: One study focused exclusively on home-to-LTC transitions [29] and two studies interrogated hospital-to-LTC transitions exclusively [25, 31]. The remaining five articles researched both transition types.

Continuity of Care: One study explored only relational continuity [24], while two studies explored only informational continuity [25, 31]. One study explored relational and management continuity [26], three studies explored informational and management continuity [27, 29, 30], and one study explored relational, informational, and management continuity [28].

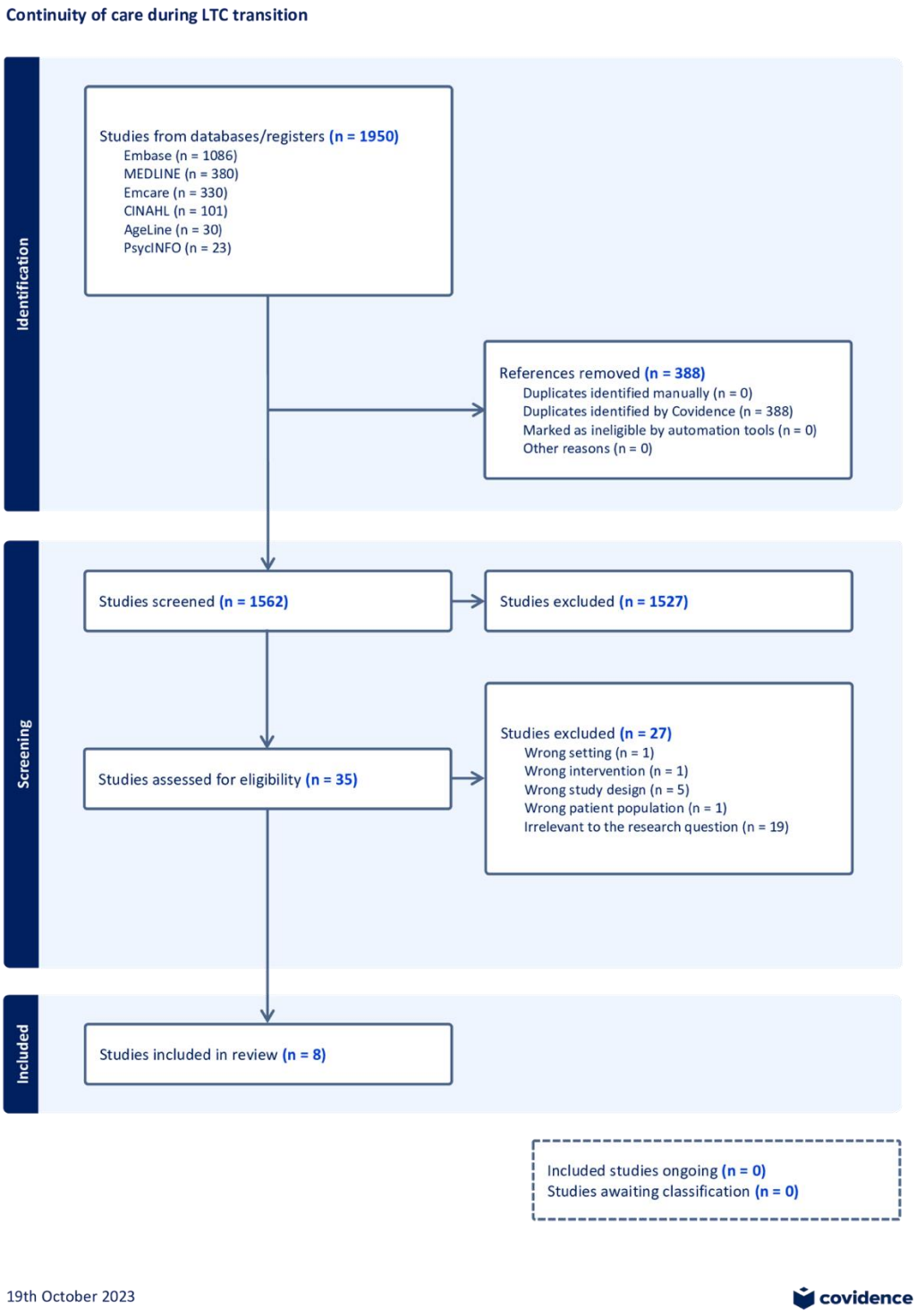

Figure 1. PRISMA flowchart of study inclusion process

Table 1. Summary of the Key Features of Included Papers (n = 8)

Author (Year)	Study design	Jurisdiction(s); Rurality	Population studied	Transition pattern		Type of continuity studied		
				Hospital to LTC	Home to LTC	Relational	Informational	Management
Abdool et al. (2016)	Case study	Ontario; Rurality(n/s)	Healthcare providers; Patients	✓			✓	
Baetz-dougan et al. (2021)	Convergent mixed methods design: survey and focused group	Ontario; Urban	Patients	✓			✓	
Gorenko et al. (2021)	Sequential explanatory mixed methods design: secondary data analysis and individual interviews	n/s	Family partners-in-care	✓	✓	n/s	n/s	n/s
Hainstock et al. (2017)	Qualitative description	British Columbia; urban, sub-urban, and rural	Family partners-in-care		✓	n/s	n/s	n/s
King et al. (2022)	Case study	Ontario; urban	Healthcare providers; Patients; Family partners-in-care	✓	✓	✓	✓	✓
Oelke et al. (2009)	Case study	Alberta; Rural	Healthcare providers	✓	✓		✓	✓
Sloan & Buchanan (1993)	Document analysis - Reviewed 60 charts	British Columbia; urban	Healthcare providers	✓	✓	✓		✓
Staykov et al. (2020)	Retrospective cohort study	Ontario; Urban and rural	Healthcare providers; Patients	✓	✓	✓		

✓ = present in that study n/s = not specified

Table 2. Summary of the Relevant Results of the Included Papers (n = 8)

Author (Year)	Objectives	Results
Abdool et al. (2016)	To highlight the current gap in legislation for difficult transition cases involving unrepresented patients and provide a novel framework for who ought to assist with making these decisions and how these decisions ought to be made.	Considerations of patients' values as well as their healthcare needs into the goals of care and placement decisions. The decision to LTC should be made in collaboration with the patient or their substitute decision maker.
Baetz-dougan et al. (2021)	To assess the perceived ease of use, usefulness, and care-enhancing potential of the North York General Hospital-LTC (NYGH-LTC) Transfer Form by interprofessional LTC staff.	Information sharing and communication facilitate continuity of care, especially improved bidirectional verbal communication (between the before- and after-transition provider) in addition to filling out the LTC transition form.
Gorenko et al. (2021)	To examine how caregiving and transitioning a family member into long-term care (LTC) influence planning.	Caregivers with LTC transition experience engaged in more planning than non-caregivers. Continuity of care was supported by caregiving experience, clear care expectations, and social support from loved ones (their significant other, family and friends).
Hainstock et al. (2017)	To explore the roles and responsibilities of family caregivers for family members making the care transition from home care to residential care (LTC).	Family caregivers play a vital role in care transitions by gathering information, advocating, and navigating the healthcare system to ensure continuity of care. To better support them, there is a need for increased investment in strategies that enhance communication and education for caregivers.
King et al. (2022)	To examine how a goal-oriented approach impacts (facilitates or inhibits) continuity of care in a long-term care setting.	Facilitators of continuity of care include engaging stakeholder – resident, care team, and family – in LTC transitional care discussions, counselling, and consultations. Also, incorporating residents' values and preferences and family's perspective in transitional care planning formed a holistic understanding of a resident are important facilitators. Lack of awareness and clear information on the transition agenda inhibited continuity of care. Another barrier is the unavailability of family and other partners-in-care when for incompetent patients/LTC-residents.
Oelke et al. (2009)	To explore the successes of Primary Care Networks (PCNs) in facilitating integration across the continuum,	Collaborations in Alberta's PCNs has evolved beyond primary care to include interrelations with acute care and LTC. The

	i.e., primary care, specialty services, acute and long-term care.	collaboration involves document exchange, chart reviews, and transdisciplinary team meetings. Information exchange among clinic physicians, continuing care and emergency medical services, and system navigators to facilitate integration and informational continuity. This integration created opportunity for interprofessional collaboration and improved outcomes for LTC residents.
Sloan & Buchanan (1993)	To explore whether physicians with many patients in a long-term care facility provide more timely follow-up of their drug orders than those with only a few.	Open physician staffing model is associated with greater likelihood of follow up and relational continuity compared to the typical closed physician staffing model. In smaller communities, follow-up care often depends on a physician's interest in LTC; those who expressed a passion for it tend to take on more patients. Also, factors like geography and payment can further limit access to continuity-based care.
Staykov et al. (2020)	To determine the proportion of LTC residents who retain their community family physician within the first 180 days of LTC, and the resident, physician, and LTC home factors that may influence retention.	Resident health, LTC home geography, and family physician demographics and practice patterns influenced relational continuity. About 87.9% of LTC residents do not retain their family physicians post-LTC admission. Longer distance (30+ km) from the LTC home to the family physician's clinic, being a female physician, an international medical graduate, and a capitation-based remuneration structure are associated with lower retention. The same applies to practising in an urban area, having billed LTC fee codes in the past year.

Continuity Practices during LTC transition in Canada

One paper revealed a high rate (87.9%) of disrupted relational continuity after moving into LTC in Ontario [24]. Indeed, all the collected literature affirmed that instances of relational continuity are very few during LTC transitions. In our review, it was notable that the papers, even those that included *foci* on informational and management forms of continuity, did not present evidence of these forms of continuity being leveraged to ameliorate and/or mitigate the impact of the provider-patient relationship disruption. In this we infer that little attention has been given to the way information and/or management plans may be utilized to improve the quality-of-care received by LTC residents.

Factors Influencing Continuity of Care during LTC Transition

While we identified no studies that explored the potential of informational and management forms of continuity to offset relational disruptions, we were able to delineate factors that influence the effectiveness of relational, informational, and management continuity of care during LTC transitions. These were grouped into three thematic areas: stakeholder engagement, practice features, and physician characteristics (Table 3). Our analysis, thus, describes perspectives and elements pertaining to the maintenance and/or enhancement of continuity of care during LTC transitions.

Table 3. Thematic presentation of factors influencing continuity of care during LTC transition

Themes	Subthemes	Type of continuity impacted		
		Relational	**Informational**	**Management**
Stakeholder engagement	Interprofessional team		✓	✓
	Patient involvement		✓	✓
	Partners-in-care		✓	✓
Practice features	Practice location	✓		
	Staffing models	✓		
	Remuneration models	✓		
Physician characteristics	Gender	✓		
	Location of medical education	✓		
	Professional interest	✓		

Stakeholder engagement

Most saliently in the review, several papers [24, 25, 27–31] considered the facilitation of informational and management continuity through collaboration between different stakeholder groups during the LTC transition. The integration of patients, their partners-in-care, and family physicians and a diverse group of providers in the transition process is pertinent to improving continuity of care for LTC residents. The information exchange studied incorporated written and verbal communication forms; both of which contribute meaningfully to improving transitions of care. The studies reported on collaborative interactions between community family physicians, LTC physicians, and other members of the interprofessional team. They also encouraged the active involvement of patients and partners-in-care in the transition process.

Interprofessional team:

Two papers focused on the critical role of interprofessional collaboration and communication to facilitating informational continuity and better care outcomes during LTC transitions [27, 31]. Baetz-Dougan and colleagues [31] recommended enhanced bidirectional communication between the before- and the after- transition care providers to enhance informational and management continuity. The other study reported that integrated care practices such as data sharing among the primary care, continuing care, and emergency care services fosters interprofessional collaboration and is associated with improved care outcomes for LTC residents [27]. In their case study in a rural community in Alberta, Oelke and colleagues [27] found that encouraging information exchange creates opportunities to build closer working relationship between physicians and other interprofessional team members (e.g., pharmacists, social workers, nurses) and enhances communication and efficient services delivery. They also found that a community-to-LTC transition navigated with the support of interprofessional team

members, in the form of a comprehensive care transition note/plan, resulted in high-quality care continuity for LTC residents.

Patient involvement:

Four papers [24, 25, 28, 30] suggest that LTC transitions should include active patient involvement. In line with management continuity, studies reported that the LTC transition process and the care plans developed during LTC transitions should be made collaboratively with the patient and their family [25]. The quality and usefulness of transition information can be improved by integrating patient values and preferences into the goals of care transition, including the planning of placements and interventions [28]. Accordingly, Abdool and colleagues [25] reported that planning LTC transitions with the older adult patients fosters the patient-centered care model in LTC. In addition, a mixed methods study by Gorenko and colleagues [30] showed that older adults with a previous LTC transition experience for a relative are often better prepared for and contribute significantly to planning their own LTC transition than those without the experience. Thus, some patients, those with lived experience of LTC transitions, can also offer valuable inputs that may enhance not only informational continuity but also management continuity [30].

Partners-in-care:

Five papers [24, 25, 28–30] offer that the involvement of partners-in-care, including family members and friends, in transition planning is pertinent to achieving effective informational and management continuity. A qualitative inquiry revealed that during LTC transition, family partners-in-care support the patient specifically through information gathering, advocacy, and navigating the healthcare system [29]. Additionally, two studies [28, 30] recommended that family partners-in-care should participate in transition care conferences to

discuss care options and goals (i.e., management continuity) and gain insight into and offer perspectives on what patient information should be collected (i.e., informational continuity). This is based on the assumption of an existing close longitudinal relationship family partners-in-care have with the older adults, qualifying them as competent representatives of their older relative [30]. Notably, a paper we reviewed highlighted that a large proportion of older adults admitted to LTC have cognitive impairment and a dementia diagnosis [24]. These older adults are often unable to articulate their values and preferences during the LTC transition. Thus, the patient health care history and transition goals of these older adults need to be communicated through their substitute decision-maker [25].

Practice features

Two studies [24, 26] included in the review reported on the environmental, organizational, and financial factors that bear influence on the attainment of continuity of care during LTC transitions. These factors were organized around the family physician's practice location, the LTC home's staffing models, and physician remuneration models.

Practice location:

The geographic disposition of the family physician's practice influences the likelihood of continuing to provide care for their patients who enter LTC [24, 26]. The evidence shows that family physicians in rural practice or small towns are more likely to continue providing care to their patients after moving into LTC than those practicing in large urban locations [24, 26]. In rural areas, however, distances greater than 30 kilometres between the family physician's clinic and the LTC home hindered relational continuity [24]. The rationale proposed by the authors indicated that longer distances for rural physicians and the time commitment involved in travel

for urban physicians may pose an additional workflow complexity to family physicians who already grapple with high overhead cost and administrative tasks.

Staffing models:

These studies also reported on LTC staffing models, highlighting the differences between closed and open models [24, 26]. In a closed model, also known as the *house doctor* model, LTC-contracted physicians are responsible for the care of all LTC residents [26]. In contrast, in an open model, family physicians attending to residents are not direct employees of the LTC home [24, 26]. The studies revealed that in open staffing models, physicians are more likely to continue caring for their patients even after they move into LTC, promoting relational continuity. The open physician staffing model is more prevalent in rural settings, which have fewer service options; unlike urban settings, which often have a greater number and wider range of healthcare professionals and specialty groups [24]. However, Sloan and Buchanan's [26] document review in a British Columbian LTC facility revealed that closed staffing models foster management continuity in larger urban LTC facilities following the transition from community to LTC. Additionally, their study findings suggested that *house doctors* in urban LTC settings conduct more visits, provide more care, and follow-up on treatment progress more often compared to those operating in open models.

Remuneration models:

One of the two papers reported that the physician remuneration model and the availability of physician LTC billing codes could either enhance or hamper relational continuity during LTC transition [24]. In their retrospective cohort study in Ontario, Staykov and colleagues found that family physicians in the capitated rostered patient payment model were less *likely* to continue delivering care to their patients in LTC compared to those in a fee-for-service payment model.

They suggested that physicians in fee-for-service models may prefer patients with complex needs, which are common in LTC, because of increased remuneration associated with billing codes for treatments for complex patients. Furthermore, they found that family physicians who have billed for LTC within the last year have a higher likelihood to practice in LTC, and potentially maintain relational contact with their patients, than those who did not.

Physician characteristics

A few physician characteristics appeared once across the reviewed papers as influencing continuity during the LTC transition process. These less represented but still present factors included the physician's gender, location of medical education, and professional interests.

Gender:

One paper noted that family physicians who identify as men were reported as having a higher likelihood of practicing in the LTC space and continuing to care for their patients entering LTC compared to their counterparts who identify as women. In their retrospective cohort study, Staykov and colleagues [24] revealed that the odds for family physicians who identify as women to practice in LTC are 10% lower than their counterparts who identify as men.

Location of medical education:

One study found that family physicians trained in Canada were more likely to practice in LTC homes than their foreign trained counterparts [24]. Their analysis also showed that foreign trained physicians had 11% lower odds of LTC practice and thus less likely to maintain relational continuity when their patients move into LTC than those trained in Canada.

Professional interest:

One study highlighted the crucial role of a physician's interest to practice in LTC on relational continuity [26]. They found that family physicians who reported an interest in or

enjoyment of LTC are more likely to follow their patients as they enter LTC than those who do not. They also noted that these family physicians accumulate more LTC residents in their practice than those who did not report a predilection to practice in LTC.

2.4 DISCUSSION

This scoping review synthesized practice and contextual factors that influence continuity of care during the LTC transitions. We noted that instances of relational continuity are very few during LTC transitions in Canada. Indeed, it may not be feasible to establish relational continuity as the standard practice during in LTC transitions in Canada due to structural and policy barriers. For instance, the disruption of relational continuity is most prevalent in urban locations, wherein LTC homes operate a "closed" physician staffing model that sees LTC-contracted physicians assume primary responsibility of care for all residents. It is further exacerbated when older adults are placed in a home that does not share a relative geographic disposition with their family physician's office, a reality many faced when the Government of Ontario enacted *Bill 7 – More Beds, Better Care Act* (2022) – which authorized temporary LTC placements as far as 150km away from the patient's preferred LTC home [32]. In these situations, enhancing informational and management continuity becomes even more critical to meeting the policy goals of fostering LTC resident dignity, ensuring their security and comfort, and adequately meeting their physical, psychological, social, spiritual, and cultural needs [3, 18, 33, 34].

A conceptual framework (Figure 2) that delineated the physician, practice, and collaborative features that influence continuity of care during LTC transitions was generated based on the the review results and transitions theory. Transitions theory underlines that various actors play varied functions in a patient's transition based on their distinctive personal and professional identities and characteristics. This is consistent with the *physician characteristics* domain of the conceptual framework. Meleis's Transitions Theory draws attention to the

influence of the features of practice environments in shaping the transition process. This informed the construction of *practice features* domain of the conceptual framework comprising practice location, staffing models, and remunerative models. Also, the Transitions theory highlights the *Engagement* of the actors as a key element of the transition process. This was a prominently represented in the review findings – *stakeholder engagement* – and captured in the framework.

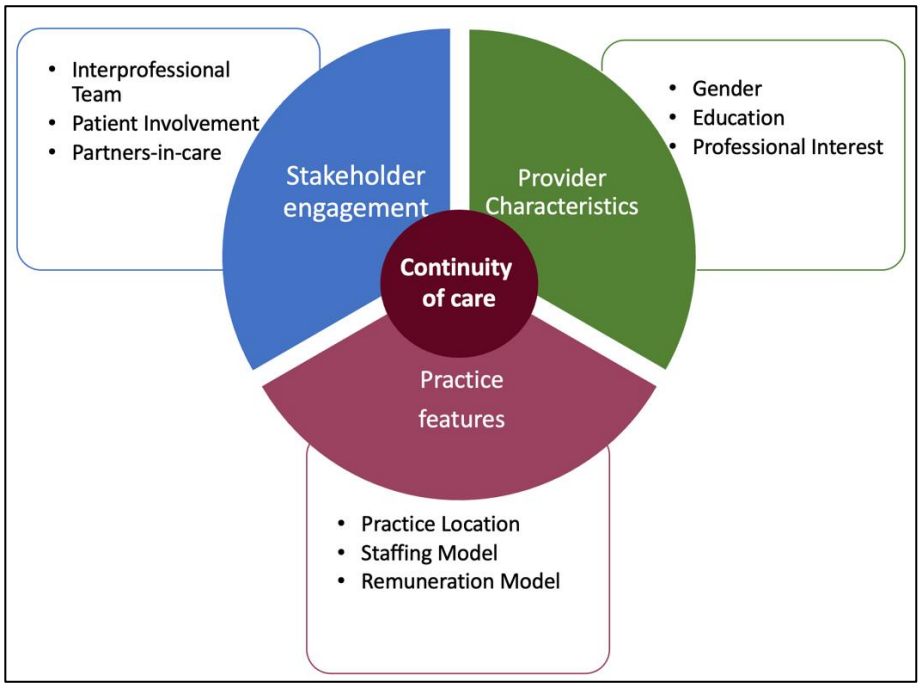

Figure 2. Conceptual framework for continuity of care during LTC transition

The production and transfer of comprehensive patient healthcare information during the LTC transition would foster informational and management continuity. We conceptualize *comprehensive* patient healthcare information as the relevant environmental, social, mental, and physical health information that is required to support continuity of care for an older adult in LTC [35]. Given the review highlights that informational and management continuity are improved through wide stakeholder engagement in LTC transition planning, this could be

achieved through the effective collaboration of a team of interprofessional healthcare providers, patients, and their partners-in-care when navigating the LTC transition. This aligns with a study in the United States showing that communication and interdisciplinary care team meetings between the before- and after-LTC transition providers is effective in promoting informational and management continuity of care [36]. Similarly, *Transitions theory* underscores that effective stakeholder engagement and interactions in the transition process results in better outcomes [9]. Another review which scoped the literature from the developed countries also affirmed that collaboration and communication between older adults and their formal and informal partners-in-care is pertinent to facilitating informational and management continuity [37]. As jurisdictions across Canada move toward a greater healthcare system integration, a pilot study [38] aggregated the opinions of healthcare leaders across Canada to infer an imperative to prioritize informational and management continuity.

Transitions theory offers that one's identity and organizational features shape the transition process [9]. In this regard, a spate of other factors was also lightly reflected in our analysis, often appearing as relevant in only one or two reviewed papers. These included physician characteristics and practice features. Notably, one such factor was the influence of location of medical education. The location of medical education bears relevance to the interest of family physicians to practice in LTC, and the likelihood to continue caring for their community-based patients who enter LTC homes. Canadian-trained family physicians have exposure to structured rotations in LTC during residency [39]. This exposure may be more variable for foreign trained family physicians, and therefore, they may be less comfortable providing care for their patients when they move into an LTC home. This is also supported by

evidence showing that geriatrics education elevates interest and competency to practice in settings that manage older adults such as LTC [40].

When considering the practice behaviours of foreign trained physicians, it is important to acknowledge that there are several policies that incentivize foreign-trained physicians to work [at least in the short term] in rural and other underserved areas in Canada [41, 42]. As Staykov and colleagues [24] reported, open staffing models are more prevalent in these settings. Collectively, then, we might expect foreign trained physicians to be more likely to follow patients into LTC. However, subsequent reports highlight that many foreign-trained physicians ultimately relocate to urban locations [42, 43] which commonly operate the closed physician staffing model that is associated with greater loss of relational continuity. In this regard, leveraging foreign trained physicians to meet rural needs has not been effective so far; at least in terms of promoting relational continuity during LTC transitions – however, there is evidence that suggests that there may be some benefits in rural areas associated with employing physicians with a rural background or who complete their undergraduate or postgraduate training in rural areas [43–46].

Furthermore, a physician's gender may influence relational continuity during LTC transition. One paper in our review suggested that family physicians who identify as women are less likely to maintain relational contact with their patients who enter LTC; this corroborates results from previous studies which reported that women physicians often encounter significant work-life balance challenges which can affect their availability for LTC roles which typically require frequent off-duty telephone calls and onerous paperwork [47–50].

The transition patterns reported included both hospital to LTC and home to LTC transitions. A report in Canada showed that between 2018 and 2019, about 40% of LTC residents transitioned directly from hospital and the rest transitioned directly from home-based settings

such as assisted living facilities and their private residences [51]. They affirmed that most older adults who move into LTC have complex care needs [51]. Nonetheless, another study [24] reported that a fee-for-service physician remuneration model is linked to increased motivation to practise in LTC and maintain relational continuity compared to the capitated system. Physicians in a fee-for-service model are disposed to LTC practice as LTC residents' frequent care needs may result in increased revenue. This corroborates existing evidence which reports that fee-for-service model incentivizes higher volume of visits which may be a desirable model for providing care for patients with high and frequent care needs [52–54].

Regardless of physicians' gender, remuneration models, or location of medical education, we believe their decisions are understandable and not necessarily unwarranted. Despite the underlying reasons behind their choices, foreign-trained physicians, women physicians, and those in a variety of remuneration models clearly play an important role in ensuring informational and management continuity. In each case, this can be achieved through a strong commitment to information exchange and by actively involving interprofessional teams, patients, and patient partners in transition planning. Such efforts underscore the importance of stakeholder engagement, as it is vital for fostering seamless care transitions and optimizing patient outcomes. By reinforcing these practices, healthcare systems can better support the diverse needs of physicians and the communities they serve, including the key roles they play during LTC transition to foster relational, informational, and management continuity.

Based on this review, we are not positioned to offer definitive recommendations to policymakers and other stakeholders. However, the scoping review outlines the contours of the research landscape and has helped us speculate on the policy areas where recommendations may emerge. These include policy reforms to ensure: i) communication between community family

physicians and LTC physicians during the LTC transition process; ii) engagement of the interprofessional healthcare team in the development of LTC transition paperwork; and iii) involvement of patient and/or partners-in-care in the development of LTC transition paperwork.

Limitations

Our review found only eight relevant empirical studies on continuity of care during LTC transition in Canada, highlighting the limited research available. Moreover, very fewer papers examined physician characteristics (gender, the location of their medical education, and physician's interest) and practice features (practice location, staffing model, and remuneration model). This gap suggests a need for more comprehensive investigations. While the existing studies offer valuable insights, they are insufficient for drawing strong conclusions or fully understanding the influence of physician characteristics and practice features on continuity of care during LTC transition. Future research should explore these under-researched themes to expand the empirical evidence and to better informing policy and practice related to transition to LTC in Canada.

Also, since we conducted our review on English language papers only, we may have missed critical French language pieces relevant in some jurisdictions in Canada, e.g., Quebec. Lastly, while we reported on gender, the one study [24] that provided this insight used sex-based terminology. We may have incorrectly supposed that gender was the more appropriate construct, assuming that the authors used male and female categories based on participant self-reports. In any event, even if our assumption is correct, we cannot confirm whether participants provided answers that reflected gender, biological sex, sex assigned at birth, or some other related construct.

2.5 CONCLUSIONS

Continuity of care is pertinent to ensure that the LTC system can continue to meet the complex care needs of older adults. However, the review shows that very little research has been done in Canada on this subject area. Inasmuch as relational continuity is lost during transition to LTC, limited attention has been given to informational and management continuity during the LTC transition. However, there is strong support for the idea that improving the integration of all relevant stakeholders can improve continuity of care for patients during LTC transition. Future studies should explore innovations that leverage informational continuity to optimize outcomes of care when older adults enter LTC.

2.6 REFERENCES

1. Un D: **World Population Prospects 2019: Highlights | Multimedia Library - United Nations Department of Economic and Social Affairs**. In: *United Nations.* 2019.
2. Statistics C: **The Daily — Canada's population estimates: Age and sex, July 1, 2021**. In: *Canada's population estimates: Age and sex, July 1, 2021.* 2021.
3. Facchinetti G, D'Angelo D, Piredda M, Petitti T, Matarese M, Oliveti A, De Marinis MG: **Continuity of care interventions for preventing hospital readmission of older people with chronic diseases: A meta-analysis**. In: *International Journal of Nursing Studies.* vol. 101; 2020.
4. Banerjee A: **An overview of long-term care in Canada and selected provinces and territories**. In: *Women and Health Care Reform.* 2007: 1-31.
5. Oltca: **The Data: Long-Term Care in Ontario**. In: *Ontario Long-Term Care Association.* 2024.
6. Aase K, Waring J: **Crossing boundaries: Establishing a framework for researching quality and safety in care transitions**. *Applied Ergonomics* 2020, **89**:103228-103228.
7. Moreno-Martin P, Jerez-Roig J, Rierola-Fochs S, Oliveira VR, Farrés-Godayol P, Bezerra de Souza DL, Giné-Garriga M, Booth J, Skelton DA, Minobes-Molina E: **Incidence and Predictive Factors of Functional Decline in Older People Living in Nursing Homes: A Systematic Review**. *Journal of the American Medical Directors Association* 2022, **23**(11):1815-1825.e1819.
8. Gentili S, Riccardi F, Gialloreti LE, Scarcella P, Stievano A, Proietti MG, Rocco G, Liotta G: **Admission to the Long-Term Care Facilities and Institutionalization Rate in Community-Dwelling Frail Adults: An Observational Longitudinal Cohort Study**. *Healthcare 2022, Vol 10, Page 317* 2022, **10**(2):317-317.
9. Rudoler D, Peckham A, Grudniewicz A, Marchildon G: **Coordinating primary care services: A case of policy layering**. *Health Policy* 2019, **123**(2):215-221.
10. Cfpc: **a New Vision for Canada**. In: *https://patientsmedicalhomeca/files/uploads/PMH_VISION2019_ENG_WEB_2pdf*. 2019: 40-40.
11. Barker I, Steventon A, Deeny SR: **Association between continuity of care in general practice and hospital admissions for ambulatory care sensitive conditions: Cross sectional study of routinely collected, person level data**. *BMJ (Online)* 2017, **356**.
12. Te Winkel MT, Damoiseaux-Volman BA, Abu-Hanna A, Lissenberg-Witte BI, van Marum RJ, Schers HJ, Slottje P, Uijen AA, Bont J, Maarsingh OR: **Personal Continuity and Appropriate Prescribing in Primary Care**. *The Annals of Family Medicine* 2023, **21**(4):305-312.
13. Chan KS, Wan EYF, Chin WY, Cheng WHG, Ho MK, Yu EYT, Lam CLK: **Effects of continuity of care on health outcomes among patients with diabetes mellitus and/or hypertension: a systematic review**. *BMC Family Practice* 2021, **22**(1).
14. Ridd MJ, Santos Ferreira DL, Montgomery AA, Salisbury C, Hamilton W: **Patient-doctor continuity and diagnosis of cancer: Electronic medical records study in general practice**. *British Journal of General Practice* 2015, **65**(634).
15. Collins R, Charles J, Moser A, Birmingham B, Grill A, Gottesman M: **Improving medical services in Canadian long term care homes**. In: *Canadian Family Physician.* 2020.

16. Kelly KJ, Doucet S, Luke A: **Exploring the roles, functions, and background of patient navigators and case managers: A scoping review**. In: *International Journal of Nursing Studies.* vol. 98; 2019.
17. Government of O: **Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1**. In.; 2021.
18. Meleis AI: **Transitions theory**. *Nursing theories and nursing practice* 2015, **4**:361-380.
19. Arksey H, O'Malley L: **Scoping studies: Towards a methodological framework**. *International Journal of Social Research Methodology: Theory and Practice* 2005, **8**(1):19-32.
20. Sucharew H, Macaluso M: **Methods for research evidence synthesis: The scoping review approach**. *Journal of hospital medicine* 2019, **14**(7):416-418.
21. Peters MDJ, Marnie C, Tricco AC, Pollock D, Munn Z, Alexander L, McInerney P, Godfrey CM, Khalil H: **Updated methodological guidance for the conduct of scoping reviews**. *JBI Evidence Synthesis* 2020, **18**(10):2119-2126.
22. Harrison H, Griffin SJ, Kuhn I, Usher-Smith JA: **Software tools to support title and abstract screening for systematic reviews in healthcare: An evaluation**. *BMC Medical Research Methodology* 2020, **20**(1):1-12.
23. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, Moher D, Peters MDJ, Horsley T, Weeks L *et al*: **PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation**. *Annals of internal medicine* 2018, **169**(7):467-473.
24. Staykov E, Qureshi D, Scott M, Talarico R, Hsu AT, Howard M, Costa AP, Fung C, Ip M, Liddy C *et al*: **Do Patients Retain their Family Physicians after Long-Term Care Entry? A Retrospective Cohort Study**. *Journal of the American Medical Directors Association* 2020, **21**(12).
25. Abdool R, Szego M, Buchman D, Justason L, Bean S, Heesters A, Kaufman H, Parke B, Wagner F, Gibson JL: **Difficult healthcare transitions: Ethical analysis and policy recommendations for unrepresented patients**. *http://dxdoiorg/101177/0969733015583185* 2015, **23**(7):770-783.
26. Sloan JP, Buchanan B: **Performance of the "house doctor". Effect of physician-to-patient ratio on follow up in long-term care facilities**. *Canadian Family Physician* 1993, **39**:273-273.
27. Oelke ND, Cunning L, Andrews K, Martin D, MacKay A, Kuschminder K, Congdon V: **Organizing care across the continuum: primary care, specialty services, acute and long-term care**. *Healthcare quarterly (Toronto, Ont)* 2009, **13 Spec No**:75-79.
28. King M, Steele Gray C, Kobewka D, Grudniewicz A: **Continuity of care for older adults in a Canadian long-term care setting: a qualitative study**. *BMC Health Services Research* 2022, **22**(1):1-11.
29. Hainstock T, Cloutier D, Penning M: **From home to 'home': Mapping the caregiver journey in the transition from home care into residential care**. *Journal of Aging Studies* 2017, **43**:32-39.
30. Gorenko JA, Konnert C, Speirs C: **Does Caregiving Influence Planning for Future Aging?: A Mixed Methods Study Among Caregivers in Canada**. *Research on Aging* 2021, **43**(5-6):203-213.
31. Baetz-Dougan M, Reiter L, Quigley L, Grossman D: **Enhancing Care for Long-Term Care Residents Approaching End-of-Life: A Mixed-Methods Study Assessing a**

Palliative Care Transfer Form. *American Journal of Hospice and Palliative Medicine* 2021, **38**(10):1195-1201.
32. Casey L: **$400 fees, long-range patient transfers: What you need to know about Ontario's new long-term care rules**. In: *The Canadian Press.* 2022.
33. Halpern L, Phillips SD, Grasse NJ: **Non-Profit Long-Term Care in Ontario: How Financially Robust Is the System?** *Canadian Public Policy* 2022.
34. Mohltc: **A guide to the long-term care homes act, 2007 and regulation 79/10**. In: *Ministry of Health and Long-Term Care.* 2007.
35. Ljungholm L, Edin-Liljegren A, Ekstedt M, Klinga C: **What is needed for continuity of care and how can we achieve it? – Perceptions among multiprofessionals on the chronic care trajectory**. *BMC Health Services Research* 2022, **22**(1):1-15.
36. Davis MN, Smith ST, Tyler S: **Improving transition and communication between acute care and long-term care: A system for better continuity of care**. *Annals of Long-Term Care* 2005, **13**(5):25-32.
37. Groenvynck L, Fakha A, De Boer B, Hamers JPH, Van Achterberg T, Van Rossum E, Verbeek H: **Interventions to Improve the Transition From Home to a Nursing Home: A Scoping Review**. *The Gerontologist* 2022, **62**(7):e369-e383.
38. Lewanczuk R: **Facilitating continuity of care at a health system level to support integration**. *International Journal of Integrated Care* 2019, **19**(4):14-14.
39. Oliver D, Emili A, Chan D, Taniguchi A: **Education in long-term care for family medicine residents**. *Canadian Family Physician* 2011, **57**(8):e288-e291.
40. Ong EY, Bower KJ, Ng L: **Geriatric Educational Interventions for Physicians Training in Non-Geriatric Specialties: A Scoping Review**. *Journal of Graduate Medical Education* 2021, **13**(5):654-665.
41. Dumont JC, Zurn P, Church J, LeThi C: **International Mobility of Health Professionals and Health Workforce Management in Canada : Myths and Realities | OECD Health Working Papers | OECD iLibrary**. In.; 2008.
42. Ono T, Schoenstein M, Buchan J: **Geographic imbalances in the distribution of doctors and health care services in OECD countries**. *Health Workforce Policies in OECD Countries: Right Jobs, Right Kills, Right Places OECD Health Policy Studies* 2016:129-162.
43. Yen W, Hodwitz K, Thakkar N, Athina M, Martimianakis T, Faulkner D: **The influence of globalization on medical regulation: a descriptive analysis of international medical graduates registered through alternative licensure routes in Ontario**. *Canadian Medical Education Journal* 2016, **7**(3):e19-e19.
44. Elma A, Nasser M, Yang L, Chang I, Bakker D, Grierson L: **Medical education interventions influencing physician distribution into underserved communities: a scoping review**. In: *Human Resources for Health.* vol. 20; 2022.
45. Grierson L, Elma A, Aggarwal M, Bakker D, Johnston N, Agarwal G: **Understanding the influence of medical education on physician geographic disposition: A qualitative study of family physician perspectives in Canada**. *Journal of Evaluation in Clinical Practice* 2023, **29**(8).
46. Grierson L, Mercuri M, Elma A, Mahmud M, Bakker D, Johnston N, Aggarwal M, Agarwal G: **Associations between education policies and the geographic disposition of family physicians: a retrospective observational study of McMaster University education data**. *Advances in Health Sciences Education* 2024, **29**(2).

47. Wilkinson E, Coffman M, Petterson S, Jabbarpour Y: **Gender Differences in Reported Weekly Work Hours Among Family Physicians**. *The Journal of the American Board of Family Medicine* 2020, **33**(5):653-654.
48. Steffler M, Chami N, Hill S, Beck G, Cooper SC, Dinniwell R, Newbery S, Simkin S, Chang-Kit B, Wright JG *et al*: **Disparities in Physician Compensation by Gender in Ontario, Canada**. *JAMA Network Open* 2021, **4**(9):e2126107-e2126107.
49. Levy C, Epstein A, Landry LA, Kramer A, Harvell J, Liggins C: **Physician Practices in Nursing Homes: Final Report | ASPE**. In.; 2006.
50. Hedden L, Barer ML, Cardiff K, McGrail KM, Law MR, Bourgeault IL: **The implications of the feminization of the primary care physician workforce on service supply: A systematic review**. *Human Resources for Health* 2014, **12**(1):1-11.
51. Marchildon GP, Allin S, Merkur S: **Canada: health system review**. *Health Systems in Transition* 2020, **22**(3).
52. Rudoler D, Deber RB, Dass AR, Barnsley J, Glazier RH, Laporte A: **Paying for primary care: The relationship between payment for primary care physicians and selection of patients based on case-mix (No. 160007)**. In. Toronto; 2016.
53. Lange TC, Carpenter T, Zwicker J: **Primary Care Physician Compensation Reform: A Path for Implementation**. In: *The School of Public Policy Publications.* 2020.
54. Kantarevic J, Kralj B: **Physician Payment Contracts in the Presence of Moral Hazard and Adverse Selection: The Theory and Its Application in Ontario**. *Health Economics* 2016, **25**(10):1326-1340.

Appendices

Appendix A: Search Strategy

Database: OVID Medline Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

#	Searches	Results
1	exp Long-Term Care/	28969
2	Long-Term Care.mp.	45348
3	Nursing Homes/	40058
4	Nursing Home*.mp.	54342
5	1 or 2 or 3 or 4	89603
6	exp "Continuity of Patient Care"/	298752
7	patient* handoff.mp.	1783
8	patient* transfer.mp.	10943
9	continuity of care.mp.	9908
10	Care continuity.mp.	841
11	informational continuity.mp.	100
12	relational continuity.mp.	197
13	management continuity.mp.	93
14	patient* handover.mp.	225
15	care transition.mp.	1307
16	6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	306820
17	exp Canada/	186504
18	canada.mp.	183039
19	17 or 18	235442
20	5 and 16 and 19	380

Database: APA PsycInfo <1806 to May Week 2 2024>

#	Searches	Results
1	exp Long Term Care/	6844
2	Long-Term Care.mp.	13504
3	exp Nursing Homes/	10587
4	exp Nursing Home Residents/	2931
5	Nursing Home*.mp.	16614
6	1 or 2 or 3 or 4 or 5	26886
7	exp "Continuum of Care"/	2503
8	continuity of care.mp.	2923
9	patient* handoff.mp.	171
10	exp Client Transfer/	306
11	patient* transfer.mp.	732

12	Care continuity.mp.	261
13	informational continuity.mp.	20
14	relational continuity.mp.	67
15	management continuity.mp.	26
16	patient* handover.mp.	33
17	exp Hospital Discharge/	4535
18	care transition.mp.	440
19	7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18	10198
20	Canada.mp.	47443
21	6 and 19	575
22	20 and 21	23

Database: Embase <1974 to 2024 May 08>

#	Searches	Results
1	exp long term care/	2436091
2	long term care.mp.	165047
3	exp nursing home/	63759
4	Nursing Home*.mp.	78620
5	1 or 2 or 3 or 4	2509312
6	patient care/	370814
7	Continuity of Care.mp.	13651
8	Continuity of Patient Care.mp.	1175
9	clinical handover/	2384
10	patient* handoff.mp.	326
11	transitional care/	6040
12	patient* transfer.mp.	2589
13	Care continuity.mp.	1076
14	informational continuity.mp.	106
15	relational continuity.mp.	219
16	managerial continuity.mp.	9
17	patient* handover.mp.	327
18	6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17	386235
19	5 and 18	47909
20	exp Canada/	222660
21	canada.mp.	284992
22	20 or 21	298903
23	19 and 22	1099
24	limit 23 to english language	1086

Database: Ovid Emcare <1995 to 2024 Week 18>

#	Searches	Results

1	exp long term care/	417880
2	long term care.mp.	46086
3	exp nursing home/	22949
4	Nursing Home*.mp.	34334
5	1 or 2 or 3 or 4	451538
6	patient care/	117397
7	Continuity of Care.mp.	7275
8	Continuity of Patient Care.mp.	806
9	clinical handover/	754
10	patient* handoff.mp.	222
11	transitional care/	1402
12	patient* transfer.mp.	1112
13	Care continuity.mp.	667
14	informational continuity.mp.	92
15	relational continuity.mp.	163
16	managerial continuity.mp.	8
17	patient* handover.mp.	192
18	6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17	123801
19	5 and 18	13377
20	exp Canada/	54849
21	canada.mp.	81949
22	20 or 21	84746
23	19 and 22	333
24	limit 23 to english language	330

Database: AgeLine

#	Searches	Results
S15	S13 AND S14	30
S14	canad*	11,960
S13	S4 AND S12	106
S12	S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11	916
S11	Client Transfer	2
S10	clinical handover	2
S9	patient* handover	2
S8	management continuity	4
S7	relational continuity	3
S6	transitional care	332
S5	continuity of care	628
S4	S1 OR S2 OR S3	28,979
S3	skilled nursing facilit*	7,441
S2	nursing home*	21,033

S1	long term care	17,366

Database: CINAHL

#	Searches	Results
S20	((MH "Canada+") OR "canada") AND (S20 AND S21)	101
S19	(MH "Canada+") OR "canada"	129,020
S18	S7 AND S17	1,631
S17	S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16	29,647
S16	"clinical handover"	195
S15	"patient* handover"	135
S14	"management continuity"	55
S13	"informational continuity"	76
S12	"relational continuity"	143
S11	"Transitional of Care"	838
S10	(MH "Transitional Care")	4,165
S9	"Continuity of Care"	6,110
S8	(MH "Continuity of Patient Care+")	22,408
S7	S1 OR S2 OR S3 OR S4 OR S5 OR S6	73,003
S6	"Skilled Nursing Facilit*"	5,970
S5	(MH "Skilled Nursing Facilities")	4,833
S4	"nursing home*"	29,971
S3	(MH "Nursing Homes+")	30,556
S2	"Long Term Care"	37,195
S1	(MH "Long Term Care")	28,227

Appendix B: Data Extraction Form

Author (Year):

Study objective(s):

Study design:

Jurisdiction(s) and Rurality:

Residents' characteristics:

Provider characteristics:

Caregiver characteristics:

LTC home characteristics:

Type of continuity studied:

Nodes of transition:

Study outcomes:

Chapter 3: Long-term care provider's perspectives on health information exchange during patient transitions into long-term care: A multiple case study

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This chapter presents a multiple case study involving 20 participants drawn from five study sites. It elicited the information long-term care providers receive from family physicians and the information they obtain from other sources. The study also generated the information long-term care providers consider the most important in supporting new long-term care residents, the information that they do not receive and how they seek it out, and factors that influence their ability to seek informational continuity during the transitions process. This chapter is designed to address the second objective posed at the outset of this dissertation: *to describe the information LTC care teams consider to be most important to support informational continuity during LTC transitions, information they receive and do not receive, the strategies they employ to seek out missing information, and factors influencing their ability to seek out the information.*

3.0 ABSTRACT

Background: In Ontario, Canada, many older adults lose the longstanding care relationship with their community family physicians when they move to long-term care (LTC) as a new set of providers assume the care responsibility. Information is transferred to LTC facilities to lessen the impact of the loss of continuity-based primary care. This study aims to describe the information LTC care teams consider to be most important to support informational continuity during LTC transitions, information they receive and do not receive, the strategies they employ to seek out missing information, and factors influencing their ability to seek out the information.

Methods: This study employed Yin's multiple case study design. Five LTC facilities were selected, which differed with respect to rurality and home sizes. Purposeful samples of participants were interviewed within each case. Participants held a variety of professional roles including admission nurse, director of care, physiotherapist, admission coordinator, social worker, personal support worker, pharmacist, nurse practitioner, and LTC physician. In total, 20 individuals participated. Guided by Transitions theory, data analysis started with within-case analysis using unconstrained deductive content analysis, followed by cross-case analysis to draw comparisons across the five cases.

Results: LTC providers value informational continuity for effective care provision. In this regard, they require up-to-date, accurate, and comprehensive biopsychosocial information. However, the information received by LTC care teams, whether provided by community-based family physicians or hospital-based healthcare professionals, is often lacking in detail and/or outdated. To make up for the information gap, LTC providers seek additional information from electronic health records, patient families, care coordinators, discharging family physicians, or hospitalists. Factors influencing LTC providers ability to seek informational continuity include organizational capacity, geography, technology, and power imbalances.

Conclusion: LTC care teams adopt extra means to fulfil their information needs during LTC transitions since the documents they receive are often inadequate. To improve their ability to seek out more information may require effective interprofessional collaboration, incentivizing services that support informational continuity, and increasing the workforce to lessen workload and allow more time for information gathering.

Keywords: Informational continuity, Relational continuity, Continuity of care, Transition, Long-term care, Primary care

3.1 INTRODUCTION

The typical long-term care (LTC) resident has some form of cognitive impairment, is unable to ambulate independently, is incontinent, with chronic multimorbidity, and with an average age of 85 years [1]. These individuals require specialized 24-hour nursing, personal care, and supervision. The complexity of their conditions warrants an interprofessional approach to care. Thus, LTC care teams often include registered nurses, nurse practitioners, social workers, personal support workers, and physicians [2]. However, the rapidly growing older adult population mounts increasing pressures on the healthcare system, including the demand for LTC beds [3, 4]. For instance, the demand for LTC is estimated to increase by 38% between 2019 and 2029 in Ontario, Canada [5].

The evidence shows that most older adults who had family physicians in the community lose contact with their family physicians when they enter LTC, as the LTC care team assume primary responsibility for their care [6]. This has important implications for the continuity of care as the disruption of relational continuity creates challenges for the care provider and service users. Relational continuity refers to maintaining a longitudinal therapeutic relationship and interactions between a patient and a care provider [3]. The consequences of loss of relational continuity include but are not limited to increased rates of medical errors, rehospitalization, and mortality [7]. Relational continuity is associated with better prescribing and compliance with therapy, improved provider and patient satisfaction, and lower healthcare costs [7, 8].

The disruption of relational continuity remains unabated in Ontario due to health system structures and policies. The loss of continuity care is common due to health system fragmentation, as there is limited interaction or collaboration across primary care, acute care, and LTC settings. In this context, most family physicians (except those in rural practice) rarely practise in both primary care and LTC, and several LTC facilities have contracted family

physicians who attend to all the residents in their facility. Thus, the probability of retaining one's previous family physician after moving into LTC is low, with available evidence showing that nearly 90% of Ontarian seniors who move into LTC experience a loss of relational continuity [6]. A recent example of additional policy influence is the introduction of Bill 7 by the Government of Ontario in a bid to address the alternate level of care problem, i.e., hospital bed occupied by patients who are due for hospital discharge. Bill 7 (*More Beds, Better Care Act, 2022*) authorized temporary LTC placements as far as 150km away from the patient's preferred LTC facility [9]. Bill 7 has unintended consequences including exacerbating the disruption of relational continuity since these individuals are placed farther away from their physicians' practice location.

LTC facilities rely on informational continuity to mitigate the negative impact of the loss of relational continuity during LTC transitions. Informational continuity refers to the efficient flow of patient health information across the continuum of care. It involves using comprehensive information about a patient's preferences, values, context, conditions, and personal circumstances to support optimal care delivery [3]. In Ontario, LTC facilities receive two main documents during LTC transition: Long-Term Care Health Assessment Form (LTC-HAF) – containing the primary care provider's medical report – and the Resident Assessment Instrument-Minimum Data Set (RAI-MDS) – completed by a care coordinator from the regional health authority, containing assessments of the new residents' psychological, social, and physical functioning [10]. For instance, a recent study in the US indicated a substantial limitation in the completeness, timeliness, and usability of the information provided by the patient-discharging care providers to support older adults' LTC transitions [11]. Through a large nationally representative survey, the investigators found that information related to functional, mental, and behavioural status and follow-ups were missing in the forms transmitted in almost two-third of

transition-to-LTC cases [11]. Similar patterns are likely to occur in Ontario, Canada, as well. This might explain why in search of more information, healthcare providers in the province also view their patient's acute care information on a harmonized hospital electronic health record (EHR) such as ClinicalConnect and ConnectingOntario.

However, while numerous studies [12-14] have affirmed the utility of informational continuity as a viable solution to address disrupted relational continuity, they also highlight that much remains to be understood empirically on how LTC providers engage with the information exchange process during LTC transitions, and the kinds of information they deem important to maintain good-quality care for LTC residents. Hence, this study sets out to describe the information LTC care teams consider to be most important to support informational continuity during LTC transitions, information they receive and do not receive, the strategies they employ to seek out missing information, and factors influencing their ability to seek out the information.

3.1.1 Theoretical orientation

This study was grounded in perspectives informed by *Transitions Theory* [15], which seeks to understand and support individuals as they experience life changes that affect their health, relationships, roles, or environment. It highlights the roles of various actors in a patient's transition, the health concerns that prompt transitions, and the features of the practice environment that influence the transition process. Particularly, *Transitions Theory* draws our attention to the organizational features of LTC facilities that influence providers' information exchange practices. The theory helps us to make sense of how LTC providers engage with the information exchange process and factors that shape their practices during LTC transitions. The *Transitions Theory* informed the development of a conceptual framework for continuity of care during LTC transition in a previous review [14]. The conceptual framework (Figure 1) consists of three broad factors that influence continuity of care during LTC transitions: stakeholder

engagement (level of involvement of patients, partners-in-care, and interprofessional care team), practice features (influence of remunerative model, staffing model, and practice location), and physician characteristics (professional interest and previous experiences). The conceptual framework guided the construction of the interview guide, data analysis, and interpretation of findings.

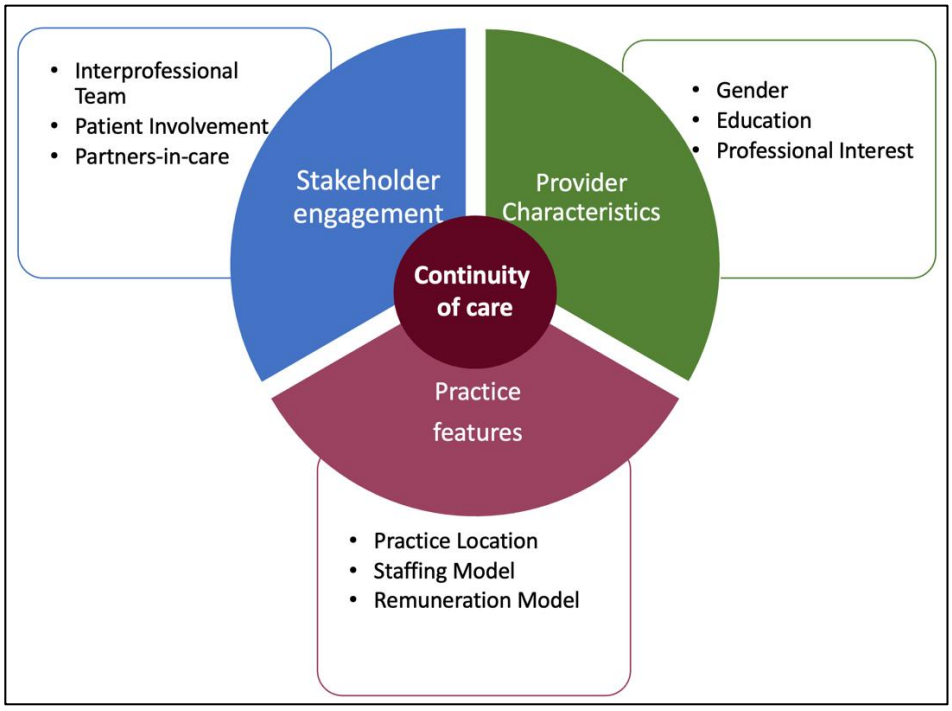

Figure 1. Conceptual framework for continuity of care during LTC transition

3.2 METHODS

Using Yin's multiple case study design [16], we developed a comprehensive description of the information care teams in LTC facilities consider to be most important in supporting new LTC patients and the strategies they employ to seek out this information. A case is a system bounded to a particular setting, context, a person, set of procedures, etc. [16, 17]. We bound each case by a LTC facility, and the study participants were care providers working in each study site. According to Yin, multiple cases enable researchers to make comparisons and to educe nuanced perspectives across different cases. This research design is suitable for an in-depth inquiry into a

complex phenomenon and within the real-world context. Thus, it appreciates the contextual conditions that a case is situated within and the influence of contextual factors on understanding the phenomenon. The proposition that guided data collection and analysis was the assumption that there are viable solutions to improving informational continuity during the transition to LTC.

Sampling

We purposefully selected LTC facilities with respect to rurality (rural and urban) and home size (small [<100 beds], medium [100-200 beds] and large [>200 beds]) [15]. We chose this case definition because rurality and home size can provide nuance on care continuity as contextual factors such as capacity, resources, and number of staff per resident tend to differ across these LTC facility characteristics [1, 18, 19]. For instance, several larger, urban LTC facilities have been reported to have more human and material resources that facilitated greater operational efficiencies than their counterparts [18, 20]. We adopted two approaches for recruitment. First, we invited LTC facilities through advertisements circulated by our knowledge partners (Greater Hamilton Health Network and Ontario Long Term Care Clinicians) and social media platforms (LinkedIn and X [twitter]). Second, we sent letters to several LTC facilities in Ontario, describing our study and inviting them to participate as study sites. Five LTC facilities, comprising one rural and four urban facilities, indicated interest to participate in the study. The cases were one large, two medium, and two small bed capacity facilities (See Table 1). For each case, the study information was shared with the staff and those who were interested in participating were invited for interview. The eligible individuals were LTC providers who play a role in assessments and information exchange during the LTC transition process such as the director of care, social worker, admission nurse, nurse practitioner, physiotherapist, and physician.

Table 1. Case profile

Features	*Case 1*	*Case 2*	*Case 3*	*Case 4*	*Case 5*
Home size (beds)	192	47	167	350	96
Rurality	Urban	Rural	Urban	Urban	Urban
Ownership status	Non-profit	For-profit	Non-profit	Non-profit	For-profit
Staff	Physicians, dentists, nurses, occupational therapists, physiotherapists, recreational therapist, nutritional staff, social workers, personal support workers, housekeepers, administrators	Physician, nurses, physiotherapist, recreational therapist, nutritional staff, personal support workers, housekeepers, administrators	Physicians, nurses, occupational therapists, Pharmacists, physiotherapists, recreational therapist, nutritional staff, personal support workers, housekeepers, administrators	Physicians, nurse practitioners, nurses, personal support workers, behavioural support team, nutritional and housekeeping staff, life enhancement and client services staff, administrators	Physicians, nurse practitioner, nurses, nutritional staff, recreational staff, social workers, personal support workers, housekeepers, administrators

Data collection

Data collection involved 30-60-minute semi-structured interviews with LTC providers. The principal investigator (ACO) visited four study sites/cases for face-to-face individual interviews and used Zoom video conferencing for one case (*Case 4*) that preferred a virtual interview. All interviews were conducted between October and December 2024. We probed the information providers receive during LTC transitions and the kind of information they would like to receive, their sources of patient information during the transitions, and what information is

valuable to them. We also inquired their perceived facilitators and barriers to informational continuity of care in their practice context and across Ontario. Probing questions flowed from their responses, seeking more details and clarifications.

Data analysis

Data collection and analysis occurred simultaneously. Analysis began within each case before moving to between-case analyses. We adopted an unconstrained deductive approach [21], which allows us to reflect our analysis through the lens of *Transitions Theory*. Data were managed on NVivo15 (Lumivero LLC, Colorado). The coding framework was developed by ACO through a preliminary analysis of four transcripts and tested by AS and LG. The coding framework was used for analysis, and any new codes that emerged were added to the codebook and documented in the audit trail notes. Each interview transcript was double-coded. The coding process involved six team members comprising a man-identifying doctoral student (ACO), a woman-identifying research coordinator with a bachelor's-level degree in health sciences (AS), and four women-identifying undergraduate-level students in a health sciences program (CL, ND, PG, CC). The team met weekly to share analytic insights, compare analytic memos, and resolve any conflicting perspectives. The within- and between-case results were consistently shared with a senior researcher (LG) and the entire research team, who provided feedback to strengthen credibility and ensure alignment with the practice and policy context.

The within-case analysis involved the grouping of codes with conceptual similarities according to the coding framework. Furthermore, we sought patterns across the top-level codes to form higher and broader level categories that are reflective of the research objectives. Between-case analysis commenced on completion of the first-two within-case analyses. Between-case analysis involved comparison of findings across cases until analytical

generalization was achieved. We concluded data collection and analysis after achieving data sufficiency, when no new insight emerged from further interviews or an additional case [22]. We kept reflexive journals during interviews and analysis to check and minimize the influence of our beliefs and biases on the approach to interviews, analysis, and interpretation of findings.

Ethics

We received ethics approval from the Hamilton Integrated Research Ethics Board (#16209). Each participant completed the consent form before their interview.

3.3 RESULTS

As shown in Table 2, 20 in-depth interviews were completed from participants across the 5 cases. Participants were aged 36 to 63 years and their years of LTC practice experience ranged from 1-40 years. Thirteen of them identified as women and seven identified as men. Participants held a variety of professional roles including admission nurse, director of care, physiotherapist, admission coordinator, social worker, personal support worker, pharmacist, nurse practitioner, and LTC physician.

Table 2. Demographic characteristics

Features	*Case 1*	*Case 2*	*Case 3*	*Case 4*	*Case 5*
Gender					
Men	-	-	4	1	2
Women	4	3	3	1	2
Average years of LTC practice	22.8	9.7	14.1	21.3	18.3
Care providers					
Physician			✓✓	✓	
Nurse practitioner					✓
Director of care	✓	✓	✓		✓
Assistant director of care					✓
Social worker	✓			✓	
Admission nurse	✓	✓	✓		✓
Admission coordinator	✓	✓			
Physiotherapist			✓		
Personal support worker			✓		
Pharmacist			✓		

Information valued

With respect to the information participants deemed important, they stated that past medical and surgical histories, medication lists, functional abilities, immunization records, and recent blood work often contained in the LTC-HAF are valuable to them. They also value the psychosocial and physical function related information which are usually contained in the RAI-MDS. The new LTC resident's psychosocial information, delineating their personal care needs, values, and their *likes* and *dislikes*, was deemed important in determining the room to assign them and the amount of care they need but also helps LTC staff to *"personalize care plans"* and ensure that each resident's *"daily routine aligns with their preferences" (C3-P14)*. This is important as they avowed *person-centred care* as a cardinal value underpinning their aspiration for informational continuity during LTC transitions.

Information received and not received

Common across all cases, participants affirmed that a comprehensively filled out LTC-HAF and RAI-MDS are useful for the success of their work in LTC. The typical information they receive include the patient's medical and surgical history, x-rays, bloodwork, infections, medication list, lifestyle assessment (e.g., drinking, smoking), behaviour (e.g., wandering), incontinence, mobility status, activities of daily living needs, and use of assistive devices like wheelchairs, glasses, dentures, and hearing aids. Participants talked about some additional documents they receive sometimes in support of informational continuity. These include documents related to comprehensive behavioural assessments for individuals with behavioural problems, notes for any surgeries, and notes from the previous interdisciplinary care team (e.g., dietitian's assessment, physiotherapist's assessment) for those transitioning from the hospital.

Although participants acknowledged that the aforementioned pieces of information were useful, they reported that the information may be lacking in detail or not cover the breadth of information needed in LTC. While an up-to-date immunization record was said to be important, it is often missing from the LTC-HAF sent to them. Also, they rarely receive information concerning functional abilities, advance care plans, and the frequency and type of oxygen delivery system (e.g., tank, concentrator, nasal prongs, masks) use. They also encounter situations where important information such as "*diagnosis (e.g., psoriasis) or critical details of patient history,*" requiring information from a family physician that could help provide a *"complete life experience of this person's journey in the healthcare system" (C2-P05)* were missing in the admission package.

Additionally, participants were concerned that the LTC-HAF and RAI-MDS may not contain the most reliable, comprehensive, and up-to-date information that reflects the patient's

current condition. The LTC facility may receive documents with incomplete records since there is currently no minimum standard for volume of information or details that are required in the documents. This provides a leeway for certain information (e.g. for patients with aggressive behaviours) to be left out purposely:

> *"Sometimes people are not as forthcoming because they know that putting all the information in the application, people may reject them and say, 'No way, we don't want to admit this person.' So, sometimes people are very open, honest, and transparent and sometimes people are not, and there are discrepancies between what we see on paper versus the person when they come." (C4-P09)*

The last assessment relative to the time of LTC admission might have occurred months earlier and any changes occurring during that period would not be captured in the documents the LTC facility receive: *"You're looking at something that may have changed… we have files updated the last 3 months, but things may have changed in a week" (C4-P12).*

Also, the information received may be less detailed because of a lack of attention to detail:

> *"Sometimes the information is very accurate and very detailed, and sometimes it isn't… Some people will take more time to fill it out and give a lot of details. For some people, you can just tell they're just checking it off and not putting in as much." (C4-P09)*

Strategies employed to fill the information gap

While participants rely primarily on the documents (LTC-HAF and RAI-MDS) for patient care transitions, in response to the prevalent information gap, they often need to employ other strategies to get the information they desire. When they have access to a harmonized hospital EHR, they will usually start by referring to it for more comprehensive information. However, where such a resource is not present or the information therein is unsatisfactory, they typically resort to talking to families and occasionally to contacting care coordinators, hospitalists, and/or community pharmacists, for any up-to-date or missing information they need. These partners-in-care were described as more accessible than discharging physicians, whether in community or hospital:

> *"Often, we'll just depend on the families themselves; we might say, bring us what you had at home. We often get a medication list from the previous pharmacist. It's easier for me to call a pharmacist than to get something from the physician." (C2-P05)*

Indeed, participants indicated that communication between discharging family physicians and LTC physicians or other LTC staff was vanishingly rare:

> *"I've never really talked to the family doctors. You just ask their secretary to get information; requests like the chart, and they send the chart over." (C3-P08)*

Factors affecting LTC providers' ability to seek out more information

While participants reported that they could reach out to a resident's family or other care providers or search harmonized EHRs in order to fill information gaps, our data also revealed five factors that could influence their ability to implement those strategies:

Capacity

Participants described capacity issues related to time and staffing constraints. Generally, participants said that LTC providers hardly reach out to or initiate communication with the discharging care providers *mainly* because of work pressure and a short, 5-day, admission window. Considering that these care providers already have immense workloads to deal with, the short window was said to be too little to coordinate inter-provider interactions for each new LTC intake. A LTC facility's staffing capacity could have influence on workload, burnouts, and willingness to pursue additional information. This issue was predominant in the smaller, rural LTC facility (Case 2), which has lesser resources and staff than the larger, urban LTC facilities (Cases 1, 3-5). Case 2 reported a difficulty recruiting and retaining staff in the rural setting. Hence, staff members take up multiple roles to cover gaps:

> *"Being a small home, most of us wear different hats. We don't have an IPAC [Infection prevention and control] person, so she [Director of care] is doing some IPAC work. We're stretched thin... That's what we do here with our home size. Whereas in bigger homes, you*

> *might see all those positions filled. Actually, they do. So, they are able to do more during admission." (C2-P07)*

Physician's practice location

The LTC physician's practice location also influences their information seeking behaviour during LTC transitions. In Case 2, for instance, we heard that their previous LTC physician lived and had a primary care practice locally. Being embedded in the rural community, this physician had close professional relationships with other local care providers; hence, they could easily reach out to those providers for needed patient information. However, their current LTC physician now only visits on designated *'doctor days'* from another city. Accordingly, no relationships have been established between the physician and the local primary and acute care providers that can facilitate information gathering. This was typical of the relationships in the four urban cases, where the LTC physician rarely interacted with the discharging care providers. Embeddedness in a tight rural healthcare environment seemed to promote the type of relationships that promote inter-physician information exchange:

> *"[H]e had his family practice here for years. He also worked in the ER at our local hospital. So, everybody knew him; all the doctors know each other. He was able to coordinate much better because he knew everybody." (C2-P06)*

Professional power dynamics

Professional hierarchies and power imbalance influence information seeking behaviours. In instances when participants contacted the discharging care provider, they noted a bias in the likelihood to receive a response based on the professional identity of the LTC staff who sent the information request. For instance, one participant said:

> *"I would more likely [have] the nurse practitioner [make the request], because once they say they're the nurse practitioner, they attract more attention. Coming from me [a nurse], it doesn't really hold enough weight. It's a shame that it has to be like that. It shouldn't have to be like that." (C1-P02)*

Lack of family caregiver support

LTC providers interact with families and resort to them for some of their information needs. Participants noted that families can serve as intermediaries between the LTC care teams and the discharging care providers. However, the family's level of involvement in the older adult's care determines how much information they can facilitate:

> *"A lot of people's families aren't involved sometimes, and some people don't have families" (C5-P20).*

When this involvement is low, the LTC providers are less likely to seek the family's input.

Lack of access to EHR

Participants reported differences in their ability to access EHRs. The LTC providers who do not have access to hospital or primary care physicians' EHRs, are unable to pursue this strategy:

> *"Talking about a central housing of medical information, unfortunately, everybody uses different systems over here. Our hospitals don't use ClinicalConnect." (C2-P05)*

3.4 DISCUSSION

The study findings suggest that LTC providers value informational continuity for effective care provision. They require up-to-date and comprehensive information transfer, but in order to seek out the information, they encounter challenges related to organizational capacity, geography, technology, and professional power imbalances. While Ontario's *Fixing Long-term Care Act, 2021,* aims to ensure that resident's physical, psychological, social, spiritual, and cultural needs are met [23], the loss of relational continuity during LTC transitions may hamper its realization. The loss of relational continuity means that LTC providers have to leverage informational continuity at key points of transition in support of these goals. This is even more pertinent when faced with the unintended consequences of policy changes like Ontario's Bill 7 (exacerbating relational continuity disruption through LTC placements in far locations), as comprehensive and meaningful patient information transfer could bolster LTC providers' ability to sustain coherent

and consistent care provision and mitigate the impacts of discontinuity of the previous provider-patient relationship. A rich description of the patient's clinical and psychosocial information – reflective of the resident's values, preferences, and care needs – are critical for consistent and person-centred care [24]. This aligns with the *Transitions Theory*, which frame effective transitions not merely as logistical care transfers but also the preservation of the patient's preferences and care goal [15].

However, this study revealed LTC providers' concerns about the effectiveness of the current information exchange process. Although the key standardized documents—LTC-HAF and RAI-MDS—were perceived to be useful, they were seen as not always reliable because of out-of-date assessments and incomplete or inaccurate data. This finding corroborates previous research suggesting that while standardized tools are essential, people who fill them out may not complete some portions or provide insufficient details [25, 26]. Our study participants feel the comprehensiveness and accuracy of the documents' content may depend on the ability of persons collecting the information to attend to detail. This calls to mind notions of the sociomaterialist perspective, which highlight that forms and systems do not operate independently, but rather interactively through the individuals who use them [27].

While the documents (LTC-HAF and RAI-MDS) did not always meet the study participants' information needs, the short (five days) window for admission to LTC, health information infrastructure deficit, and staffing issue limit their ability to seek out missing information. This problem was accentuated when the site had no access to harmonized hospital EHRs. This is notable, as several studies have reported a lower staffing and EHR adoption rate in rural than urban regions of Canada and North America broadly [28-30]. Our findings also showed that while LTC providers would like to look up information from primary care EHRs, the generally

fragmented and unintegrated health information infrastructure in Canada makes this not possible [28, 31]. This highlights an imperative to invest in integrated EHR systems in bid to foster informational continuity across the continuum of care.

Since the documents and EHRs may not always meet the LTC providers' information needs, our study participants identified reaching out to the resident's family or the discharging primary or acute care providers as an alternative approach to adopt in a bid to fill information gaps. Particularly, direct provider-provider communication could strengthen effective information exchange during the transition process. This is in line with previous calls for direct, real-time communication or warm handoff between the discharging and receiving care providers during LTC transitions [32]. However, participants described rarely having opportunities for actual direct communication with discharging physicians. This may be in part due to professional power dynamics. The perceived differential response based on the requester's professional identity (e.g., nurse vs. nurse practitioner) that was noted in our data highlights implicit hierarchies that hinder interprofessional collaboration and efficient information flow [33, 34].

We noted a reliance on administrative staff, pharmacists or family members to fulfil information requests. The level of family involvement, particularly, in the patient's care becomes crucial for informational continuity because LTC providers struggled to obtain information from families when they were not actively engaged nor well-informed about the patient's health and personal care. Numerous studies have shown that active engagement of families in care enhances their preparedness for information sharing during care transition [35, 36]. Hence, the information needs of LTC care teams may be easier to address if families are actively involved in and well-informed about the care of older adults who are transitioning to LTC.

Lastly, the conceptual framework comprising three domains of factors influencing continuity of care during LTC transitions was revised (Figure 2) to incorporate a fourth domain – *Materials.* The materials domain is in cognizant of factors related to technology and documents that determine bear influence on informational continuity and continuity of care generally. The materials factors consider i) availability of or access to *electronic health records* and their and effective in supporting informational continuity; ii) the influence of the transitional care *document design* on care providers disposition to providing comprehensive information; and iii) availability of *guidelines and standards* that would lead to the provision of good quality and useful of information for the recipients in LTC. *Practice capacity*—highlighting the influence of workload, staffing, and timing constraint on informational continuity practices—was added to the practice features domain. Also, professional identity and hierarchy—illuminating the interplay of professional power dynamics based on one's professional identity—was added to the physician characteristics domain.

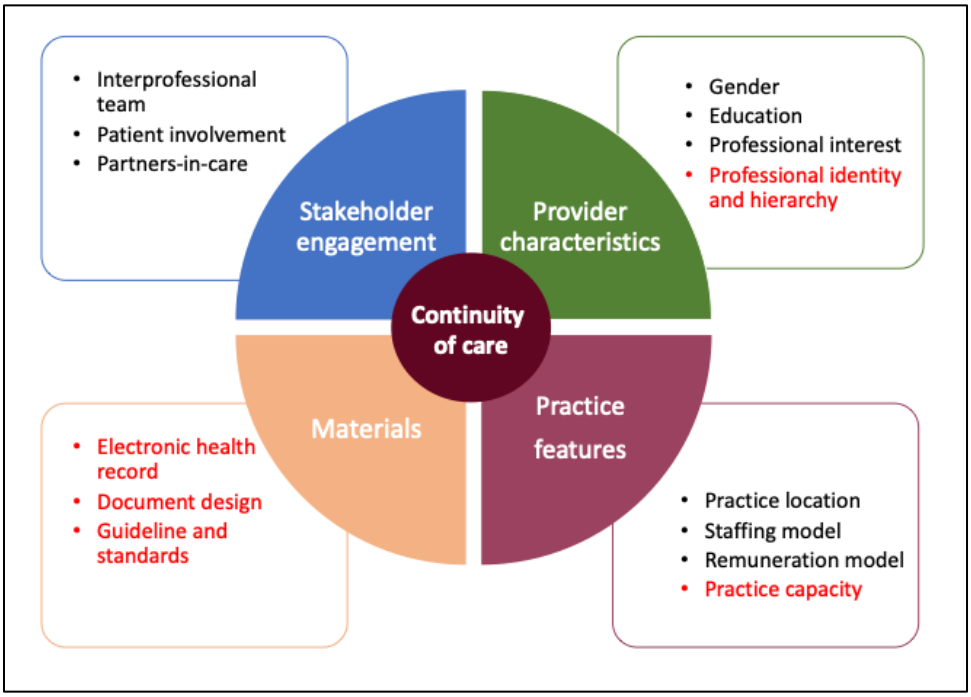

Figure 2. Revised conceptual framework for continuity of care during LTC transition

3.4.1 Implications

The study findings underscore several important implications for clinical practice, health professions education, and health policy, offering actionable recommendations to support informational continuity during LTC transitions. For clinical practice, the findings highlight the integration of direct cross-setting provider communications as a normative activity during the LTC admission process. This communication could enhance the quality and accuracy of information transferred. It could foster greater practitioner engagement in the information-sharing process and reduce the risk of omission or loss of important information during care transitions, thereby promoting continuity and patient safety.

Health professions education systems can also be leveraged to attune care providers to appreciate the significance of comprehensive information transfer [14]. In this regard, it would be pertinent to ensure focused content on LTC transitions in the core curricula of health professions training programs. This learning material should address the logistical aspects of transitioning care while also emphasizing the broader implications for continuity of care. Interprofessional education that highlights collaborative practice, effective communication strategies, and the import of the informational continuity dimensions of transitions in care will better prepare healthcare professionals to manage these complex processes [37].

From a policy perspective, the study identifies a need to improve access to harmonized EHRs across care settings. This is particularly critical in rural LTC facilities, where technological infrastructure may be limited. Harmonized EHRs would facilitate timely and accurate patient data sharing, thereby supporting informational continuity. Also, policy efforts should focus on increasing investment in LTC staffing levels. Adequate staffing will not only mitigate burnout but also allows LTC providers the time and capacity to engage in activities that can produce informational continuity, such as seeking out information from various sources. Collectively,

these recommendations centre a system-level approach to improving LTC transitions, focusing on communication, orientation and reorientation through education, information technology, and staffing.

3.4.2 Limitations

The study data was derived from a few cases, i.e., five out of the 615 licensed LTC facilities in Ontario [5]. However, we achieved data sufficiency as there were similar responses across cases, and additional interviews did not yield new insights. There was only one rural LTC facility compared to four urban LTC facilities in our sample due to difficulty with recruitment. The LTC sector is rife with high workloads, staff burnouts and turnovers [5]. It was difficult to recruit LTC staff for the study as they had to contend with balancing work commitments and participation in research. Practitioners who consented to participate in the study generously gave their break time for the interview. Also, the scope of the study is on care providers, missing the perspective of older adults and their families in this informational continuity discourse. In future work, an inquiry into the experiences and perceptions of older adults and their family caregivers on the information-sharing tools and process and their implications for informational continuity-related policies and practice would be desirable.

3.5 CONCLUSION

LTC providers value informational continuity during LTC transitions, deeming it crucial for a person-centred approach to care to optimize residents' care outcomes and quality of life. They adopt extra means to fulfil their information needs during LTC transitions since the documents they receive are often inadequate. However, they often grapple with several challenges related to organizational capacity, geography, technology, and power imbalances. To improve their ability to seek out more information may require effective interprofessional collaboration, incentivizing

services that support informational continuity, and increasing the workforce to lessen workload and allow more time for information gathering.

3.6 REFERENCES

1. Banerjee A: **An overview of long-term care in Canada and selected provinces and territories**. In: *Women and Health Care Reform.* 2007: 1-31.
2. Block S, Dhunna S: **What does it cost to care? Improving wages and staffing levels in Ontario's long-term care facilities**. In: *Canadian Centre for Policy Alternatives.* 2020.
3. Facchinetti G, D'Angelo D, Piredda M, Petitti T, Matarese M, Oliveti A, De Marinis MG: **Continuity of care interventions for preventing hospital readmission of older people with chronic diseases: A meta-analysis**. In: *International Journal of Nursing Studies.* vol. 101; 2020.
4. Holliday N, Ward G, Fielden S: **Understanding younger older consumers' needs in a changing healthcare market—supporting and developing the consumer market for electronic assisted living technologies**. *International Journal of Consumer Studies* 2015, **39**(4):305-315.
5. Oltca: **The Data: Long-Term Care in Ontario**. In: *Ontario Long-Term Care Association.* 2024.
6. Staykov E, Qureshi D, Scott M, Talarico R, Hsu AT, Howard M, Costa AP, Fung C, Ip M, Liddy C *et al*: **Do Patients Retain their Family Physicians after Long-Term Care Entry? A Retrospective Cohort Study**. *Journal of the American Medical Directors Association* 2020, **21**(12).
7. Chan KS, Wan EYF, Chin WY, Cheng WHG, Ho MK, Yu EYT, Lam CLK: **Effects of continuity of care on health outcomes among patients with diabetes mellitus and/or hypertension: a systematic review**. *BMC Family Practice* 2021, **22**(1).
8. Te Winkel MT, Damoiseaux-Volman BA, Abu-Hanna A, Lissenberg-Witte BI, van Marum RJ, Schers HJ, Slottje P, Uijen AA, Bont J, Maarsingh OR: **Personal Continuity and Appropriate Prescribing in Primary Care**. *The Annals of Family Medicine* 2023, **21**(4):305-312.
9. Casey L: **$400 fees, long-range patient transfers: What you need to know about Ontario's new long-term care rules**. In: *The Canadian Press.* 2022.
10. OH@H: **Guide to Placement in Long-Term Care Homes**. In: *Ontario Health atHome.* 2024.
11. Adler-Milstein J, Raphael K, O'Malley TA, Cross DA: **Information sharing practices between US hospitals and skilled nursing facilities to support care transitions**. *JAMA network open* 2021, **4**(1):e2033980-e2033980.
12. Gorenko JA, Konnert C, Speirs C: **Does Caregiving Influence Planning for Future Aging?: A Mixed Methods Study Among Caregivers in Canada**. *Research on Aging* 2021, **43**(5-6):203-213.
13. King M, Steele Gray C, Kobewka D, Grudniewicz A: **Continuity of care for older adults in a Canadian long-term care setting: a qualitative study**. *BMC Health Services Research* 2022, **22**(1):1-11.
14. Okoh AC, Shahu A, Gu R, Siu H, Howard M, Badone E, Grierson L: **Continuity of care during long-term care transitions: a scoping review of the Canadian literature**. *BMC Health Services Research 2025 25:1* 2025, **25**(1):1-13.
15. Meleis AI: **Transitions theory**. *Nursing theories and nursing practice* 2015, **4**:361-380.
16. Yin RK: **Case study methods**. *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* 2012:141-155.

17. Anthony S, Jack S: **Qualitative case study methodology in nursing research: An integrative review**. In: *Journal of Advanced Nursing.* vol. 65; 2009.
18. Halpern L, Phillips SD, Grasse NJ: **Non-Profit Long-Term Care in Ontario: How Financially Robust Is the System?** *Canadian Public Policy* 2022.
19. Daly T: **Dancing the two - Step in Ontario's long - term care sector: Deterrence regulation = consolidation**. In: *Studies in Political Economy.* vol. 95; 2015.
20. Wilkinson A, Haroun V, Wong T, Cooper N, Chignell M: **Overall Quality Performance of Long-Term Care Homes in Ontario**. *Healthcare quarterly (Toronto, Ont)* 2019, **22**(2).
21. Elo S, Kyngäs H: **The qualitative content analysis process**. *Journal of advanced nursing* 2008, **62**(1):107-115.
22. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, Burroughs H, Jinks C: **Saturation in qualitative research: exploring its conceptualization and operationalization**. *Quality & Quantity* 2017, **52**(4):1893-1893.
23. Government of O: **Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1**. In.; 2021.
24. Tuohy D, Fahy A, O'Doherty J, Meskell P, O'Reilly P, O'Brien B, Murphy J, Doody O, Graham M, Barry L *et al*: **Towards the development of a national patient transfer document between residential and acute care—A pilot study**. *International Journal of Older People Nursing* 2021, **16**(4):e12374-e12374.
25. Cwinn MA, Forster AJ, Adam Cwinn A, Hebert G, Calder L, Stiell IG: **Prevalence of information gaps for seniors transferred from nursing homes to the emergency department**. *Canadian Journal of Emergency Medicine* 2009, **11**(5):462-472.
26. Griffiths D, Morphet J, Innes K, Crawford K, Williams A: **Communication between residential aged care facilities and the emergency department: A review of the literature**. *International Journal of Nursing Studies* 2014, **51**(11):1517-1523.
27. Haider J, Sundin O: **Sociomateriality**. In: *Information Literacy through Theory.* edn. Edited by Hicks A, Loyd A, Pilerot O: Facet Publishing; 2023.
28. Anzalone AJ, Geary CR, Dai R, Watanabe-Galloway S, McClay JC, Campbell JR: **Lower electronic health record adoption and interoperability in rural versus urban physician participants: a cross-sectional analysis from the CMS quality payment program**. *BMC health services research* 2025, **25**(1):128-128.
29. Murphy P, Burge F, Director R, Wong ST, Patrick M, Ca MMd: **Measurement and rural primary health care: a scoping review**. *Rural and Remote Health* 2019, **19**(3).
30. Greenberg AJ, Haney D, Blake KD, Moser RP, Hesse BW: **Differences in Access to and Use of Electronic Personal Health Information Between Rural and Urban Residents in the United States**. *The Journal of Rural Health* 2018, **34**:s30-s38.
31. Görges M, Rush KL, Burton L, Mattei M, Davis S, Scott H, Smith MA, Currie LM: **Preferred Functions of Personal Health Records in Rural Primary Health Clinics in Canada: Health Care Team Perspectives**. *Applied Clinical Informatics* 2021, **12**(1):41-48.
32. Campbell Britton M, Hodshon B, Chaudhry SI: **Implementing a Warm Handoff between Hospital and Skilled Nursing Facility Clinicians**. *Journal of Patient Safety* 2019, **15**(3):198-204.
33. Okpala P: **Addressing power dynamics in interprofessional health care teams**. *International Journal of Healthcare Management* 2020, **14**(4):1326-1332.

34. Okoh AE, Akinrolie O, Bell-Gam HI, Adandom I, Ibekaku MC, Kalu ME: **Nigerian healthcare workers' perception of transdisciplinary approach to older adults' care: A qualitative case study**. *International Journal of Care Coordination* 2020, **23**(2-3):92-106.
35. Bucknall TK, Hutchinson AM, Botti M, McTier L, Rawson H, Hitch D, Hewitt N, Digby R, Fossum M, McMurray A *et al*: **Engaging patients and families in communication across transitions of care: An integrative review**. *Patient Education and Counseling* 2020, **103**(6):1104-1117.
36. Manias E, Bucknall T, Hughes C, Jorm C, Woodward-Kron R: **Family involvement in managing medications of older patients across transitions of care: A systematic review**. *BMC Geriatrics* 2019, **19**(1).
37. Nguyen HTT, Wens J, Tsakitzidis G, Valcke M, Nguyen HT, Duong TQ, Nguyen CT, Hoang DA, Hoang YTB, Duong LTN *et al*: **A study of the impact of an interprofessional education module in Vietnam on students' readiness and competencies**. *PLOS ONE* 2024, **19**(2):e0296759.

Appendices

Appendix A: Qualitative Interview Guide

Introduction & Purpose of Interview:

Thank you for participating in this study.

As you may know, we are conducting a study to understand the information that care teams in long-term care (LTC) facilities receive when older adults transition to LTC and consider to be most important in supporting new LTC residents and strategies to seek it out.

We're doing this study because the longstanding provider-patient relationship between older adults and their family physicians is often disrupted as older adults enter LTC homes. However, patients who maintain longitudinal provider-patient relationships experience better overall health outcomes. While relational continuity is lost during the LTC transition, patient health information is handed over to the healthcare team at the LTC facility. To ameliorate the impact of discontinuity, this project seeks to understand how best care providers in LTC can support improved informational continuity during LTC transition, the information they consider to be critical and the best methods to obtain the information.

Turn the recording device on.

So, I have a number of questions for you that relate to talking about the strategies [DOCs/admission coordinators/registered nurses/nurse practitioners/social workers/physiotherapists/physicians, etc.] employ to promote informational continuity, the information they receive or would want to receive, the role of the interprofessional team in the LTC homes, and your perceptions of facilitators and barriers to fostering informational continuity during the LTC transition process.

I also invite you to tell me anything you feel is important for us to know about the things that may motivate you and other care providers in LTC to work with the elderly population and play a central role in their LTC transition. I also want to remind you that you don't need to answer any uncomfortable questions, and we can stop the interview at any time. The interview will be recorded; however, each interview will be de-identified, meaning that anything said will not be linked back to you in order to protect your identity.

Is this okay?

I also wanted to ask if you are okay with me collecting the demographic information about you and your current practice, and that the answers you have provided are how you want to be represented.

Let's begin.

Interview Questions

Long-term Care Handover Activities

1. Let's talk about your perspective on continuity of care during LTC transitions.
   - What are the specific tasks involved in the transition/admission process?
     - I would like you to describe your LTC admissions process:
       - How does a resident application get reviewed?
       - Who coordinates contact with the family?
       - How is information collected/received from Ontario Health at Home?
       - What is the timeframe for all this work, etc.?
   - What are the things you feel contribute to successful transitions/admissions?
   - What are some of the things that aren't done yet, but you think would help with a successful admission/transition for everyone involved?

   a. Please can you describe a typical transition?
      i. Describe transitions that may have gone more smoothly?
      ii. Describe transitions that may have gone less smoothly?
   b. What are your sources of patient information during the transition?
   c. What kind of informational do you typically receive during LTC transition?
   d. What kind of information do you consider valuable and would like to be included in a good-quality patient handover note during the transition to LTC?
   e. Please can you describe what an ideal LTC transition should look like?
      i. Is your ideal LTC transition attainable in the Ontarian context? If so, how?
   f. In your view, does computerized medical records have any role in enhancing informational continuity?
      i. If so, in what ways can it contribute to improving informational continuity?
      ii. If no, why do you think it may not be useful in improving informational continuity?
   g. **For physician,** what practice model (group/solo; remuneration) are you in and how do the features of that model support/hinder informational continuity during LTC transition?
      i. What features are particularly relevant?
      ii. What could change to make things better?
   h. Let's talk about type of activities you perform during the transition to enhance informational continuity.

    i. Who do [Directors of care (DOCs)/Admission coordinators/registered nurses/nursing practitioners/social workers/Physiotherapists/physicians] (including you) communicate with in the process?
    ii. What assessments do you perform or need to perform?
    iii. What documents do you fill in the process?
    iv. What strategies do you employ to promote informational continuity?

i. In your view, what is the utility of an interprofessional team effort to enhancing informational continuity?
    i. Who should be the members of this interprofessional team?
        - Should it include patients and their families/relatives?

j. Do you have any window of opportunity to communicate with the before-transition family doctors during LTC transition?
    i. If so, how often does it occur?
    ii. How does it impact the transition process and the patient care?
    iii. How can it be consolidated upon?

k. Let's talk about sociocultural beliefs and environmental influence
    i. Could you describe the influence of the older adult and practitioner's cultural beliefs and attitudes on fostering effective informational continuity during LTC transition?
    ii. Could you describe the wider sociocultural and environmental factors that can foster effective informational continuity during LTC transition?
    iii. Could you describe community resources that can foster effective informational continuity during LTC transitions?

2. Facilitators and barriers to optimizing the informational continuity of care during LTC transition. (Note: *The interviewer will probe for greater details about factors that participants have already mentioned and other factors that may have not been mentioned directly*).
    a. What factors related to patients and families do you think are relevant to the success of a transfer or maintaining informational continuity?
    b. What factors related to the LTC care team do you think are relevant to the success of a transfer or maintaining informational continuity?
    c. What factors related to the provincial and Federal-level policies do you think are relevant to the success of a transfer or maintaining informational continuity?
    d. In what ways can medical education support improved informational continuity?
        i. Can you identify specific educational antecedents that could enhance informational continuity?

Concluding Interview

3. In your view, what solutions could you proffer to improve informational continuity during the transition to LTC?
4. Is there anything else you would like to share with us that you feel is important?

Thank you.

Appendix B: Codebook

Codes

Name	Description
Actors involved in the transition	
Barrier	Comprises factors or situations hampering or posing a barrier to continuity of care or smooth LTC transition.
Poor stakeholder engagement	Describes the limitations pertaining to features of patient, their family, or various healthcare providers on the transition process
Poorly prepared handover documents	Describes scenarios where physicians fill out the transition/handover notes (CCP, LTC admission forms, etc.) poorly.
Reading the documents	Describes situation whereby the LTC physicians may not read the care transition/handover note
Time constraint	Describes how physicians' workload or busy/tight schedule limit their ability to dedicate adequate time to working on the LTC transition note or the whole transition process.
Unable to work across settings	Captures the reasons why many family physicians are not able to work in or see their patients who are admitted to LTC.
Facilitators	
Benefits of EHR	Describes the benefits of electronic medical records (EHRs).
Confident in the document	Describes factors and scenarios pertaining to the credibility of/trust on the accuracy or quality of the information transmitted during the transition process.
Good quality documents	Describes scenarios where physicians filled out the transition/handover notes (CCP, LTC admission forms, etc.) effectively.
Good stakeholder engagement	Describes the positive influence of features of patient, their family, or various healthcare providers on the transition process
Motivated by altruism	Describes instances where family physicians are motivated to work on the LTC transition documents because doing it will be in the patient's best interest.
Same MRP in both settings	Describes scenarios where the patient is able to maintain the same most responsible provider (MRP, physician) in both community and long-term care.

Name	Description
Physician Characteristics	
Location of medical education	Canada or Foreign-trained medical graduate. Foreign trained will also consider Canadians who studied abroad and international medical graduate
Physician gender	Considers influence of physician's gender (man, woman, etc.) on their ability to foster informational continuity during LTC transition
Professional interest	This considers whether the physician had interest in the care of the elderly and how it shaped their practice and inclination to support informational continuity during LTC transition.
Practice features	
Practice location	This considers the location of physicians' practice (urban, semi-urban, rural) and it may influence their ability to support informational continuity.
Remuneration model	
Capitation	Describes the influence of capitation remuneration model on a physician's ability to facilitate informational continuity during LTC transition.
Fee-for-service	Describes the influence of fee-for-service remuneration model on a physician's ability to facilitate informational continuity during LTC transition.
Salary	Describes the influence of salaried remuneration model on a physician's ability to facilitate informational continuity during LTC transition.
Staffing model	
Closed staffing model	Closed physician staffing model describes a situation where an LTC-contracted (or staff) physicians are responsible for the care of all LTC residents
Open staffing model	Open physician staffing model describes a situation where family physicians attending to LTC residents are not direct employees of the LTC home
Processes	Factors that influence continuity of care during LTC transitions and describe processes and activities family physicians engage in to facilitate continuity of care during LTC transitions.
Assessments family physicians perform	Describes any assessments that family physicians conduct during the transition process or if they don't conduct assessments.

Name	Description
Current information	Describes the types of information family physicians currently transfer to LTC during the transition process
Documents transferred	Describes the type of documents family physicians transfer to LTC during the transition process
Improving the information	Describes the types of information family physicians would prefer to transfer to LTC and they perceive would enhance informational continuity
Information from other healthcare providers	Describes the type of information family physicians seek from other healthcare providers during LTC transition
Information from patient	Describes the type of information sought from patients [or their substitute decision maker] during transition
Interactions-or-communication	
Provider-patient interaction	Describes instances of communication (via phone call, emails, face-to-face) between community family physicians and their patients/family during the transition process.
Provider-provider interaction	Describes instances of communication (via phone call, emails, face-to-face) between community family physicians and their LTC counterparts during the transition process.
Patient attributes	Describes patient health or personal/social attributes or characteristics that may promote or hinder smooth LTC transition
Preparation and knowledge	Describes instances where physicians educate/prepare patients/family and how it facilitates informational continuity and good transition experience.
Stakeholder engagement	
Interprofessional team	Describes the roles of and activities family doctors and other interprofessional healthcare providers engage in to facilitate informational continuity during the LTC transition
Partners-in-care	Describes the roles of and activities patient relatives and other non-medical groups involved in their care engage in to facilitate informational continuity during the LTC transition

Name	Description
Patients	Describes the roles of and activities patient engage in to facilitate informational continuity during the LTC transition
System Navigator	Describes communications with and activities of stakeholders like care coordinators or system navigators from the CCAC/HCCSS/LHIN during the long-term care transition process.
Tension on choices of information	Describes situations where there are tensions on the type of information to include in the transition/handover notes.
Recommendations	Describes participants' perceived solutions to enhancing informational continuity during LTC transition.
Cross-setting communication	Describes facilitating communication between care physicians in the community and their long-term care counterpart
Digitizing the transition document	Describes the recommendations to improve transition note via electronic or digital method.
Downstream policy focus	Entails that interventions to improve informational continuity during LTC transition should be downstream-driven.
Educational interventions	Describes educational interventions that could prepare family physicians to effectively facilitate informational continuity during LTC transitions.
Learning the documentation during residency	Describes the knowledge and skills family physicians should acquire during residency to prepare them to effectively facilitate informational continuity during LTC transitions
Long-term care rotations	Describes the benefits of LTC rotation during residency to prepare them to effectively facilitate informational continuity during LTC transitions
Improving compensation	Considers improving the money physicians receive to fill out the transition note.
Improving time	Considers improving issues pertaining to time constraint to effective informational continuity.
Information integration	Entails collating information from all stakeholders, including the care providers, patients and their family in one file/document.

Chapter 4: A qualitative descriptive study of family physicians' perspectives on informational continuity during patient transitions into long-term care

Authors: Augustine Chukwuebuka Okoh, Aimun Shah, Christine Lin, Paranshi Gupta, Naisha Dharia, Caroline Caswell, Henry Siu, Michelle Howard, Ellen Badone, Lawrence Grierson

This chapter presents a qualitative descriptive study describing the information that family physicians think is most important for facilitating continuity of care during patient transitions from community-based care into long-term care relative to the information they actually send to the long-term term care team. It also describes the communications activities in which family physicians engage when providing this information. In doing so, the study illuminated the factors that influence the family physician's ability to provide all the information that they think is important. This chapter is designed to address the third objective posed at the outset of this dissertation: *to describe the information family physicians provide and would like to provide to enhance informational continuity for patients transitioning to long-term care and factors that influence their ability to provide the desired information.*

4.0. ABSTRACT

Background: Many older adults lose contact with their family physicians as new providers take over their care in long-term care (LTC). To address this, comprehensive patient handoff notes are vital for ensuring care continuity. In Ontario, family physicians share healthcare information during LTC transitions, but available evidence suggests that this information exchange is not optimized. This study described the information family physicians would like to provide in support informational continuity for patients transitioning to LTC, the information that they actually provide, and the factors that influence their information exchange practices.

Methods: Using a qualitative descriptive design, 13 semi-structured interviews were conducted with family physicians who work in continuity-based community practice in Ontario and who regularly engage in information exchange to support patient transitions into LTC facilities. A conceptual framework for continuity of care during LTC transition guided data collection and analysis. Data were analysed using unconstrained deductive approach.

Results: Participants varied in terms of age, gender, years of practice, and the location (urban, suburban, rural) and payment model (fee-for-service, capitation) of their practice. Their descriptions highlighted that they uniformly believe that family physicians should aspire to provide a comprehensive set of biomedical and psychosocial information during patient transitions to LTC, but in practice, they provide predominantly biomedical information. This information is typically communicated via the Province's standard LTC Health Assessment Form (LTC-HAF). Notably, participants differed in the amount of information that they transferred via this form, with some engaging with the documentation in only a minimal fashion while others maximized the information included in the form, provided additional documents, communicated directly with the receiving LTC team, and/or took time to prepare families to transmit information on behalf of their loved one. These differences were clearly driven by systemic constraints associated with the physicians' practice capacity, but also by their personal perceptions of the true value of the information that they transmit to LTC.

Conclusion: The LTC-HAF serves as a foundational tool but does not serve to optimize informational continuity during LTC transitions in all cases. Enhancing the family physicians' ability to support informational continuity during LTC transitions may involve the development of minimal standards for form completion, more interprofessional collaboration during transitions, and enhanced LTC-focused education during medical training.

Keywords: Informational continuity, Continuity of care, Transition, Long-term care, Primary care

4.1 INTRODUCTION

Like most countries, Canada is experiencing a significant demographic shift, with individuals over 65 years old projected to increase from 16.9% to 22.7% of the population between 2016 and 2031, and those over 85 increasing three-fold by 2046 [1, 2]. In Ontario, older adults over 75 years old are estimated to double between 2017 and 2037 [3].The rapidly growing senior population translates to increased demand for long-term care (LTC) beds.

Relational continuity refers to maintaining ongoing patient-provider therapeutic relationship over a long time [4]. Research indicates that this type of continuity of care is linked to more effective prescribing, lower hospital admission and emergency department visit rates, reduced mortality, better therapy adherence, increased physician and patient satisfaction, enhanced preventive care, and lower healthcare costs [5-7]. The evidence underscores the value of patients maintaining a consistent relationship with a primary care provider, often a family physician, who understands their evolving health needs and personal circumstances. During transitions to LTC, however, over 87.9% of older adults in Ontario who had a family physician lose that relationship when entering a LTC facility [8]. This is because most LTC facilities in the province operate a closed physician staffing model, where physicians employed by the facility assume primary responsibility of care for all their residents [8]. Ultimately, this means relational continuity of care is disrupted during LTC transitions.

The literature has examined the implications of a loss of relational continuity on health outcomes during transitions to LTC, highlighting higher rates of medical errors, suboptimal care, rehospitalization, and mortality [8-11]. To mitigate the impact of loss of relational continuity, informational continuity becomes essential for maintaining consistent and coherent care. Informational continuity refers to the efficient flow of comprehensive patient information across care settings. It implies sharing comprehensive information about patients' medical conditions,

health history, illness experiences, preferences, values, and circumstances when planning and implementing healthcare services as patients move from one care setting to another [4, 12]. Informational continuity, in turn, aids management continuity - the maintenance of coherent care plans that are consistently responsive to the patients' changing needs across the continuum of care [4].

Family physicians in Ontario engage with the LTC transition process, according to the tenets of the *Fixing Long-Term Care Act, 2021*, which requires them to fill out the Long-Term Care Health Assessment Form (LTC-HAF) when their patients move to LTC. This form aims to ensure that important patient information is received by the LTC providers [13, 14]. While the policy mandates the transmission of the LTC-HAF, it does not detail minimal standards for completion, nor does it mandate direct communication (written or verbal) between the discharging (primary care) and accepting (LTC) care providers during the transition process. Research evidence from this domain indicates that family physicians, especially those practising in urban areas, rarely get involved in such bidirectional communication [15].

Qualitative case study research of LTC facilities in Ontario [Chapter 3] suggests that the information family physicians transmit to LTC may be limited to brief descriptions of diagnosis, allergies, medications, and medical history without rich description of the relevant health history and patient preferences that have been determined through the longitudinal patient-family physician relationship. Accordingly, the current study examines the information exchange process from the family physician perspectives, seeking description on the information they believe is important, the information they provide, how they provide it, and the factors that influence their information sharing decisions. This study supports the overarching goal of

developing improved communication and information exchange during patient transitions into LTC.

4.2 METHODS

We used Sandelowski's qualitative descriptive design [16], focusing on the experiences and perspectives of the patient-discharging family physicians. Qualitative description focuses on eliciting, describing, and representing participants perspectives about the phenomenon of interest. It stays close to the data and offers low-inference interpretation.

Theoretical framework

This study was guided by a conceptual framework for continuity of care during LTC transition, which was first developed in a recent scoping review [15] and revised in another study (Chapter 3). The framework integrates the perspectives of *Transitions Theory* and *Transdisciplinarity*. While *Transitions Theory* illuminates the roles of various actors and the influence of practice environments in a patient's transition [17], *Transdisciplinarity* espouses specifically the collaboration of formal (and informal) care providers in care delivery [18]. The conceptual framework (Figure 1) is comprised of four broad factors that influence continuity of care during LTC transitions: stakeholder engagement (level of involvement of patients, partners-in-care, and interprofessional care team), practice features (influence of remunerative model, staffing model, practice location, and practice capacity), physician characteristics (professional interest, previous experiences, and profession power dynamics), and materials (electronic health records, document design, and quality of information). This framework informed all stages of the study including the development of our interview guide and data analysis.

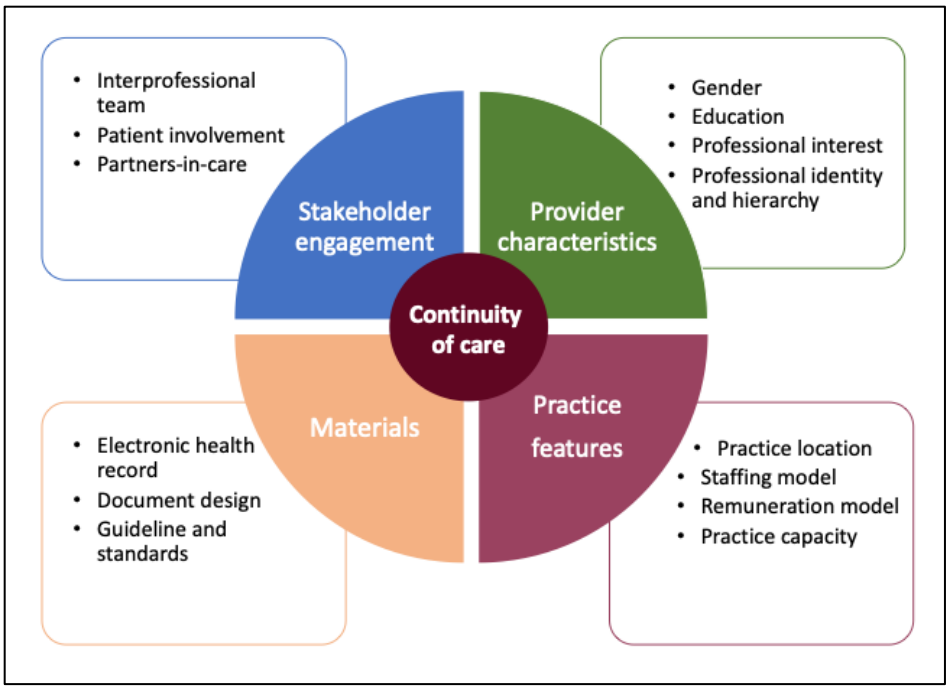

Figure 1. Revised conceptual framework for continuity of care during LTC transition

Ethics

We obtained ethics approval through the Hamilton Integrated Research Ethics Board (#16209), and all participants completed informed consent form before enrolment.

Recruitment

We purposefully recruited family physicians with a continuity-based community primary care practice in Ontario [19]. They were invited through advertisements circulated by the Greater Hamilton Health Network, co-investigators' professional networks (LG, HS, MH), and social media (LinkedIn and X [twitter]). We also leveraged snowballing techniques as participants were asked to share study details with colleagues who they believed could offer insight on the topic. We aimed to recruit participants who varied with respect to their geographic location (rural, suburban, urban), remuneration model (fee-for-service, salary, capitation, blended), and career stage (early career (≤5 years), established (>5 years)).

Data collection

Each participant was invited for a one-hour, audio-recorded, individual interviews conducted via Zoom video conferencing by the principal author (ACO, a man-identifying doctoral student). The semi-structured interview guide was developed, piloted, and refined by the full research team. It probed family physicians' perspectives about the value of care continuity, the information they transmit and would like to transmit to LTC, the strategies they employ to promote informational continuity, and their perceptions of facilitators and barriers to engaging in activities that support informational continuity during the LTC transition process. Adopting a transdisciplinary practice lens, we sought to elicit family physicians' thoughts on the utility of incorporating inputs from patients, other health care professionals, and partners-in-care such as family caregivers and support workers. We transcribed and deidentified the interviews before analysis.

Data analysis

Data were analysed using an unconstrained deductive approach [20], which allows us to reflect our analysis of interviews through the lens of the LTC transitions-continuity of care conceptual framework [15]. Guided by the framework, we constantly reflected on the interplay of stakeholder engagement (e.g., communication opportunities), practice features (e.g., remunerative model), and physicians characteristics (e.g., physicians' education) in shaping participants' approach to information sharing during LTC transitions. Data were managed on NVivo15 (Lumivero LLC, Colorado).

The coding framework was developed by ACO through a preliminary analysis of three transcripts and tested by AS and LG. Six authors carried out the coding process, ensuring that each transcript was double-coded. The coders were a man-identifying doctoral student (ACO), a woman-identifying research coordinator with a bachelor's-level degree in health sciences (AS),

and four women-identifying undergraduate-level students in a health sciences program (CL, ND, PG, CC). All coders analysed two initial transcripts and discussed the process and their reflections before distributing the transcripts for double coding. Disagreements between coders were resolved by a third coder (ACO or LG). The analytic process involved focused coding and aggregation of top-level codes to create thematic categories from an iterative review of the data [21, 22]. Findings were regularly shared with the full research team, who offered feedback to enhance credibility and ensure relevance to the policy context. Data collection and analysis ceased at the point of data sufficiency, when no new information arose from more interviews [23]. To enhance rigour, we kept interview memos which allowed us to provide interpretation to each participant's transcript during data analysis. Reflexive journals were kept during analysis to check and minimize the influence of our biases, beliefs, and personal experiences on the analysis and interpretation of results [24].

4.3 RESULTS

We interviewed 13 participants who varied across sociodemographic, career stage, and practice characteristics (*Table 1*).

Table 1. Participants' demographic characteristics (n=13)

Demographic characteristics	
Age (years)	44.1 (±10.4)
Gender	
Men	5 (38.5%)
Women	8 (61.5%)
Career stage	
Early career (≤5 years)	3 (23.1%)
Established (>5 years)	10 (76.9%)
Remuneration model	
Fee-for-Service	1 (7.7%)
Capitation	7 (53.8%)

Salary	2 (15.4%)
Blended	3 (23.1%)
Practice location	
Urban	7 (53.8%)
Suburban	3 (23.1%)
Rural	3 (23.1%)
LTC practice experience	
Yes	5 (38.5%)
No	8 (61.5%)

All study participants felt that they had a moral duty to facilitate the provision of good-quality care to older adults, and some expressed a sentiment that the older adults have given so much to society and deserved to be treated with dignity in their later years. In this regard, participants affirmed that they value continuity of care for patients when they transition from one care setting to another. Although they would like to remain the most responsible physician for their patient who transition to LTC, this is often not feasible in the context of their other professional responsibilities. For instance, Participant 2 said:

> *"I can see four more people at the same time it would take me to go there… Travel takes time… It doesn't really make sense for us to leave the clinic for efficiency purposes and monetary purposes and life purposes."*

Accordingly, they embrace informational continuity as a viable surrogate for relational continuity. They opined that informational continuity was pertinent to maintaining consistent and good-quality care for their patients who move into LTC facilities.

The information that participants described that should be transmitted in support of informational continuity cut across both biomedical and psychosocial categories. They believed biomedical information pertaining to medical history, medical conditions, surgeries, allergies, sensitivities or adverse effects experienced with any drugs, use of oxygen, resistant organisms screening, chest x-rays, Tuberculosis skin test, immunization record (last flu shot, tetanus,

pneumococcal), physical functional abilities, mobility aids, incontinence products, and advance care plans (e.g., 'do not resuscitate' instructions) was valuable to support informational continuity of care. With respect to the psychosocial domain, they believed information about cognitive function, behavioural issues like wandering and aggression, family and social background, addictions, mental health and trauma history, hobbies, habits, and spiritual and cultural practices to be important.

The information family physicians transfer

Our participants shared that they rarely communicate all of abovementioned information to LTC providers during transitions. They indicated that the biomedical information was often limited to a brief medical history, current medical diagnoses, infectious disease assessments, current medications, and allergies. The psychosocial information was even fewer and was usually about safety concerns (e.g., wandering behaviours). Any discharge summary for recent discharge from hospital or surgeries would be included in the documents they send to LTC, depending on the patient and if the information is available to them.

The data revealed several justifications for suboptimal information exchange, including prevailing concerns about information redundancy or obsoleteness, efforts to support efficient LTC placement for patients with aggressive behaviours, and the material limits of the LTC-HAF documents and completion standards.

The information is not actually all that valuable

Despite generally affirming the value of informational continuity of care, this was not always reflected in practice. Our data reveals a tension pertaining to balancing the desire to provide comprehensive information with the perceived utility of the transmitted information

Many participants expressed uncertainty that the LTC providers actually use the information they provided. This was seen as demotivating the provision of a more comprehensive information. For instance, there were concerns that the LTC-HAF may be a duplicative activity:

> *"I feel like when somebody goes into long-term care, they have a full assessment that needs to be done within a certain timeframe after they come into the care home. So, a lot of the time, the physician working in the long-term care home is gathering their own information." (Participant 4)*

Furthermore, participants were also sceptical about the utility of the information they provided because it does not always capture changes in patients' health over time:

> *"I think probably the part that I struggled most as a physician to complete is just that piece about what the patient is and isn't able to do on their own … To get into long-term care, depending on their triage, can be like months to a year. I don't know about their functioning when I'm filling out that form compared to when I requested that they be considered for long-term care." (Participant 7)*

Interestingly, several participants suggested that their professional scope also limited their ability to provide comprehensive biopsychosocial information that supports care continuity. These individuals opined that appropriately holistic information exchange should include inputs from the interprofessional collection of care providers involved in the patient's care, but that the LTC-HAF was the exclusive responsibility of the family physician:

> *"The care coordinator should be taking our opinion and combining that with OT [occupational therapy] and PT [physiotherapy] and speech language pathology, and whoever else needs to be involved… and then transmit that to the long-term care home the patient applied for." (Participant 5)*

Comprehensive information exchange is not always in the patient's best interest

A few participants highlighted that the system of allocation of LTC spots seems to implicitly promote the withholding of psychosocial information that may influence LTC placement decisions. This was most prominently discussed with respect to patients who demonstrate aggressive or socially problematic behaviours. In these circumstances, the family

physician may choose to not include this information in order to encourage their welcome into the home:

> *"He had been extremely physically aggressive, and so I had put that in a documentation only to get a call to tell me that I should not put this in because they won't take him. And I thought that was strange because it's better to let them know what is going on. I put in what I could, and it took longer for the family to get a home placement." (Participant 1)*

The LTC-HAF is a limited document

Notably, most participants pointed to the material limits of the LTC-HAF as major drivers of their decision to provide less than optimal information.

Specifically, they noted that the structure of LTC-HAF accommodates only a limited selection of information. It does not offer enough space to provide a more detailed patient history nor prompts to include some diagnostic information as well as psychosocial information such as spiritual or cultural practices. In this regard, one participant said:

> *"[T]he way the information is asked for result in less information being given as opposed to more. So, for example, if I fill out an insurance form, they'll often ask for consultant's notes or imaging results… I don't remember seeing specific requests for that kind of information on admission to nursing home form." (Participant 3)*

Augmenting this, participants also pointed out that there are no clear standards or thresholds for the minimal information family physicians should include in the LTC-HAF. Indeed, we heard that the LTC-HAF is usually accepted regardless of any missing information or any space that was left blank. Hence, they would often leave sections blank when the relevant information was not readily available: "*If I have it in my chart, I'll send it. If I don't have it, I just leave it blank" (Participant 4)*.

When more information exchange is deemed necessary

To offer more information, almost all the participants said that the LTC-HAF is frequently sent along with the cumulative patient profile (CPP). The CPP is a structured

summary of the patient's medical history and current health information, which is contained in each practice's electronic health record. A typical of the CPP contains personal information, family history, current problem, history of past health, current medication/treatment, allergies, immunizations, risk factors. The CPP is not a mandatory document, the LTC-HAF is the only mandatory document family physicians are required to send. Because the LTC-HAF is inadequate or may not contain all the information they would like to send to LTC, participants said that they usually include CPP of their own volition. However, participants highlighted that the inclusion of CPP is insufficient to fully achieve informational continuity because it ultimately reinforces the biomedical information but hardly contain any psychosocial information apart from family history. While all participants shared a sense that the information prompted by the LTC-HAF and the CPP was often suboptimal, a few described extending their efforts so as to provide the LTC care team with more information.

Some of these participants described appending additional notes pertaining to the patient's condition:

> *"In addition to providing the CPP [cumulative patient profile], I include a bit of a narrative on what has happened recently and what's really caused the change to require long-term care." (Participant 1)*.

While others described engaging in direct communication with the LTC providers: *[T]he handover to the physician, if that doctor is in the hospital for the week, it could literally be face to face" (Participant 9).* Notably, all participants – whether they participated in direct provider-provider communication – asserted a belief that this practice would enhance informational continuity and ensure greater and clearer information exchange.

The most common strategy that was described by participants who went beyond the completion of the LTC-HAF and CPP, however, was to prepare the patient's family members

and caregivers to be able to present information about their loved one to the LTC team during and following the transition:

> *"I find the best way to do it is to really educate the caregiver, whoever is going to be their main contact… and you just be very open with all the diagnoses, all the stuff that's going on, all their medications, why they're on it. That's how you have the safest transition realistically, because it's not me that's talking to the long-term care people, it's the family that ends up talking to the long-term care people." (Participant 2)*

Factors that influence family physician decisions to provide more information than that included in the LTC-HAF

A relatively small proportion of our participants described providing more information than prompted by the LTC-HAF. Despite this, we were able to identify some common factors within the descriptions that bore relevance on to or not to do so.

Practice Capacity and Fee-For-Service Remuneration

Most prominently, the decision not to go beyond the form was universally couched in the capacity required to meet all the needs of a practice. Family physicians grapple with balancing their time across direct patient care and a growing amount of paperwork. With this in mind, our participants regularly described that they did not have adequate time to "add in" more than is minimally required:

> *"Ideally, a physician shouldn't have a full 8h clinic with patients and then have one million forms like this to fill out … If you want the most fulsome history and information to go to the long-term care facility to support the patient's ongoing continued good care, it needs to be resourced, right?" (Participant 7)*

These descriptions of time allocation were almost universally tied to the remunerative model that defined the practice. Specifically, participants working under fee-for-service remuneration were unlikely to allocate much time to administrative services because of the opportunity cost of providing direct patient care services with higher compensation:

> *"…pure fee-for-service disincentivizes people from doing this… takes a long time, and they could be seeing other people… If you're a salaried doc[tor], truthfully, it doesn't matter to you, either way you're getting paid to do the work." (Participant 9)*

Rurality and Urbanicity

Our data also showed that information-exchange behaviours differed across rural and urban contexts. Notable, in this regard, was that participants in rural settings were more likely to extend their efforts towards informational continuity because they work across acute care, primary care and LTC in their regions. The *tight knit* healthcare arrangements in the rural areas facilitated easy direct provider-to-provider communication with LTC physicians during transitions. Often the physicians receiving the patients within LTC were described as members of the participants' group family practice or someone they know quite well:

> *"We're really privileged from the point of view that all the primary care providers in this whole area work under one roof. So, those doctors who are at long-term care, if they're not currently working in my clinic, they used to… they don't just get the form in the discharge summary... So, there's a warm handover, whether it's a phone call or direct face-to-face because we're sitting in the same office." (Participant 9)*

On the other hand, the participants working in urban and suburban areas described that it was rare for them to getting involved in such bidirectional communication; although they affirmed that they value the opportunity for direct provider-provider communication when possible:

> *"I think that would be valuable, and I've had an experience where a physician that I knew was taking over the care of somebody. And so, we got to actually have a conversation and that made me feel like that patient was probably going to get a little bit of a smoother transition in care." (Participant 8)*

Previous Experience Working in LTC

LTC practice experiences and/or immersive educational experiences in LTC also influenced the participant approach to LTC transitions. Specifically, participants with those

experiences were more inclined to go beyond the LTC-HAF to ensure informational continuity for their patients:

> *"I worked for 13 years in long-term care… and obviously I can't have the same relationship continuity when my patients go into long term care now. But I do feel I have an obligation and a role to play to provide good informational continuity." (Participant 11)*

4.4 DISCUSSION

Our findings provide insight into family physicians' perceptions of and engagement with information sharing during the LTC transition process. While participants acknowledged the LTC-HAF as an essential document, they expressed concerns regarding its limitations and the time they had available to complete it comprehensively. These concerns track nicely with a survey by Tuohy and colleagues [25], which revealed care providers' preference for efficient interoperable, computerized documentation that saves time, and improves the amount of patient-relevant information provided. Furthermore, the lack of clear minimum information standards associated with the document may lead to practitioners providing less than comprehensive information [26]. Indeed, research shows that information standards promote optimized information transmission during care transitions [25, 27].

Since the LTC-HAF was perceived as inadequate to achieve informational continuity, some of our study participants resorted to providing extra documents (CPP and narrative summary), educating family caregivers, or communicating directly with LTC team, although these efforts were inconsistently realized. Notably, these activities were common among individuals with a previous LTC education and practice, highlighting the pivotal influence of these experiences on family physician's disposition to support informational continuity. This corroborates several studies showing that LTC experience during training is associated with physician's preparedness for continuity-based practice [8, 28, 29].

A salient finding in this study pertains to the constraints and incentives to practice behaviour imposed by remunerative models. For instance, fee-for-service physicians were less likely to allocate time to paperwork, whereas salaried physicians described fewer practice-level barriers in completing the LTC-HAF. The literature corroborates this finding also, showing that the fee-for-service remuneration model is associated with reduced time allocation to low paying indirect care services, such as paperwork, and more time allocation to care activities that are financially incentivized [30-33]. In principle, a major drawback of the fee-for-service model is the oversupply of high-paying services irrespective of likelihood to improve outcomes, whereas as of low-paying, undervalued services that are essential to the health and wellbeing of a given population may be undersupplied or neglected [34]. However, nuances exist as not all physicians respond to financial incentives uniformly because professional ethics, patient relationships, and institutional norms modulate behaviour. For instance, the American Medical Association's Code of Medical Ethics clearly states that physicians must never prioritize their financial interests over the well-being of their patients. Physicians who uphold such ethical codes are unlikely to intentionally modify their practice decisions based on financial incentives [35, 36].

This collection of results is notably evocative of the *Sociomateriality Theory*, which underscores the complex and dynamic relationship between materiality and social practices in shaping organizational practices and outcomes [37, 38]. The theory argues that the manifest behaviours of actors and organizational practices are a result of the interactions between material and social elements constantly co-constituting each other [37]. The material elements are perceived as not just passive tools but actively shape and are shaped by actors' practices [39, 40]. Thus, sociomaterialist perspective helps us to make sense of the role of technology and other material objects in organizational life, and how these objects are shaped by the organizations'

social and cultural factors [40, 41]. Here, the theory draws our attention to the role of tangible (e.g., LTC-HAF, EHR) material objects and intangible (e.g., policies, guidelines) constructs in shaping family physicians' practice behaviour during the LTC transition process, as well as how these materials are actively shaped by social elements (organizational practices and outcomes). For instance, the family physician's tendency to provide minimal information is not simply the result of personal decisions or values but rather highlights their interaction with the LTC-HAF's design and surrounding guidelines [37, 41]. An improved system needs to consider not only a refined form but also how organizational and social factors influence how the family physician will interact with it [38]. A clear example of this influence appears in the study findings that highlight how the close professional relationships in rural contexts support greater information exchange.

4.4.1 Implications for Practice, Education, and Policy

The current study fills a gap in the literature on continuity of care, particularly, pertaining to informational continuity during LTC transitions in Ontario. Uncovering the limits of the current document-based handoff, it has highlighted a need for other complementary communication strategies. Inconsistencies in the information provided in the documents underscores the necessity of a clear standard for comprehensive information transfer during these transitions. Noting the limits of family physicians' professional boundaries, we infer that an interprofessional approach to completing the LTC transition documentation may be necessary.

Accordingly, we recommend some strategies to enhance informational continuity during LTC transitions. First, in Ontario, the LTC-HAF is currently paper-based and not interoperable with primary care EHRs. Integrating the LTC-HAF with EHRs could streamline information sharing and reduce redundancy. Making it digital and interoperable would allow auto-population from EHRs, thereby saving time and improving efficiency.

Second, we recommend integrating educational content on LTC in medical school curriculum and LTC rotations during family medicine residency to provide practitioners with experiences and competencies for informational continuity. With the projected rapid increase in older adults' population and growing number of individuals who need LTC, medical education at all levels should pay more attention to the care of this demographic. The Committee on Accreditation of Canadian Medical Schools should ensure course content on LTC transition during undergraduate medical education and inculcate knowledge related to the activities and implication of the information exchange process during the transitions early in training. Similarly, the College of Family Physicians of Canada should encourage LTC rotations during family medicine residency to familiarize residents with the information needs of LTC facilities and orient them to support informational continuity during LTC transitions.

Third, expanding interdisciplinary involvement in care transitions by incorporating input from the full range of health professionals could support a more holistic approach to informational continuity of care. While geographic distance, high workloads, and time constraints may hamper the feasibility of family physicians and other care providers to work collaboratively to generate comprehensive biopsychosocial information, a care coordinator from the regional health authority may be deployed to manage the collection and collation of information from various providers.

Lastly, operationalizing a standardized protocol for provider-provider communication—through remunerated and structured phone or videoconferencing calls—could enhance the transfer of critical patient care insights from family physicians to LTC providers. For instance, Ontario has OHIP billing codes for LTC case conferences with multiple healthcare professionals (K124) to discuss a patient's care plan and progress while in an LTC facility as well as physician-

to-physician telephone consultation (K730) and e-consultation (K738) for the primary care physician to collect data that is not already available in their records [42]. However, there is no available billing code for primary care physician and LTC providers for information sharing during LTC transitions. Aligning financial incentives with care continuity-targeted services may encourage family physicians to allocate time for comprehensive information transfer.

4.4.2 Limitation

Given challenges with recruiting family physicians, we completed only 13 interviews. While a small sample size may affect generalizability, we achieved a fair representation of participants across various demographics – gender, age, career stages, LTC experiences, and rurality thus promoting the theoretical generalization of our findings. Moreso, the contextually rich findings illuminate the family physician's current practices and perceived barriers to informational continuity during LTC transitions in the study jurisdiction.

4.5 CONCLUSION

Informational continuity is important in ensuring high-quality care during LTC transitions. While the LTC-HAF serves as a foundational tool, additional approaches such as appending additional documents, inter-provider communication, and preparing caregivers with transitional care information could aid in optimizing informational continuity during these transitions. Addressing constraints that shape their family physicians' information-exchange behaviour (e.g., perceived utility of the information, remuneration, time constraint) would bolster their ability to engage in activities that support informational continuity. Also, considering technological barrier related to hand-filling the LTC-HAF and a fragmented electronic information system that family physicians face, future research could explore the implementation of digital solutions to enhance the efficiency and comprehensiveness of information transfer during LTC transitions.

4.6 REFERENCES

1. Statistics C: **The Daily — Canada's population estimates: Age and sex, July 1, 2021**. In: *Canada's population estimates: Age and sex, July 1, 2021.* 2021.
2. Cihr: **CIHR Institute of Aging Strategic Plan 2023-2028. Reframing Aging – Empowering Older Adults**. In: *Canadian Institutes of Health Research.* 2023.
3. Cihi: **Infographic: Canada's seniors population outlook: Uncharted territory**. In: *Canadian Institute for Health Information.* 2025.
4. Facchinetti G, D'Angelo D, Piredda M, Petitti T, Matarese M, Oliveti A, De Marinis MG: **Continuity of care interventions for preventing hospital readmission of older people with chronic diseases: A meta-analysis**. In: *International Journal of Nursing Studies.* vol. 101; 2020.
5. Te Winkel MT, Damoiseaux-Volman BA, Abu-Hanna A, Lissenberg-Witte BI, van Marum RJ, Schers HJ, Slottje P, Uijen AA, Bont J, Maarsingh OR: **Personal Continuity and Appropriate Prescribing in Primary Care**. *The Annals of Family Medicine* 2023, **21**(4):305-312.
6. Chan KS, Wan EYF, Chin WY, Cheng WHG, Ho MK, Yu EYT, Lam CLK: **Effects of continuity of care on health outcomes among patients with diabetes mellitus and/or hypertension: a systematic review**. *BMC Family Practice* 2021, **22**(1).
7. Barker I, Steventon A, Deeny SR: **Association between continuity of care in general practice and hospital admissions for ambulatory care sensitive conditions: Cross sectional study of routinely collected, person level data**. *BMJ (Online)* 2017, **356**.
8. Staykov E, Qureshi D, Scott M, Talarico R, Hsu AT, Howard M, Costa AP, Fung C, Ip M, Liddy C *et al*: **Do Patients Retain their Family Physicians after Long-Term Care Entry? A Retrospective Cohort Study**. *Journal of the American Medical Directors Association* 2020, **21**(12).
9. King M, Steele Gray C, Kobewka D, Grudniewicz A: **Continuity of care for older adults in a Canadian long-term care setting: a qualitative study**. *BMC Health Services Research* 2022, **22**(1):1-11.
10. Sloan JP, Buchanan B: **Performance of the "house doctor". Effect of physician-to-patient ratio on follow up in long-term care facilities**. *Canadian Family Physician* 1993, **39**:273-273.
11. Yun H, Unruh MA, Ryskina KL, Jung H-Y: **Association between discontinuity in clinicians and outcomes of nursing home residents**. *Health Affairs Scholar* 2024, **2**(11):qxae139-qxae139.
12. Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair CE, McKendry R: **Continuity of care: A multidisciplinary review**. In: *British Medical Journal.* vol. 327; 2003.
13. Government of O: **Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1**. In.; 2021.
14. OH@H: **Guide to Placement in Long-Term Care Homes**. In: *Ontario Health atHome.* 2024.
15. Okoh AC, Shahu A, Gu R, Siu H, Howard M, Badone E, Grierson L: **Continuity of care during long-term care transitions: a scoping review of the Canadian literature**. *BMC Health Services Research 2025 25:1* 2025, **25**(1):1-13.
16. Sandelowski M: **What's in a name? Qualitative description revisited**. *Research in Nursing and Health* 2010, **33**(1).
17. Meleis AI: **Transitions theory**. *Nursing theories and nursing practice* 2015, **4**:361-380.

18. Okoh AE, Akinrolie O, Bell-Gam HI, Adandom I, Ibekaku MC, Kalu ME: **Nigerian healthcare workers' perception of transdisciplinary approach to older adults' care: A qualitative case study**. *International Journal of Care Coordination* 2020, **23**(2-3):92-106.
19. Collins KMT: **Advanced Sampling Designs in Mixed Research: Current Practices and Emerging Trends in the Social and Behavioral Sciences**. *SAGE Handbook of Mixed Methods in Social & Behavioral Research* 2015:353-378.
20. Elo S, Kyngäs H: **The qualitative content analysis process**. *Journal of advanced nursing* 2008, **62**(1):107-115.
21. Doyle L, McCabe C, Keogh B, Brady A, McCann M: **An overview of the qualitative descriptive design within nursing research**. *https://doiorg/101177/1744987119880234* 2019, **25**(5):443-455.
22. Vaismoradi M, Turunen H, Bondas T: **Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study**. *Nursing & health sciences* 2013, **15**(3):398-405.
23. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, Burroughs H, Jinks C: **Saturation in qualitative research: exploring its conceptualization and operationalization**. *Quality & Quantity* 2017, **52**(4):1893-1893.
24. Dodgson JE: **Reflexivity in Qualitative Research**. *Journal of Human Lactation* 2019, **35**(2):220-222.
25. Tuohy D, Fahy A, O'Doherty J, Meskell P, O'Reilly P, O'Brien B, Murphy J, Doody O, Graham M, Barry L *et al*: **Towards the development of a national patient transfer document between residential and acute care—A pilot study**. *International Journal of Older People Nursing* 2021, **16**(4):e12374-e12374.
26. Griffiths D, Morphet J, Innes K, Crawford K, Williams A: **Communication between residential aged care facilities and the emergency department: A review of the literature**. *International Journal of Nursing Studies* 2014, **51**(11):1517-1523.
27. Thraen I, Bair B, Mullin S, Weir CR: **Characterizing "information transfer" by using a Joint Cognitive Systems model to improve continuity of care in the aged**. *International Journal of Medical Informatics* 2012, **81**(7):435-441.
28. Oliver D, Emili A, Chan D, Taniguchi A: **Education in long-term care for family medicine residents**. *Canadian Family Physician* 2011, **57**(8):e288-e291.
29. Ong EY, Bower KJ, Ng L: **Geriatric Educational Interventions for Physicians Training in Non-Geriatric Specialties: A Scoping Review**. *Journal of Graduate Medical Education* 2021, **13**(5):654-665.
30. Devoe JE: **The Incompatibility of Patient-Centered Care With Fee-for-Service Payment**. *JAMA Internal Medicine* 2020, **180**(12):1572-1573.
31. Clay Z: **The shift to fee-for-service: Neoliberalism and behavioral health services**. *Reflections: Narratives of Professional Helping* 2020, **26**(1):75-85.
32. Kantarevic J, Kralj B: **Physician Payment Contracts in the Presence of Moral Hazard and Adverse Selection: The Theory and Its Application in Ontario**. *Health Economics* 2016, **25**(10):1326-1340.
33. Kraft KB, Hoff EH, Nylenna M, Moe CF, Mykletun A, Østby K: **Time is money: general practitioners' reflections on the fee-for-service system**. *BMC Health Services Research* 2024, **24**(1):1-10.
34. Hurley J: **Health Economics**. Toronto; 2010.

35. Mitchell AP, Rotter JS, Patel E, Richardson D, Wheeler SB, Basch E, Goldstein DA: **Association Between Reimbursement Incentives and Physician Practice in Oncology**. *JAMA Oncology* 2019, **5**(6):893.
36. Robertson C, Rose S, Kesselheim AS: **Effect of Financial Relationships on the Behaviors of Health Care Professionals: A Review of the Evidence**. *Journal of Law, Medicine & Ethics* 2012, **40**(3):452-466.
37. Haider J, Sundin O: **Sociomateriality**. In: *Information Literacy through Theory.* edn. Edited by Hicks A, Loyd A, Pilerot O: Facet Publishing; 2023.
38. Kim Y, Yang E: **Theoretical understanding of sociomateriality in workplace studies**. *Facilities* 2020, **38**(13-14):927-942.
39. Leonardi PM: **Theoretical foundations for the study of sociomateriality**. *Information and Organization* 2013, **23**(2):59-76.
40. Moura EOd, Bispo MdS: **Sociomateriality: Theories, methodology, and practice**. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration* 2020, **37**(3):350-365.
41. Fenwick T: **Sociomateriality in medical practice and learning: attuning to what matters**. *Medical Education* 2014, **48**(1):44-52.
42. Oma: **Access OHIP billing codes and forms fast**. In: *Ontario Medical Association.* 2025.

Appendices

Appendix A: Qualitative Interview Guide

Introduction & Purpose of Interview:

Thank you for participating in this study.
As you may know, we are conducting a study to understand the information family physicians provide during long-term care (LTC) transitions and the communication activities they engage to enhance informational continuity for patients transitioning to LTC.
The reason why we're doing this study is because the longstanding provider-patient relationship between older adults and their family physicians is often disrupted as older adults enter LTC homes. However, patients who maintain longitudinal provider-patient relationships experience better overall health outcomes. While relational continuity is lost during LTC transition, patient health information is handed over to the healthcare team at the LTC facility. To ameliorate the impact of discontinuity, this project seeks to describe the type of activity family physicians perform during the transition to enhance informational continuity, their perceptions of facilitators and barriers to optimizing this continuity, and their perspective on ideal LTC transitions.
I'd like to get your permission to record the interview – [Turn the recording device on.]
So, I have a number of questions for you that relate to talking about the strategies you (as a family physician) employ to promote informational continuity, the information you transmit, your perception of the window of opportunities you have to communicate with the LTC providers, and your perceptions of facilitators and barriers.
I also invite you to tell me anything you feel is important for us to know about the things that may motivate you and other family physician to work with the elderly population and play a central role in their LTC transition. I also want to remind you that you don't need to answer any questions that you are uncomfortable with, and we can stop the interview at any time. The interview will be recorded; however, each interview will be de-identified, meaning that anything said will not be linked back to you in order to protect your identity.
Is this okay?
I also wanted to ask if you are okay with me collecting the demographic information about you and your current practice, and that the answers you have provided are how you want to be represented?
Let's begin.

Interview Questions

Participant Identity

5. As we get started, we are collecting some demographic information about our participants and if it's okay with you, I'd like to ask you some questions about your social identity.

a. Could you describe your social identity? Are you comfortable doing that? Some people may describe characteristics that relate to their racial, ethnic backgrounds, gender/sexuality. We want you to describe your identity in whatever manner that is comfortable and important to you and you also deem relevant to this study.

Practice Characteristics

6. Let's talk about your current practice. Can you tell us about your practice?
    a. How long have you been in independent practice?
    b. Are you in a solo practice or a group practice?
    c. What is the main funding model in your practice (fee-for-service and blended capitation)?
    d. Do you have a Certificate of Added Competence in Care of the Elderly
    e. Where is practice situated?
        i. rural or urban

7. Given your perceptions of what it means to be a family physician and what you currently do in your practice, can you tell me about the educational or personal experiences that led you to pursue this scope of practice ~~and in this area~~?

8. Do you conduct LTC visits?

Long-term care handover activities

9. Let's talk about your perspective on continuity of care during LTC transitions.
    a. Please can you describe a typical LTC transition?
        i. Describe transitions that may have gone more smoothly?
        ii. Describe transitions that may have gone less smoothly?
    b. What kind of information do you typically include in a handover note when your patients move to LTC?
    c. What kind of information would you like be included in a good quality patient handover note during their transition to LTC?
    d. How would you describe your ideal LTC transition process in Ontario?
        i. Do you think your ideal LTC transition attainable in Ontarian?
        ii. Considering the current policies and system structure, do you think it can be achieved?"
    e. Have you billed for LTC in the past year?
        i. If yes/no, how does it affect effective informational continuity during LTC transition?
    f. In your view, does computerized medical records have any role in enhancing informational continuity?
        i. If so, in what ways can it contribute to improving informational continuity?

   ii. If no, why do you think it may not be useful in improving informational continuity?

g. What practice model [Solo/Group, FFS/Blended capitation/Salary/service contract] are you in and how do the features of that model support/hinder informational continuity during LTC transition?
   i. What features are particularly relevant?
   ii. What could change to make things better?

h. Let's talk about type of activities you perform during the transition to enhance informational continuity.
   i. Who do family physicians (including you) communicate with in the process?
   ii. What assessments do you perform or need to perform?
   iii. What documents do you fill out in the process?
   iv. What strategies do you employ to promote informational continuity?

i. In your view, what is the utility of an interprofessional team effort to enhancing informational continuity?
   i. Who should be the members of this interprofessional team?
      - Should it include patients and their families/relatives?

j. Do you have any window of opportunity to communicate with the LTC providers?
   i. If so, how often does it occur?
   ii. How does it impact the transition process and the patient care?
   iii. How can it be consolidated upon?

10. Facilitators and barriers to optimizing the informational continuity of care during LTC transition. (Note: *The interviewer will probe for greater details about factors that participants have already mentioned and other factors that may have not been mentioned directly*).
    a. What factors related to patients and families do you think are relevant to the success of a transfer or maintaining informational continuity?
    b. What factors related to physician do you think are relevant to the success of a transfer or maintaining informational continuity?
    c. What factors related to the Provincial and Federal-level policies do you think are relevant to the success of a transfer or maintaining informational continuity?

    We're also interested in understanding the educational aspects or interventions that could help improve informational continuity:

    d. In what ways can medical education support improved informational continuity?
       i. Can you identify specific educational experiences that could enhance informational continuity?
       ii. How do you perceive exposing students and residents to LTC rotations?
          - Can you describe the benefits of exposing students and residents to LTC rotations?

- How do these rotations help prepare students and residents for future responsibilities, such as facilitating patient transitions into LTC homes?

iii. Do you have experience training learners (students or residents) in filling out these forms like Long-term care admission form?
- Or have you had these experiences during your training?

Concluding Interview

11. In your view, what solutions can you proffer to improve informational continuity during the transition to LTC?
12. Is there anything else you would like to share with us that you feel is important?

Thank you.

Appendix C: Codebook

Codes

Name	Description
Actors involved in the transition	
Barrier	Comprises factors or situations hampering or posing a barrier to continuity of care or smooth LTC transition.
Poor stakeholder engagement	Describes the limitations pertaining to features of patient, their family, or various healthcare providers on the transition process
Poorly prepared handover documents	Describes scenarios where physicians fill out the transition/handover notes (CCP, LTC admission forms, etc.) poorly.
Reading the documents	Describes situation whereby the LTC physicians may not read the care transition/handover note
Time constraint	Describes how physicians' workload or busy/tight schedule limit their ability to dedicate adequate time to working on the LTC transition note or the whole transition process.
Unable to work across settings	Captures the reasons why many family physicians are not able to work in or see their patients who are admitted to LTC.
Facilitators	
Benefits of EHR	Describes the benefits of electronic medical records (EHRs).
Confident in the document	Describes factors and scenarios pertaining to the credibility of/trust on the accuracy or quality of the information transmitted during the transition process.
Good quality documents	Describes scenarios where physicians filled out the transition/handover notes (CCP, LTC admission forms, etc.) effectively.
Good stakeholder engagement	Describes the positive influence of features of patient, their family, or various healthcare providers on the transition process
Motivated by altruism	Describes instances where family physicians are motivated to work on the LTC transition documents because doing it will be in the patient's best interest.
Same MRP in both settings	Describes scenarios where the patient is able to maintain the same most responsible provider (MRP, physician) in both community and long-term care.
Physician Characteristics	

Name	Description
Location of medical education	Canada or Foreign-trained medical graduate. Foreign trained will also consider Canadians who studied abroad and international medical graduate
Physician gender	Considers influence of physician's gender (man, woman, etc.) on their ability to foster informational continuity during LTC transition
Professional interest	This considers whether the physician had interest in the care of the elderly and how it shaped their practice and inclination to support informational continuity during LTC transition.
Practice features	
Practice location	This considers the location of physicians' practice (urban, semi-urban, rural) and it may influence their ability to support informational continuity.
Remuneration model	
Capitation	Describes the influence of capitation remuneration model on a physician's ability to facilitate informational continuity during LTC transition.
Fee-for-service	Describes the influence of fee-for-service remuneration model on a physician's ability to facilitate informational continuity during LTC transition.
Salary	Describes the influence of salaried remuneration model on a physician's ability to facilitate informational continuity during LTC transition.
Staffing model	
Closed staffing model	Closed physician staffing model describes a situation where an LTC-contracted (or staff) physicians are responsible for the care of all LTC residents
Open staffing model	Open physician staffing model describes a situation where family physicians attending to LTC residents are not direct employees of the LTC home
Processes	Factors that influence continuity of care during LTC transitions and describe processes and activities family physicians engage in to facilitate continuity of care during LTC transitions.
Assessments family physicians perform	Describes any assessments that family physicians conduct during the transition process or if they don't conduct assessments.
Current information	Describes the types of information family physicians currently transfer to LTC during the transition process

Name	Description
Documents transferred	Describes the type of documents family physicians transfer to LTC during the transition process
Improving the information	Describes the types of information family physicians would prefer to transfer to LTC and they perceive would enhance informational continuity
Information from other healthcare providers	Describes the type of information family physicians seek from other healthcare providers during LTC transition
Information from patient	Describes the type of information sought from patients [or their substitute decision maker] during transition
Interactions-or-communication	
Provider-patient interaction	Describes instances of communication (via phone call, emails, face-to-face) between community family physicians and their patients/family during the transition process.
Provider-provider interaction	Describes instances of communication (via phone call, emails, face-to-face) between community family physicians and their LTC counterparts during the transition process.
Patient attributes	Describes patient health or personal/social attributes or characteristics that may promote or hinder smooth LTC transition
Preparation and knowledge	Describes instances where physicians educate/prepare patients/family and how it facilitates informational continuity and good transition experience.
Stakeholder engagement	
Interprofessional team	Describes the roles of and activities family doctors and other interprofessional healthcare providers engage in to facilitate informational continuity during the LTC transition
Partners-in-care	Describes the roles of and activities patient relatives and other non-medical groups involved in their care engage in to facilitate informational continuity during the LTC transition
Patients	Describes the roles of and activities patient engage in to facilitate informational continuity during the LTC transition
System Navigator	Describes communications with and activities of stakeholders like care coordinators or system navigators from the CCAC/HCCSS/LHIN during the long-term care transition process.

Name	Description
Tension on choices of information	Describes situations where there are tensions on the type of information to include in the transition/handover notes.
Recommendations	Describes participants' perceived solutions to enhancing informational continuity during LTC transition.
Cross-setting communication	Describes facilitating communication between care physicians in the community and their long-term care counterpart
Digitizing the transition document	Describes the recommendations to improve transition note via electronic or digital method.
Downstream policy focus	Entails that interventions to improve informational continuity during LTC transition should be downstream-driven.
Educational interventions	Describes educational interventions that could prepare family physicians to effectively facilitate informational continuity during LTC transitions.
Learning the documentation during residency	Describes the knowledge and skills family physicians should acquire during residency to prepare them to effectively facilitate informational continuity during LTC transitions
Long-term care rotations	Describes the benefits of LTC rotation during residency to prepare them to effectively facilitate informational continuity during LTC transitions
Improving compensation	Considers improving the money physicians receive to fill out the transition note.
Improving time	Considers improving issues pertaining to time constraint to effective informational continuity.
Information integration	Entails collating information from all stakeholders, including the care providers, patients and their family in one file/document.

Chapter 5: Information exchange during long-term care transition: A comparative analysis of the perspectives of family physicians and long-term care providers

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This chapter presents an integration of findings from Chapter 3 and 4. It is designed to synthesize all study findings into knowledge products. Findings from the three studies that make up this dissertation are integrated to develop a long-term care transition informational continuity framework and to offer suggestions to improve the tool family physicians complete during the transition process.

5.0 Abstract

This chapter presents synthesized findings from two related qualitative studies that explored the information exchange process during long-term care (LTC) transitions in Ontario, Canada. It brings together descriptions of the patient-relevant information that LTC providers deem important when older adults transition into LTC relative to the information that they actually receive with descriptions of the patient-relevant information community-based family physicians believe is important to maintaining the benefits of care continuity as their older patients transition into LTC relative to the information that they actually transmit. These descriptions also include reflections on the constraints to optimized information exchange experienced by the healthcare providers on both ends of the transition trajectory. Through critical synthesis, this integration of findings supports the development of recommendations to improve the Province's LTC Health Assessment Form and enabling interventions that could optimize informational continuity in Ontario. The recommendations centre health professions education interventions, document revision, the automation of form completion, collaborative documentation practice, warm handoff standards, and efforts to better empower patient families.

5.1 Introduction

This chapter was conceived as an integrative piece, providing a comparative analysis of the findings of two related qualitative studies from a research program that examined the information exchange process during long-term care (LTC) transitions in Ontario, Canada. One study (Chapter 3), hereafter called LTC Perspective study, focused on LTC providers and aimed to describe the information that care teams in LTC facilities receive and consider to be most important in supporting new LTC patients relative to what they receive. The other study (Chapter 4), hereafter called Family Physician (FP) Perspective study, focused on family physicians and aimed to describe the information they consider important to and transmit during LTC transitions, and the factors that influence their engagement in activities that support informational continuity.

5.2 Synthesis of findings

During LTC transitions, family physicians prepare and send over the Long-Term Care Health Assessment Form (LTC-HAF) to LTC. The LTC Perspective study shows that family physicians send some pieces of information that are needed in LTC such as the older adults' medical and surgical history, x-rays, bloodwork, infections, medication list, lifestyle assessment (e.g., drinking, smoking), incontinence, mobility status, activities of daily living needs (i.e., support with grooming), and use of assistive devices such as wheelchairs, glasses, dentures, and hearing aids. They get little psychosocial information, and what they receive in this domain most times pertains to whether the older adult has a family caregiver or is prone to wander. Family physician participants in the FP Perspective study corroborated the nature of this information exchange; although several indicated that there are occasions when they send additional information via the creation of additional notes or through direct communication with the LTC

team. However, the participants in the LTC Perspective study did not describe receiving this additional information, suggesting that these Family Physician information-sharing behaviours are not systemically pervasive. Indeed, the participants in the LTC Perspective study emphasized that they do not receive a sufficient depth of information to optimize care continuity during the transition.

The LTC participants shared that they would like to receive additional biomedical information pertaining to functional abilities, up-to-date immunization records, complete records of diagnosis (to mitigate missing diagnoses the LTC discover upon admission), advance care plans, and the frequency and type of oxygen delivery system (e.g., tank, concentrator, nasal prongs, masks) use. They also indicated that additional psychosocial information pertaining to the patients' personal care needs, trauma history, values, likes and dislikes, hobbies, habits, and spiritual and cultural practices would also be valuable to them.

Table 1 delineates the information family physician participants often send to LTC, the information that can be sent but they do not always send, and the information that is unavailable to send.

Table 1. List of information transferred and not transferred during LTC transition

Typically transferred	Available but not transferred	Unavailable information
• Medical and surgical history • X-rays • Bloodwork • Infectious disease screening • Medication list • Lifestyle assessment (e.g., drinking, smoking) • Incontinence • Mobility status • Activities of daily living needs • Use of assistive devices (e.g., wheelchairs, glasses, dentures, hearing aids) • Presence of a family caregiver • Wandering	• Hobbies • Habits • Oxygen use • Spiritual and cultural practices • Aggressive behaviour • Trauma history • Declare if patient has advance care directive like a 'do not resuscitate' instruction (also attach a document to confirm it) • Any specific likes or dislikes that could inform approach to care	• Latest immunization • Uncaptured or new diagnosis

The studies suggest that the information exchange process during LTC transition is not yet able to fully support informational continuity. Some important information needed in LTC is not frequently transferred in the current document-based care transition method. This gap echoes previous studies that have highlighted the limitations of standardized transition forms in capturing the complexity of older adults' care needs [1, 2]. A cross-sectional study in the United States found that a majority of the LTC transition forms were either incomplete, obsolete, or contained information that is not useful to the LTC team [3].

The current synthesis also suggests that many family physicians are not unaware of the information that LTC care teams value and need for good-quality care for residents in their facilities. The results of our two studies reveal that family physicians do not send certain

information because of several tensions related to their practice. Here, we will present these tensions and a series of recommendations to address them.

Tensions contributing to suboptimal information transfer

Tension 1: Family physician practices are over-capacity

There were indications that some family physicians do not think it is necessary to provide more information than is expedient due to competing priorities. This was inferred based on the preference to prioritize other services (e.g., direct patient care) above allocating more time to completing the LTC-HAF comprehensively or seeking out the information they do not have from other sources (e.g., hospital). Family physicians grapple with balancing their time across direct patient care and a growing amount of paperwork. This issue was predominant among family physician participants operating a fee-for-service remunerative model who seem to face a greater concern regarding harmonizing the provision of certain services and generating sufficient income.

Tension 2: Family physicians feel the information is redundant

Family physicians may not be inclined to provide more information that is readily available and easily accessible to them due to scepticism about the utility of the information they transfer to LTC. This is linked to some family physician participants' perception that the LTC providers may not use the information they provided since fresh assessments are usually performed in LTC. These family physicians feel the information transfers during LTC transition is a redundant activity; hence, they are unmotivated to provide more than the minimal information.

Notwithstanding the mandatory assessments at LTC during new admissions, our LTC participants expressed that the information they receive from the patient-discharging provider is

valuable to them. We are inclined to agree; the assessment during LTC admission does not trump the need for the patient-discharging provider to transfer comprehensive and meaningful information. A lack of information can impact care continuity, compromising care quality for the new LTC resident.

Tension 3: Family physicians feel some of the information is obsolete

Scepticism also arises from the concern that some of the information they provide may be obsolete by the time it is received by the LTC team. The obsoleteness stems from the fact that some changes might occur in the patient's health (e.g., deterioration, a new diagnosis that occurred after the physicians last assessment) by the time of LTC admission relative to when the family physician completed the form. The LTC Perspective Study corroborated this perspective, with participants stating that the information received does not always match the current health status of the new resident.

Tension 4: Family physicians feel the LTC-HAF is limited in its design

The family physician participants argued that the current design of the LTC-HAF limits the information they are able to provide. For instance, the form does not contain sections for information about patient hobbies, habits, and spiritual and cultural practices, nor does it offer sufficient space for specific details about the patient's health status and preferences. As such, this type of information is not included during transitions. Furthermore, the current handwritten method of completing the form is seen to compromise legibility and leaves less space for details than would be possible in an electronically completed form.

Tension 5: Family physicians do not know or have some information in their record

The family physician participants said that they do not send some information (e.g., latest immunization) because they may not have it in their electronic health records (EHR) and how

long they have known the patient influences the kind of information or level of detail they can realistically provide. However, while many family physician participants stated that it is unlikely they would seek out information they do not have in their EHR from other sources, LTC participants also shared that they do not have access to primary care or acute care EHRs to retrieve the information they need by themselves. Hence, we deduce a critical problem with accessing information kept in EHRs outside of each care provider's practice setting in the study context, which is a contributing factor to the inability to obtain fulsome patient information during LTC transition.

Tension 6: Family physicians feel the provision of some information is outside their professional boundary

The boundary of the family physician's scope of practice was identified as a limiting factor in contributing comprehensive biopsychosocial information to support continuity of care. The family physician participants felt it is more appropriate for some information to come from other health professionals. They occasionally offered this as a reason why they usually provide little psychosocial information. It was noted that holistic information exchange ideally involves input from the full interprofessional team involved in a patient's care. However, the LTC-HAF was viewed as falling solely under the responsibility of the family physician.

The synthesized resulted culminated to an informational continuity process model (Figure 1), depicting the flow of information from the discharging to the receiving care provider. The model delineated factors that influence the discharging care providers ability to provide minimal/suboptimal or comprehensive and optimal information such as perception about the value of the information, systemic factors remunerative model, previous educational or work

experience in LTC, and opportunities for inter-provider communication. The model also captured factors influencing the LTC teams' ability to seek out they need such as practice differences across geography, influence of practice capacity, and access to health information infrastructures. How the LTC team seek out the information were included, namely via harmonized EHR and reaching out to family caregivers, pharmacists, or hospitalists. The process model informed the construction of recommendations to optimize informational continuity, described below.

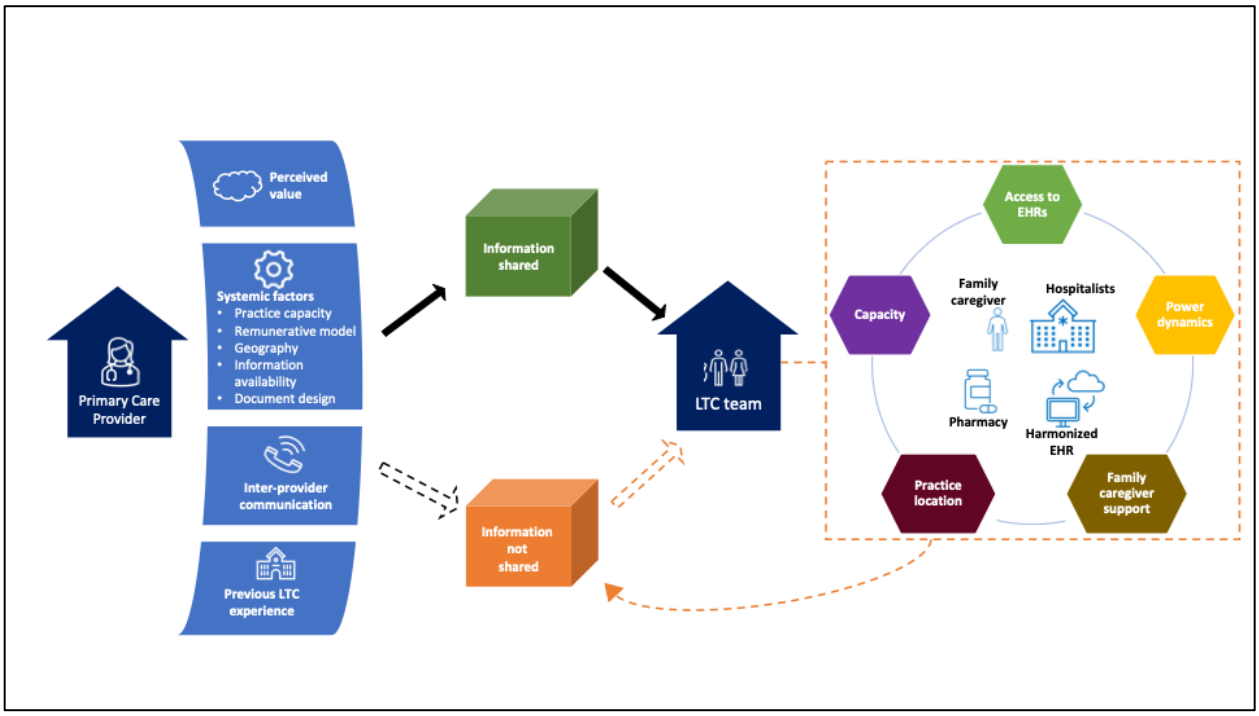

Figure 1. LTC transition informational continuity process model

How can the information exchange process be optimized?

Revising the LTC-HAF

The LTC-HAF conveys considerable essential clinical information (e.g., diagnoses, medications) but psychosocial data are not sufficiently included. The exclusion of patient-centred information such as hobbies, trauma history, or advance care preferences were recurring issues.

Currently, the form contains inadequate details and fails to provide enough context to guide LTC care decisions. Based on synthesis of findings from the LTC Perspective and FP Perspective studies, we concluded that the form does not cover the full scope of information that is important for the attainment of informational continuity. Hence, the form would need to be amended to include sections for important information yet to be requested in the form. Table 2 offers additional information that could be included in the LTC-HAF to support the provision of holistic information exchange during LTC transition.

Table 2. Suggested information to enhance the LTC-HAF

Current information	*Suggested additional information*
• Current medical diagnosis (including physical and mental health, surgical, family and social background) • Brief medical history (including physical and mental health, surgical, family and social background) • Attaching any available medical reports and specialists' consults • Use of oxygen • Chest x-ray, TB skin test • Vaccination record (last flu shot, tetanus and diphtheria vaccine, pneumococcal vaccine) • Last antibiotic-resistant organism screening • Drug sensitivities, allergies, and addictions • Current medications • Current treatments/Special needs • Current Diet • Risk factors (behavioural risk to self and to others, e.g., wandering, physical, verbal or sexual aggression and potential for violent behaviour) • Any health changes since the previous assessment	• Trauma history • Incontinence/incontinence products • Mobility and mobility aid • Declare if patient has a partner or power of attorney • Declare if patient has advance care directive like a 'do not resuscitate' instruction (also attach a document to confirm it) • Spiritual and cultural practices that are important to the patient • Any specific likes or dislikes that could inform approach to care • Hobbies • Habits and lifestyle (e.g., smoking, drinking)

• If the family physician is willing to continue the patient's care	

Harmonized Electronic Health Records

To optimize the information exchange process during LTC transition, practitioners across settings may benefit from housing all patient information in a centralized database. This is position is endorsed in the third pillar of the Patient's Medical Home (PMH) model—Connected Care—which promotes integrating practices with other care settings and services through the integration of health information technology to enhance efficient coordination of records across care settings [4]. A harmonized EHR would address current issues regarding the inability to access any patient health information, facilitating easy access to primary care-, acute care-, and LTC-related patient information for all care providers involved in or taking over their care. This would thereby save the patient-discharging provider time seeking out information not readily available in a singular practice EHR. Also, the harmonized EHR would be helpful to LTC care teams as they can use it when they want to cross-check information contained in documents they receive or in search of any missing information.

The idea of a harmonized, province-wide electronic health records EHRs reflects broader national efforts to reduce data fragmentation and enhance real-time access to comprehensive patient information [5]. Such systems would allow both discharging and receiving providers to retrieve and verify critical patient information needed for informed care planning when they move into LTC. However, a province-wide, harmonized EHR has remained aspirational. Currently, Ontario's healthcare system relies on dozens of EHR platforms that do not communicate due to corporate interest or vendor competition and existing integration efforts have focused on connecting rather than replacing legacy systems [6, 7]. Because of a lack of

interoperability, full EHR data cannot be shared between Ontario hospitals using different vendor systems [7]. eHealth Ontario has not been successful in their integration efforts and an Auditor General's report identified issues pertaining to wasteful consulting, poor oversight, and billion-dollar overruns, while financial constraints and limited cost-sharing between government and healthcare facilities hindered full coverage [8]. Also, there appears to be a lack of strong political will towards EHR integration. Years of Ministry-level delays, shifting political mandates from change in governing parties, inconsistent strategic planning, and frequent restructurings have stalled progress and blurred accountability since the 2000s [8-10]. Thus, although a province-wide, harmonized EHR is desirable, its actualization remains unlikely in the current context.

Automated Form Completion

With harmonization of EHRs highly unlikely for now, the transfer of patient-relevant information during LTC transition via the LTC-HAF remains pivotal to fostering informational continuity. Currently, the LTC-HAF is filled out in pen and paper form and transmitted via fax. This process is inefficient and time consuming. We offer that digitizing forms and automating the completion process would contribute to optimizing the information exchange process during LTC transition. Evidence shows that computerized, interoperable documentation enables automatic data population, reduces time spent on documentation, and enhances patient-centred care [11]. Hence, digitizing the form (LTC-HAF) to be completed electronically would improve legibility and provide more space than handwritten paper to include a more detailed information. Making the form interoperable with existing EHRs to facilitate auto-population would make it easier and faster to complete. We opine that this will not only improve efficiency but also motivate the patient-discharging care provider to provide information in more depth and breadth.

The form automation recommendation is in line with the current effort by the Province of Ontario to automate several health forms. The automation would improve coordination of information across care settings and decrease fax volume [12]. This automation will be managed via the Ontario Health eForms Platform. The platform will offer direct integration of digital forms with EHRs, enable automatic population, track and manage submissions, and provide access to a dashboard for real-time status and confirmation updates [12]. Successes recorded in form automation so far suggests that LTC-HAF digitization and electronic transmission would be feasible and beneficially. Recent success stories are the Special Authorization Digital Information Exchange (SADIE)—managements information transfer for programs like Ontario Drug Benefit—and the Health Report Manager (HRM)—manages the transmission of discharge summaries and diagnostic imaging reports—that currently enable doctors to securely complete and electronically submit forms and receive patient reports directly into their EHRs and have improved efficiency in information exchange management [13, 14].

Collaborative Documentation

We noted the limits of one health professional providing holistic biopsychosocial information; a concern that was highlighted in both the LTC Perspective and FP Perspective studies. While the form should be digitized and amended to contain more information, we also offer that more comprehensive information would be obtained by completing the form collaboratively. Collaborative documentation would involve different providers filling out sections of the LTC-HAF related to their discipline, and would generate comprehensive social, pharmaceutical, and medical information without duplicating efforts or having to seek out any missing or underreported pieces. However, the Ontario *Fixing Long-Term Care Act (2021)* gives the responsibility of completing the LTC-HAF to a single primary care provider, often a family

physician [15]. Inputs from other care providers (e.g., physiotherapist, home care nurse, social worker) involved in the care of the older adult in the community might be necessary to elicit a well-rounded information during LTC transition. We recommend an amendment to the *Act* to accommodate a collaborative approach to completing the LTC form.

An interprofessional collaborative approach to assessment and documentation is in line with Okoh and colleagues' [16] notion of consolidated documentation, which entails multidisciplinary inputs in documentation and ensures that no single provider bears the burden of compiling holistic information and that comprehensive information is eventually generated. Consolidated documentation would improve both depth and utility of the information. Nonetheless, the feasibility of such a collaborative approach to assessment and documentation in practice needs to be examined. Arguably, it may be more efficient for one provider to complete each document than multiple providers because of the additional cost that could be accrued in engaging multiple providers and the additional time required by providers who are already faced with a high volume of work. However, considering the benefits of informational continuity on the care of LTC residents such as reduced rates of medical errors, (re)hospitalization, and mortality [17], it would be worthwhile to explore means to achieve a collaborative approach to documentation.

Recent federal and provincial policies are creating a pathway to address access to care, which may also mitigate the high work volume and time constraint issues. Through the Primary Care Action Plan [18], the Government of Ontario aims to significantly expand access to interprofessional primary care teams for residents of the Province by 2029. With more family physicians practising in interprofessional teams, they would benefit from the ability to share

work with other health professionals [19], thereby freeing up more time for tasks such as continuity-based information sharing.

In addition to seeking family physicians' effective engagement in the information exchange, other care providers could also participate in an interdisciplinary construction of information. The recent *Canada Health Act Services Policy* [20] permits public coverage for pharmacists, nurse practitioners, and midwives' provision of physician-equivalent services. While expanding the practice scope of those care providers, it is intended to increase access to primary care for Canadians who do not have a family physician. Being empowered to provide primary care services, these health professionals become well-positioned to contribute to LTC transition documentation.

Adapting the consolidated documentation approach as described by Okoh and colleagues [16], we recommend that a care coordinator from the regional health authority should manage the collaborative documentation process. The care coordinator would lead the collection and collation of patient care information from each medical (e.g., family physician, nurse practitioner) and nonmedical care provider (e.g., occupational therapist) involved in their care. This is consistent with Lukersmith and colleagues' [21] conceptualization of the functions of a care coordinator, including serving as an intermediary between various providers involved in a patient's care.

Warm Handoff and Empowering Families

The issue of obsoleteness of some information in transitional care document may be addressed via a warm handoff during the LTC admission window. Warm handoff refers to bidirectional communication involving the discharging (primary or acute care) provider and the receiving (LTC) providers meeting (in-person, videoconference, telephone) to discuss patient

care transition. Warm handoff is not yet a statutory activity for LTC transition and there is no incentive to do it. Unlike the document transfer, the *Fixing Long-Term Care Act (2021)* does not mandate warm handoff. Nevertheless, we recommend a mandatory *standardized warm handoff,* which we conceptualized as a paid, structured handoff approach that entails a 10–30-minutes conference call organized by a care coordinator and involving primary care and LTC physicians and may also include any other necessary care provider. Making it a paid and mandatory activity could encourage providers to engage in the cross-setting, inter-provider communication during LTC transitions.

Warm handoff is believed to enhance mutual understanding and patient safety, especially for individuals with complex needs; like LTC residents [22, 23]. We perceive that warm handoff would help the discharging care provider to clearly understand the information most relevant to the receiving care provider in order to provide good-quality personalized care for the new LTC resident. It could serve as an opportunity to provide necessary clarifications and share important insights gained over years of care that may not be fully captured in standardized forms.

Although we believe the standardized warm handoff is achievable, we are also cognizant that the finitude of financial resources affects feasibility and policymakers' acceptance of an additional paid service. Many healthcare programs and services are competing for the limited health dollar [24]. As a viable surrogate for the standardized warm handoff, families can serve as conduit for information exchange between practitioners. Currently, many families interact with the patient-discharging and receiving care providers at one point or the other along the LTC transition process. Hence, families could serve as potent agents for informational continuity when they are actively involved in and well-informed about the older adult's care.

Also, family members can fill important information gaps as they often have valuable longitudinal and contextual insights. Studies have shown that actively engaging families in care enhances their preparedness for information sharing during care transition [25, 26]. Their level of involvement is important as families may not offer much information support if they are not well-informed about the medical and nonmedical care of their relatives. To empower patient families to navigate the care transition effectively, the discharging care provider can share essential medical, behavioural, and personal care information with them, which will equip them to serve as a reliable source of information for the LTC care teams. This echoes the evidence that equipping families with clear, practical information about patient care ensures they can share essential medical, behavioural, and personal history with other care providers [27].

As mentioned above, the discharging and receiving care providers both invest time to meet with families during care transitions, indicating a commitment to continuity and patient-centred care. An opportunity exists to enhance this process by coordinating joint meetings between families and both sets of providers. The idea of involving family, and when possible, the older adult, in the inter-provider meeting is in agreement with a previous study that advocated for multi-stakeholders engagement—involving care providers, family and patients—in support of informational continuity during LTC transitions [22]. This model could facilitate a more cohesive and transparent dialogue, enabling shared understanding of the patient's needs, expectations, and care plan. The model does not necessarily require additional time from providers, as it aligns their existing, separate meetings into a single, shared encounter. It brings together the episodes both sets of providers would have billed separately into one shared encounter. Hence, no new or additional cost would be incurred from a cost-effectiveness perspective while also realizing the informational continuity goal.

Improved LTC-relevant Education

Among the tensions highlighted above, we noted that some family physicians may not attach much priority to the LTC transition information sharing activity when faced with time constraint and due to concerns about redundancy. In this regard, we infer that LTC-relevant education is needed to help family physicians to appreciate the relevance of the information they transmit to LTC and motivate them to seek comprehensive information transfer. Education will play a crucial role in the development of a system that supports informational continuity.

We offer that educational content on the LTC transition process could orient family physicians to know what information is important, why it is important to transfer it, and provide experiences that emphasize this importance. The educational reforms we propose include: a) integrating course content on informational continuity during LTC transition into Undergraduate Medical Education syllabi to start inculcating the relevance of the information exchange early in medical training; b) including a mandatory LTC rotations during Family Medicine residency, offering practical experiences in LTC that may help in appreciating the utility of the information exchange and what information is important to the LTC care team; and c) creating Continuing Medical Education credits for a short course on LTC transition information exchange to help family physicians to continually enhance the knowledge and skills needed to support informational continuity in their practice.

Incorporating training opportunities for LTC transitions into medical education aligns with evidence suggesting that training improves care providers' competence in managing care transitions for complex needs individuals like those moving into LTC [27]. Education can attune care providers to appreciate the significance of the information transfer and instil the competencies needed to provide comprehensive and essential information [22]. Numerous

studies have indicated that LTC experience during training enhances providers' disposition and preparedness to engage in continuity-based services [28-30]. Hence, LTC-relevant educational experiences would not only build competencies but also motivate providers to engage in activities that foster informational continuity.

We acknowledge a major systemic constraint to operationalizing our recommendations. We note a conundrum pertaining to inserting a new content into medical school curricula as it would amount to displacing another one. Also, arguably, a mandatory LTC rotation may be difficult to implement since family medicine residency in Canada is a 2-year program. The College of Family Physicians of Canada's (CFPC) Outcome of Training Project's [31] plan to shift from a 2-year to a 3-year family medicine residency, which was halted, would have presented an opportunity to implement a mandatory LTC rotation during residency in all Canada medical schools. Nonetheless, there may be a way to accommodate LTC rotations in the current 2-year residency program structure, especially since LTC is among family medicine's major areas of professional responsibility as delineated in the CFPC's Residency Training Profile [32].

Currently, three of the 18 Canadian medical schools—Queen's University, McMaster University, and Western University—have a LTC component in their residency program. For instance, McMaster University Family Medicine residency has four 1/2 days per year of LTC rotation integrated into their core family medicine block [28]. Also, Queen's University Family Medicine residency dedicates one 1/2 day per week of their 24-week core family medicine block to LTC rotation [33]. Family Medicine residency leads from other medical schools can learn from and consider how they can adapt the models those schools applied into their context.

5.3 Conclusion

This paper highlights critical gaps and opportunities in the information exchange process during transitions to LTC. While the current use of the standardized form, LTC-HAF, facilitates some level of information transfer, both LTC Perspective and FP Perspective studies identified its limitations in conveying the depth, context, and breadth of information needed for high-quality, person-centred care. Although essential clinical data are typically included, valuable psychosocial and personal care information is not provided sufficiently due to structural, logistical, and professional constraints. We offer recommendations that centre health professions education interventions, document revision, the automation of form completion, collaborative documentation practice, warm handoff standards, and efforts to better empower patient families. By addressing the recommendations, care providers can bolster informational continuity and better support older adults moving into LTC. Future work should focus on piloting and evaluating these interventions in real-world settings to inform policy and practice reforms in the LTC transition process.

5.4 References

1. Cwinn MA, Forster AJ, Adam Cwinn A, Hebert G, Calder L, Stiell IG: **Prevalence of information gaps for seniors transferred from nursing homes to the emergency department**. *Canadian Journal of Emergency Medicine* 2009, **11**(5):462-472.
2. Griffiths D, Morphet J, Innes K, Crawford K, Williams A: **Communication between residential aged care facilities and the emergency department: A review of the literature**. *International Journal of Nursing Studies* 2014, **51**(11):1517-1523.
3. Adler-Milstein J, Raphael K, O'Malley TA, Cross DA: **Information sharing practices between US hospitals and skilled nursing facilities to support care transitions**. *JAMA network open* 2021, **4**(1):e2033980-e2033980.
4. Cfpc: **a New Vision for Canada**. In: *https://patientsmedicalhomeca/files/uploads/PMH_VISION2019_ENG_WEB_2pdf*. 2019: 40-40.
5. Cihi: **Advancing connected care in Canada**. In: *Canadian Institute for Health Information.* 2025.
6. Safadi H, Chan D, Dawes M, Roper M, Faraj S: **Open-source health information technology: A case study of electronic medical records**. *Health Policy and Technology* 2015, **4**(1):14-28.
7. Rozenblum R, Jang Y, Zimlichman E, Salzberg C, Tamblyn M, Buckeridge D, Forster A, Bates DW, Tamblyn R: **A qualitative study of Canada's experience with the implementation of electronic health information technology**. *Canadian Medical Association Journal* 2011, **183**(5):E281-E288.
8. Collier R: **Auditor General blasts eHealth Ontario**. *Canadian Medical Association Journal* 2009, **181**(11):E261-E262.
9. Webster PC: **Ontario's plan for electronic health records is at risk, official says**. *Canadian Medical Association Journal* 2010, **182**(6):E253-E254.
10. Dong L, Sahu R, Black R: **Governance in the transformational journey toward integrated healthcare: The case of Ontario**. *Journal of Information Technology Teaching Cases* 2024, **14**(1):24-36.
11. Tuohy D, Fahy A, O'Doherty J, Meskell P, O'Reilly P, O'Brien B, Murphy J, Doody O, Graham M, Barry L *et al*: **Towards the development of a national patient transfer document between residential and acute care—A pilot study**. *International Journal of Older People Nursing* 2021, **16**(4):e12374-e12374.
12. **eForms** [https://www.ontariohealth.ca/about-us/our-programs/digital-health-programs/patients-before-paperwork/eforms]
13. **SADIE Information** [https://www.ontario.ca/page/sadie-information#:~:text=Related-,Overview,is%20required%20for%20each%20request.]
14. **Overview-Ontario MD: What is HRM?** [https://www.ontariomd.ca/products-and-services/health-report-manager/overview#:~:text=What%20is%20HRM?,Learn%20more.]
15. Government of O: **Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1**. In.; 2021.
16. Okoh AE, Akinrolie O, Bell-Gam HI, Adandom I, Ibekaku MC, Kalu ME: **Nigerian healthcare workers' perception of transdisciplinary approach to older adults' care: A qualitative case study**. *International Journal of Care Coordination* 2020, **23**(2-3):92-106.

17. Chan KS, Wan EYF, Chin WY, Cheng WHG, Ho MK, Yu EYT, Lam CLK: **Effects of continuity of care on health outcomes among patients with diabetes mellitus and/or hypertension: a systematic review**. *BMC Family Practice* 2021, **22**(1).
18. Ministry of H: **Ontario's Primary Care Action Plan, January 2025**. In: *Government of Ontario.* 2025.
19. Weiss D, Cook B, Eren R: **Transdisciplinary Approach Practicum for Speech-Language Pathology and Special Education Graduate Students**. *Journal of Autism and Developmental Disorders* 2020, **50**(10):3661-3678.
20. Zborovski S, Trimble I: **Federal Government Announces Policy on Canada Health Act Status of Payments to Regulated Healthcare Professionals Providing Physician-equivalent Services**. In: *Stikeman Elliott Business Law firm.* 2025.
21. Lukersmith S, Millington M, Salvador-Carulla L: **What Is Case Management? A Scoping and Mapping Review**. *International Journal of Integrated Care* 2016, **16**(4):2-2.
22. Okoh AC, Shahu A, Gu R, Siu H, Howard M, Badone E, Grierson L: **Continuity of care during long-term care transitions: a scoping review of the Canadian literature**. *BMC Health Services Research 2025 25:1* 2025, **25**(1):1-13.
23. King M, Steele Gray C, Kobewka D, Grudniewicz A: **Continuity of care for older adults in a Canadian long-term care setting: a qualitative study**. *BMC Health Services Research* 2022, **22**(1):1-11.
24. Hurley J: **Health Economics**. Toronto; 2010.
25. Bucknall TK, Hutchinson AM, Botti M, McTier L, Rawson H, Hitch D, Hewitt N, Digby R, Fossum M, McMurray A *et al*: **Engaging patients and families in communication across transitions of care: An integrative review**. *Patient Education and Counseling* 2020, **103**(6):1104-1117.
26. Manias E, Bucknall T, Hughes C, Jorm C, Woodward-Kron R: **Family involvement in managing medications of older patients across transitions of care: A systematic review**. *BMC Geriatrics* 2019, **19**(1).
27. Jeffs L, Saragosa M, Law MP, Kuluski K, Espin S, Merkley J: **The role of caregivers in interfacility care transitions: A qualitative study**. *Patient Preference and Adherence* 2017, **11**:1443-1450.
28. Oliver D, Emili A, Chan D, Taniguchi A: **Education in long-term care for family medicine residents**. *Canadian Family Physician* 2011, **57**(8):e288-e291.
29. Ong EY, Bower KJ, Ng L: **Geriatric Educational Interventions for Physicians Training in Non-Geriatric Specialties: A Scoping Review**. *Journal of Graduate Medical Education* 2021, **13**(5):654-665.
30. Staykov E, Qureshi D, Scott M, Talarico R, Hsu AT, Howard M, Costa AP, Fung C, Ip M, Liddy C *et al*: **Do Patients Retain their Family Physicians after Long-Term Care Entry? A Retrospective Cohort Study**. *Journal of the American Medical Directors Association* 2020, **21**(12).
31. **Outcomes of Training Project** [https://www.cfpc.ca/en/news-and-events/news-events/news-releases/2023/outcomes-of-training-project-memo-to-academic-and]
32. CFPC: **Residency Training Profile for Family Medicine and Enhanced Skills Programs Leading to Certificates of Added Competence**. In.; 2021.

33. **Kingston and 1000 Islands - Family Medicine**
[https://familymedicine.queensu.ca/academics/program-sites/kingston-and-1000-islands#:~:text=PGY1%20Core%20Family%20Medicine%20Rotations%20*%20Clinical,Call%20Duties%20(approx.%201/10%20days%2C%202%2D3%20weekends/year)]

Chapter 6: Conclusion

This chapter begins with a summary of the key findings of each study presented in Chapters 2-4 and the integrated piece – Chapter 5. It also discusses the empirical, methodological, and theoretical contributions of this work. This is followed by a discussion of the implications of this dissertation for education, practice and policy. Lastly, it offers some future research directions.

This work sought to elicit the available evidence on continuity of care during long-term care (LTC) transitions in Canada and the perception of family physicians and LTC providers on how to support informational continuity during the transition process. The goal is to develop recommendations for the optimization of informational continuity of care during the primary care to LTC transition process. Simply put, the overarching aim is to describe the information exchange activities that occur during primary care to LTC transition, and to explore opportunities to leverage policy to optimize informational continuity during the transition process. The preceding chapters (2-4) were designed to address this overarching goal. This was done using three study-specific research objectives:

i. To identify and synthesize evidence on continuity of care during LTC transition in Canada, highlighting the key factors and knowledge gaps that impact continuity of care. (Study 1 – Scoping review)
ii. To describe the information LTC care teams in Ontario consider to be most important to support informational continuity during LTC transitions, information they receive and do not receive, the strategies they employ to seek out missing information, and factors influencing their ability to seek out the information. (Study 2 – Qualitative descriptive study)

iii. To describe the information family physicians in Ontario provide to LTC, would like to provide to enhance informational continuity for patients transitioning to long-term care, and the factors that influence their ability to provide the desired information. (Study 3 – Multiple case study)

The scoping review findings guided the approach employed in the two qualitative inquiries (Chapters 3 and 4), including the data collection tools development and data analyses. In Chapter 5, a critical synthesis of the results of the two qualitative studies produced a set of actionable policy recommendations geared to optimizing informational continuity in the study context.

6. 1 Summary of findings

6.1.1 Study 1 – Continuity of Care during Long-Term Care Transitions: A Scoping Review of the Canadian Literature

This scoping review highlighted the paucity of literature about continuity of care during LTC transitions in Canada, with only eight empirical studies included in the review. It synthesized practice and contextual factors that influence (relational, informational, management) continuity of care during the LTC transitions in the Canadian context. Stakeholder engagement or collaboration was noted to uphold informational and management continuity. This entails the active participation of diverse healthcare professionals in planning and executing smooth and comprehensive patient information and care plan transfers during the LTC transition process. It also includes integrating the patients' values, as communicated themselves or through their substitute decision-maker, and the involvement of family caregivers in an interprofessional team approach to transition planning. Family physicians in rural practice were more likely to continue providing care to their patients after their admission into LTC. In addition, one paper found that family physicians who identify as men were more likely to maintain relational continuity as more of them practice in LTC than their women-identifying counterparts. The same

pattern was noted in family physicians trained in Canada relative to international medical graduates. Relational continuity was more likely among family physicians with a fee-for-service remuneration model and those who have previously billed for LTC services than their counterparts.

The scoping review found that instances of relational continuity were very few during LTC transitions, but information transfer is commonly practiced during the process. While four papers contemplated informational continuity, none of the studies did a deep dive into the information exchange process to ascertain the comprehensiveness, quality, and utility of the information and specific activities that practitioners engage in during information sharing. Also, the reviewed papers did not contain information on or offer specific recommendations for policies and guidance to empower family physicians and other healthcare practitioners to practice in a manner that fosters continuity of care during LTC transition. The empirical studies that followed this scoping review were designed to generate evidence to fill the knowledge gap.

6.1.2 Study 2 – Long-term care provider's perspectives on health information exchange during patient transitions into long-term care: A multiple case study

In Study 2, 20 LTC providers from diverse disciplinary backgrounds recruited from five LTC facilities in Ontario were interviewed to explore their perspectives on informational continuity during LTC transitions in Ontario. Participants in this qualitative study identified types of information they value when caring for new LTC residents. These include past medical and surgical histories, medication lists, functional abilities, immunization records, and recent lab results – typically found in the LTC Health Assessment Form (LTC-HAF). They also stressed the importance of psychosocial and physical function details contained in the Resident Assessment Instrument-Minimum Data Set (RAI-MDS). Psychosocial information, such as resident's personal care preferences, values, and likes or dislikes, was seen as essential for assigning rooms,

determining care levels, and developing person-centred care plans. Participants emphasized that informational continuity during transitions is vital to delivering individualized and dignified care.

Across all cases, staff affirmed that comprehensively completed LTC-HAF and RAI-MDS forms support successful transitions. They generally receive medical and surgical history, diagnostics (e.g., x-rays, bloodwork), medication lists, lifestyle and behavioural assessments, mobility and incontinence status, and details about assistive devices. Occasionally, they also receive additional documents like behavioural assessments or interdisciplinary care team notes. However, participants frequently reported that the information was incomplete, outdated, or lacked essential details. For instance, immunization records were often missing, and critical elements such as specific diagnoses or life history details – typically provided by family physicians – were absent. Furthermore, since there is no required minimum standard for content or detail in these forms, some information, especially related to behaviours or mental health, might be intentionally omitted if it will affect LTC placement decision.

Participants also expressed concern that the last formal assessments might be outdated by the time of admission, leading to gaps in understanding the resident's current condition. These gaps can compromise care planning, as missing or vague information may result from poor documentation or insufficient attention to detail. To bridge these gaps, LTC staff employ several strategies beyond relying on the standardized forms. When possible, they consult hospital electronic health records (EHRs) to gather more complete information. In the absence of EHR access or when records are insufficient, they reach out to family members and, less frequently, to other healthcare providers such as hospitalists, care coordinators, or pharmacists. Family members, when involved and informed, often act as crucial intermediaries. However, contact

with discharging family physicians is rare, and these physicians are described as largely inaccessible to LTC staff.

Participants' ability to seek additional information was influenced by five key factors. First, limited time and staffing capacity (especially in smaller, rural facilities) restricted efforts to contact patient-discharging care providers. The short five-day admission window further constrained opportunities for follow-up, being deemed too short to successfully have the communication with other providers. Second, the location and practice setting of the LTC physician affected information flow. Rural-based physicians embedded in the community were more likely to have relationships that enabled information sharing, unlike their urban counterparts who do not often enjoy such close relations in their location. Third, professional power dynamics played a role, with the likelihood of receiving responses varying depending on the professional identity of the requester. Fourth, the involvement of family caregivers impacted their usefulness as information sources; low involvement reduced the likelihood of successful communication. Finally, limited or no access to hospital or primary care EHRs hindered efforts to fill informational gaps, especially for facilities in location outside the coverage of integrated EHR systems.

6.1.3 Study 3 – A qualitative descriptive study of family physicians' perspectives on informational continuity during patient transitions into long-term care

Study 3 described the perceptions of 13 family physicians on informational continuity during the LTC transition in Ontario. Family physicians in this study unanimously expressed a strong moral obligation to ensure high-quality care for older adults, whom they viewed as deserving of dignified treatment due to their lifetime contributions to society. A central theme in their perspectives was the importance of care continuity during transitions to LTC. While they ideally wished to maintain their role as the most responsible physician throughout this transition,

competing demands made this unrealistic. Hence, they endorsed informational continuity (i.e., ensuring comprehensive and important information is transferred to LTC) as a practical substitute for relational continuity.

Participants emphasized that both biomedical and psychosocial information are crucial for maintaining care quality in LTC. Biomedical information considered important included medical history, diagnosis, surgeries, medications, allergies, assistive devices, and advance care plans. Psychosocial information such as cognitive status, behavioural issues, mental health history, social background, habits, and spiritual or cultural practices were also seen as integral. However, in practice, the information transferred during transitions was often limited. Typically, family physicians shared only selected biomedical data – brief histories, diagnoses, medications, allergies – and very limited psychosocial information – mostly restricted to safety-related concerns (e.g., aggressive behaviour).

Several factors contributed to this minimal information. The family physicians questioned the usefulness of comprehensive information if it was not going to be used by LTC providers, which made them less inclined to invest time in preparing it. The LTC-HAF, the primary transfer document, was criticized for being too constrained and lacking prompts for psychosocial information. Furthermore, the absence of a clear expectation for information completeness led physicians to leave sections blank when such information was not readily accessible to them. Some also pointed out that family physicians alone may not be best positioned to capture holistic patient information, suggesting a broader interprofessional approach was needed. Another sensitive factor was strategic withholding of certain psychosocial details, particularly information like aggressive behaviour that might portray a patient as challenging. Some physicians acknowledged that including such information might jeopardize

timely or successful LTC placement, creating a dilemma between honesty and advocacy for their patients.

Despite these limitations, some physicians went beyond providing the LTC-HAF. They included the cumulative patient profile (CPP), which provided a richer biomedical detail, and occasionally added narrative summaries or contacted LTC providers directly. Direct provider-provider handoffs were described as enhancing information exchange, though such practices were not universal. Preparing family members to advocate and share relevant information during the transition was another common strategy.

Some factors influenced physicians' ability to provide a more comprehensive information during LTC transition. Practice capacity as it pertains to time constraints and fee-for-service remunerative model discouraged allocating more time to administrative work like the LTC information exchange activities. Unlike their urban counterparts, physicians in rural settings – where they often had overlapping roles in primary, acute, and LTC – were more likely to engage directly with the receiving LTC providers. Educational or professional experience in LTC also made some physicians more likely to provide thorough information, motivated by a deeper understanding of what is useful in those settings. Overall, while informational continuity is strongly valued by family physicians, its implementation is limited by systemic constraints, document inadequacies, uncertainty about information utility, and varying practice contexts.

6.1.4 Information exchange during long-term care transition: A comparative analysis of the perspectives of family physicians and long-term care providers

This piece presented synthesized findings from Study 2 and Study 3. It integrated descriptions of the patient-relevant information that LTC providers deem important when older adults transition into LTC relative to the information that they actually receive with descriptions of the patient-relevant information community-based family physicians believe is important to

maintaining the benefits of care continuity as their older patients transition into LTC relative to the information that they actually transmit.

During transitions to LTC, family physicians are responsible for completing the LTC-HAF, which is transferred to LTC providers. This form typically includes biomedical information such as medical history, medications, mobility, and assistive device use. However, LTC providers in the study emphasized that while this information is valuable, it lacks the depth and breadth needed for high-quality care, particularly with respect to psychosocial data like trauma history, personal values, cultural practices, and preferences. Family physicians acknowledged the importance of sharing this information but often fail to provide it due to several constraints. These include time constraints, lack of relevant information in their practice EHRs, and doubts about the utility of the information they provide stemming from the perception that LTC providers will reassess patients upon admission. Additionally, the LTC-HAF lacks sections for detailed psychosocial information and pen-and-paper format method of completion creates inefficiency. Some physicians also omit information, such as aggressive behaviours, fearing it could delay LTC placement—a concern raising equity issues in LTC access but also causing the transfer of inaccurate information to LTC. Many family physician participants also feel that gathering comprehensive information beyond their scope of practice (e.g., spiritual practices, recreational needs) should be the role of other professionals, yet the current structure assigns this responsibility solely to them. This highlights a systemic issue related to the absence of collaborative documentation in filling out the LTC-HAF.

To address these shortcomings, the study proposes digitizing and expanding the LTC-HAF to allow automatic population of data from EHRs, making it easier to provide complete and detailed information. However, true informational continuity requires more than just a better

form. A harmonized, province-wide EHR system would allow care providers across settings to access and verify patient information, reducing data silos. Yet, such harmonization in Ontario remains unlikely due to systemic challenges, including lack of interoperability, lack of political will, and financial constraints. Given this, the form itself must become more functional. Automation can enhance efficiency, legibility, and space for details.

Additionally, involving an interprofessional team in completing the form can distribute responsibility more realistically and ensure holistic data capture. This would require policy changes to the *Fixing Long-Term Care Act, 2021*, which currently mandates that a single primary care provider complete the form. Education is also pivotal in the informational continuity optimization discourse. Including LTC-specific training in medical curricula and professional development can sensitize providers to the value of effective and meaningful information exchange and equip them with the skills to do so. Introducing structured, mandatory warm handoffs, involving paid discussions between discharging and receiving providers—could further enhance continuity by allowing for clarification and context-sharing that forms alone may not be able to convey. Families could serve as valuable intermediaries in information exchange. Engaging and informing them during the transition process empowers them to bridge information gaps, leveraging their intimate, longitudinal knowledge of the patient.

Ultimately, optimizing information exchange in LTC transitions requires system-wide improvements – automation, document revision, interprofessional collaboration via documentation and warm handoffs, and education– all aimed at enhancing informational continuity and upholding good-quality care for older adults moving into LTC.

6.2 Study contributions

The contributions are categorized into three: substantive/empirical, methodological, and theoretical contributions.

6.2.1 Substantive contributions

To date, there has been limited scholarship on informational continuity in the LTC transition domain. This work provided the first two empirical inquiries that have studied the details of the information exchange process during LTC transitions in Canada from the lens of informational continuity. It offers a rich understanding of the type and value of information that family physicians would like to share and the type and value of information that LTC providers would like to receive during LTC transitions.

Chapter 2 (a scoping review) is the first review study on continuity of care from the Canadian context. It revealed the paucity of literature and the imperative to produce empirical evidence in this area. An important contribution of the review is synthesizing specific physician, practice, and collaborative features that influence the realization of continuity of care during LTC transitions.

Chapter 3 described LTC providers' perspectives on informational continuity during the transition process. It illuminated the information LTC providers value, receive, and do not receive currently during LTC transition. It demonstrated that although many valuable biomedical information is frequently received, the psychosocial information necessary to support person-centred care was often lacking. The study extended knowledge on the challenges LTC providers face during care transitions such as obsolete information, missing information, and insufficient attention to detail in LTC transition forms. Also, previous studies have reported that factors like the physician's practice location [1] and family engagement [2, 3] that bear influence on

continuity-based practice. However, Chapter 3 provided nuance on the influence of practice location, building on Staykov and colleagues' [1] findings on one's ability to remaining the most responsible physician for a patient entering LTC by offering insight into how practice location can influence information exchange practices. Unlike the previous studies [2, 3], Chapter 3 results highlighted an imperative to consider the family's level of involvement in the care of their older adult relative, not just during the transitional care period but in a longitudinal fashion. The study also offered additional influential factors such as staffing capacity, professional power dynamics, and access to EHR.

Chapter 4 analysed family physicians' perspectives on informational continuity during LTC transitions. It elucidated the information family physicians deem important to send to LTC, what they actually send, and what they are unable to send during LTC the transition process. The study also clarified that while family physicians send several important biomedical information, they perceived it would be more appropriate to collect the psychosocial information from other health professionals. Thus, the study contributed the idea of fostering informational continuity by adopting interdisciplinary involvement in care transitions by incorporating input from the full range of health professionals in the patient's circle of care. It contributed an understanding of the issues that hamper family physicians' ability to provide a more comprehensive information: time constraints, the limits of LTC-HAF's design, redundancy, lack of clear information standard (or minimal amount of information and quality [depth and utility] of information), withholding information that may delay LTC placement.

Chapter 5 offered a synthesized result and established the full range of information that is typically transferred, available but not transferred, and unavailable information to transfer during LTC transitions. It contributed a set of recommendations to optimize the information exchange

process, namely: LTC educational interventions across undergraduate, postgraduate, and continuing medical education; document revision, the automation of form completion, collaborative documentation practice, warm handoff standards, and efforts to better empower patient families. This is the first study to contemplate these reforms in the effort to build a resilient health system that supports informational continuity during the transition process and optimal care outcomes for LTC residents.

6.2.2 Theoretical contributions

This work, particularly in Chapter 4, advanced the application of the *Sociomateriality* theory [4], underlining the human and non-human elements that determine the nature and quality of information exchange during LTC transitions in the study setting. *Sociomateriality* theory is a collaborative and interdisciplinary theoretical framework rooted in the field of organizational studies. It is not credited to a single individual but evolved through the works of prominent scholars in organizational studies like Wanda Orlikowski, Karen Barad, and many others. The theory underscores the complex and dynamic relationship between materiality and social practices in shaping organizational practices and outcomes [4, 5]. It argues that the manifest behaviours of actors and organizational practices are a result of the interactions between material and social elements constantly co-constituting each other [4]. Materiality considers how actors use non-human tangible and intangible entities (e.g., digital or physical objects, infrastructure, discourses, institutional contexts) to achieve work objectives [4, 5]. These material elements are perceived as not just passive tools but actively shape and are shaped by actors' practices [6, 7]. Thus, *sociomaterialist* perspective helps us to make sense of the role of technology and other material objects in organizational life, and how these objects are shaped by social and cultural factors [6, 8].

The theory drew our attention to the role of material objects in shaping practice behaviour across care settings (LTC, primary, and acute care), as well as how these materials are actively shaped by human actions. This is particularly applicable during the information sharing process helping one to make sense of the factors that influence family physician's approach to the care transition communication or documentations. The *Sociomaterialist* theory helps to illuminate how materials like the LTC-HAF, EHRs, and practice context (e.g., rurality, remunerative model) determine the information family physicians provide, their ability to interact and who they interact with during the information sharing process. For example, a family physician may not be able to include an information that is not request for in the LTC-HAF. The theory is a useful guide in probing into the influence of family physicians practice orientation on how these materials are used. A family physician who has developed an orientation to seek to transfer comprehensive information during care transitions would likely allocate more time to complete the LTC-HAF meticulously.

6.2.3 Methodological contributions

The continuity of care conceptual framework, which was developed in Chapter 2 and revised in Chapter 3, explains physician characteristics, practice features, and collaborative elements that influence continuity of care during LTC transitions. This adds to the body of scientific works that have theorized the features of continuity of care, while lending a unique Canadian perspective. The framework is informed by two interdisciplinary theoretical frameworks—*Transitions theory* and the *Transdisciplinary perspective*. The framework guided the two qualitative inquiries, informing data collection tools and analytic process. The framework is innovative because it prompts an inclusive and collaborative approach to knowledge construction making diffusion and acceptability of findings across disciplinary

boundaries possible. This is because it inspires co-construction of knowledge, indicating that the continuity-based activities during LTC transitions would be better understood from the lenses of multiple stakeholders.

Furthermore, while the conceptual framework guided the empirical studies and we also anticipate that it would be relevant to researchers in future inquiries related to the topic. While the framework is grounded in the Canadian literature, it may offer some benefits to other jurisdictions or countries with similar challenges – helping in studying the LTC care continuity-related problems and guiding the development of potential solutions. For instance, studies have shown that several LTC transitions in the United States are characterized by inadequate information transfers [9], however, to the best of our knowledge, no other framework has considered the informational continuity element of LTC transition. Also, another study in the Netherlands involved verbal informal exchange of information (discussing the older adults' medication and medical history) between general practitioners and the designated LTC physicians [4, 5]. However, the studies did not explore the influence of elements like patient and family engagement, physician education, practice location, and remunerative models on their ability to the informational continuity. Also, apart from informal inter-provider communication, little is known about the document transfers and other strategies employed to support informational continuity during transitions in the Netherlands.

The scoping review (Chapter 2) employed Arksey and O'Malley's framework and was conducted in adherence to the Joanna Briggs Institute's guideline to map the literature on continuity of care during LTC transitions in Canada. The Joanna Briggs Institute guidelines are consistent with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (the PRISMA-ScR) [10]. The reporting pattern followed the

PRISMA-ScR reporting checklist. The rigorous approach to scoping employing the aforesaid framework and guidelines. The rigorous approach to the scoping review enhances credibility, transparency, and reproducibility.

Chapter 3 employed Yin's multiple case study design [11]. The eclectic constituents of the study sample ensured generation of perspectives from multiple disciplinary groups. The participants interviewed included a family physician, registered nurse, nurse practitioner, social worker, administrative officer, physiotherapist, pharmacist, and personal support worker. Also, the exploration of similarities and differences across the rural/urban divide enhanced theoretical generalization and produced rich insights regarding how continuity-based practices during LTC transitions compare between rural and urban settings.

Qualitative description [12] was employed to study family physicians' perspectives on the informational continuity discourse in Chapter 4. It is the first study to use this research design in LTC transition-related informational continuity inquiry. Qualitative descriptive study design provides low-inference analysis of the data. It gears to stimulate further research in this area since this work is exploratory, being a novel inquiry on the topic in the Canadian context. Additionally, we sought extrapolations beyond the specific activities of participants as family physicians but also applying a transdisciplinary lens [13] in the interview guide construction to elicit their insights on the roles and preferences other health professionals, patients, and families during these transitions. For instance, Chapter 4 generated the relevance of an interprofessional approach to completing LTC transition documentations. A notable benefit is that it offered a more comprehensive insight beyond a single physician's experience and beliefs to include insight relevant to other primary care providers who are not yet involved in the LTC transition process. Our sense is that these participants are able to offer such insights because of their accumulated

knowledge and experience over the years from interaction with colleagues, patients, families, and the LTC transition process.

6.3 Study implications

6.3.1 Implications for health professions education

This work highlighted that educational experiences have immense influence on a family physician's disposition to continuity-based practices during LTC transitions. *Transitions Theory* highlights the importance of education to developing competencies in professional practice. Meleis and colleagues [14] drew links between education and professional socialization. The practitioners' transitions were described as a journey, and practitioners internalize the knowledge, skills and values that builds them into fully embracing their professional identity from their entry-level training, postgraduate training to continuous professional development. Meleis and colleagues indicated that things learned during a practitioner's educational experiences shape their approach to transitional care services. Hence, it would be beneficial to reform health professions education, repositioning it to orient practitioners for practices that support informational continuity. We recommend integrating educational content on LTC in medical training. This is in concordance with the 10th pillar of the Patient's Medical Home (PMH) model which focuses on Training, Education and Continuous professional development [15]. The model promulgates not only didactic but also experiential training for students, residents, medical and other health professionals. Thus, adapting didactic and experiential learning in the LTC space would be pivotal for competency building and to better attune practitioners to support informational continuity.

In addition, health professions educational curricula should include course contents on LTC transitions reflective of implications of care transition practices on continuity of care, emphasizing collaborative practices and communication. Traditionally, different health professions structure their educational programs such that learners are trained by preceptors from their field of study

[16]. While discussions on interprofessional educational programs have gained momentum in the past few decades [17], uptake has been slow as various health professions continue to uphold their professional autonomy and boundaries. However, various studies [18-20], including this thesis, echo the critical value of providing educational content that would prepare learners to imbibe collaborative practice, motivating interest in communication with other health professionals. Since the LTC transition process involves information exchange among different health professionals, effective communication and collaboration among them would be pertinent to achieve informational continuity. Therefore, educational program leaders are encouraged to incorporate interprofessional education content in their curricula.

While exposure to and understanding the roles of other health professional are important, each discipline, including medical education programs also bear significant responsibility for selecting and developing faculty and preceptors who embody the collaborative competencies they aim to instil in learners. We argue that it is not sufficient to emphasize collaboration solely through formal instruction; rather, students benefit more profoundly from observing authentic, high-functioning interprofessional collaboration modelled by physician mentors. The presence of faculty who consistently demonstrate respectful, effective teamwork provides learners with concrete examples of collaborative practice, reinforcing these values through lived experience. Thus, the cultivation of mentors who exemplify these qualities would be a useful strategy in fostering a culture of collaboration within health professions education and, eventually, clinical practice.

Notably, power imbalances and professional hierarchies pose significant threats to effective collaboration. The practice of responding to requests from certain practitioners (e.g., nurse practitioners, family physicians) and overlooking requests from others (e.g., registered nurses),

reported in Chapter 3, re-echo this concern. This indicates an imperative for reorientation and encouraging horizontal power relations. Professional identity formation and practice orientation, including disposition to collaborative practice, are usually shaped through education [16, 21, 22]. Hence, health professions education programs should be intentional in instilling attributes that support effective collaboration, including mutual respect and horizontal power relations [18].

6.3.2 Implications for practice

This dissertation is grounded in the PMH's 7th pillar that seeks to achieve continuity of care across the continuum of care. This is geared to delivering good-quality and patient-centred care. While relational continuity is currently structurally unfeasible during LTC transition, this work explores leveraging informational continuity. It illuminates the limits of the current document-based handoff and highlights a need for other complementary information sharing methods. Inconsistencies in the information provided in the documents underscore the necessity of a clear standard for comprehensive information transfer during these transitions. For instance, Chapter 4 suggested that it may be unrealistic to elicit comprehensive biopsychosocial information under current practices because of the limits of family physicians' professional boundaries which focus on biomedical aspects of care. Hence, an interprofessional approach to completing the LTC transition documentation may be necessary. The studies all offer that a team-based approach involving the discharging and receiving care providers as well as patients and their informal caregivers would help in generating information that support patient-centred care. While collaborative practice is well theorized [18], it has not been fully applied to LTC transition information exchange process. In this regard, this work elicited an imperative to utilize an interprofessional team approach in developing LTC transition paperwork and involving families and/or patients in the process.

Furthermore, expanding interdisciplinary involvement in care transitions by incorporating input from other health professionals could support a more holistic approach to informational continuity of care. The qualitative studies highlighted the shortcomings of a single disciplinary lens in overrepresenting one discipline's perspective in care transition documents. The document's content may focus heavily on biomedical information when it is completed by a nurse practitioner, whereas it may have more psychosocial content if it is completed by a social worker – emphasizing the value of adopting a collaborative approach. A clear example can be demonstrated using the RAI-MDS. Sections of the RAI-MDS could be completed by different health professionals: functional status by an occupational therapist, behaviour and preferences by a social worker, and medication and health conditions by a nurse practitioner. This approach of multidisciplinary (e.g., nursing, social work, rehabilitation science) inputs could generate a balanced, rich and comprehensive biopsychosocial information.

Lastly, while the importance of communication among care providers for effective care delivery is well-researched [23], it is not yet a norm in practice during LTC transitions in the study context. A prominent reform articulated in Chapter 5 is a need for the information exchange process to make communication between both sets of providers (primary care and LTC) as well as family caregivers a standardized practice. This work shows that warm handoffs are important because accurate, current, and valuable information could be shared during the encounter. We believe that integrating warm handoff as a mandatory component of the LTC transition process would improve both interprofessional collaboration and provider commitment to the information exchange process.

6.3.3 Implications for policy

This dissertation produced evidence and recommendations that are relevant to healthcare system policymaking as per identifying areas for intervention and proffering viable solutions for the identified problems. LTC providers require accurate and up-to-date documentation of the patient's condition, accessible and interoperable health information systems, and proactive communication among stakeholders. However, they often grapple with several challenges related to organizational capacity, geography, and technology.

The LTC-HAF is currently paper-based, and it is filled out and faxed. This model compromises legibility, time, and volume of information provided. We recommend digitizing and transmitting the form electronically. Also, integrating documents like the LTC-HAF with EHRs could improve efficiency during completion. This would improve data access, save time, and minimize the duplication of information. The proposition is that practitioners would be encouraged to provide more information if the process of retrieving information and filling out the documents was smooth and less time-consuming.

The LTC admission policy stipulates a five-day admission window [24], however, the narrow admission window is perceived as restrictive, not offering sufficient time for cross-setting communication and collaboration. Moreover, the information contained in the transition documents may be obsolete, and it might be difficult for the discharging care providers to provide an updated assessment within the short window. The five-day LTC admission requirement could be relaxed to mitigate the time barrier to collaboration. Anecdotally, some care providers express the view that a two-week window would offer more flexibility and more opportunity for stakeholder engagements, arguing that these care providers grapple with enormous workloads and would need adequate time to fix these warm handoffs into their schedule.

Also, implementing a targeted payment structure for the warm handoffs might be worth exploring. Making warm handoff a billable service may incentivize care providers to engage in it. Specifically, operationalizing a standardized procedure for provider-provider communication—through a paid-for, structured in person, phone, or videoconferencing calls—could enhance the transfer of critical patient care insights from family physicians to LTC providers. For instance, Ontario has OHIP billing codes for LTC case conferences with multiple healthcare professionals (K124) to discuss a patient's care plan and progress while in an LTC facility as well as physician-to-physician telephone consultation (K730) and e-consultation (K738) for the primary care physician to collect data that is not already available in their record [25]. Currently, there is no billing code for primary care physician and LTC providers for information sharing during LTC transitions. Aligning financial incentives with care continuity-targeted services may encourage family physicians to allocate time for comprehensive information transfer.

6.4 Strengths and limitations

The studies that make up this dissertation have several strengths and limitations. Regarding the strengths, first, methodological rigor across the constituent studies ensures reproducibility and trustworthiness. This is demonstrated through the involvement of multiple coders ensuring each interview transcript is double-coded, strict adherence to ethical guidelines in managing recruitment and participant data, and detailed description of the research procedure. Also, to ensure best practice, Chapter 2 involved a comprehensive search strategy developed with the assistance of a health sciences librarian and adherence to the JBI guideline for scoping review and application of PRISMA-ScR checklist. The range of methods applied across individual studies add depth to the work. For instance, the two qualitative studies build from the findings of the preceding scoping review in terms of the interview guides and coding frameworks

development, thereby ensuring alignment and facilitating integration across the studies. Also, the multiple case study methodology enabled comparisons and exploration of nuances and contextual features across geography (rural and urban) and LTC facility sizes.

Second, the transdisciplinary approach to knowledge production is another strength of this work. A single disciplinary lens would not have provided a well-rounded exploration of research questions given the nature of the topic studied in this thesis. This work involved a mix of participants from various disciplinary backgrounds (e.g., family medicine, nursing, social work, physiotherapy, etc.). Drawing on insights from diverse disciplinary lenses provided a comprehensive understanding of issues and practices pertaining to informational exchange during LTC transitions in the study context. Additionally, the scoping review contains papers that examined on continuity of care broadly from the perspectives of healthcare providers, patients, and family caregivers. The inclusion of insights beyond those of traditional healthcare practitioners is a tenet of trans-disciplinarity. The application of transdisciplinary perspective in the scoping review offered an analytic framework that served as a solid foundation for the primary studies that followed it, prompting a balanced exploration of the information exchange during the LTC transition process.

The third strength is the practical relevance of the topic studied in this work. With an increasing number of older adults needing LTC, there is also a growing demand for evidence to inform the development and implementation of effective policy initiative and investments for LTC in Ontario and across Canada. This is critical in the aspect of continuity of care due to a paucity of literature in this subject area and the significance of continuity of care to sustaining good-quality care after transitioning to LTC. Hence, the findings and recommendations from this

program of research are well-positioned to offer some policy and practice interventions that could optimize information exchange during LTC transitions.

There are some important limitations to bear in mind while interpreting the study findings. First, some relevant papers may have been omitted in the scoping review if they were published in French since the eligibility criteria was limited to English language publications. A reliance on the English literature implies that the review might have not presented findings that represent the Québécois LTC transition context. Second, the empirical studies (Chapters 3 and 4) were conducted in Ontario, which represents only one out the 13 jurisdictions in Canada. Canada has an eclectic health system architecture with governance, financial and delivery models differing across jurisdictions. Hence, while the study findings are applicable to Ontario, applicability to other Canadian jurisdictions should be considered carefully.

Third, due to the recruitment challenges, Chapter 3 comprised of only one rural LTC facility out of the five study sites. Having one rural case constrained ability to draw comparisons and develop a richer description reflective of the broader contextual features and practices in rural Ontario. One rural case may not offer the full picture of the information exchange practices during LTC transitions in the rural regions.

Lastly, being a care provider-focused research project, the perspectives of patients and other partners in care were not explored directly or in-depth in this work. The rationale for the provider-focus approach was detailed in Chapter 1, including their expert and experiential knowledge of and engagement with the LTC transition communication tools and processes. Nevertheless, we are not necessarily discounting the service user perspective as there may be benefits from eliciting the perspective of older adults and their families, especially pertaining to

upholding patient- and family-centred care. The older adults and family caregiver insights should be examined future research.

6.5 Areas for future research

This work presents the first empirical study to describe LTC providers' perceptions of informational continuity during the LTC transitions in the Canadian context. Hence, it opens the field to more studies and academic dialogue on the subject. Several areas for future research have been identified throughout the process of conducting the studies presented in this dissertation. First, the scoping review found only eight relevant empirical studies, highlighting the limited research available on continuity of care during LTC transition in Canada. Very few papers examined how physician characteristics (gender, education, interest in LTC practice) and practice features (geography, staffing model, and remunerative model) bear influence on continuity of care. While two papers examined the two practice features (geography, staffing model), only one paper explored remunerative model and all physician characteristics. Although the existing studies offer valuable insights, they are insufficient to draw strong conclusions or fully understand the influence of physician characteristics and practice features on providers ability to support care continuity during LTC transition. Considering this paucity of literature, more research is necessary to explore these under-researched themes to increase the pool of evidence and better inform policy and practice related to transition to LTC in Canada.

Second, family physicians face technological barriers related to hand-filling the LTC-HAF and a fragmented electronic information system. The crude pen and paper method and transmission via fax was a prominent barrier experienced by family physicians in this work. This work generated a recommendation for innovation, specifically to automate the document preparation and transmission process. Future implementation science studies should investigate

the usability, feasibility, and impact of an automated LTC-HAF that is interoperable with primary care EHRs on enhancing the efficiency and comprehensiveness of information transmission during LTC transitions.

Third, the fragmented information technology infrastructure poses a significant barrier to accessing information housed in a different care setting other than the practice setting of each care provider involved in the care transition process. The current study suggested that a more harmonized and easily accessible health information system across LTC, acute care, and primary care is desirable. There was widespread belief that such integrated provincial health information infrastructure would streamline information access and foster informational continuity. However, the implementation of such information system remains unfeasible in the Province currently due to financial constraints, political inertia, and incompatibility of the existing platforms with each other. Hence, future research should investigate potential strategies to address the limiting factors.

Fourth, the views and experiences of patients and their family caregivers on informational continuity during LTC transition are worth exploring as patient-centred care is the contemporary mainstay of healthcare research, education and practice. It would be beneficial to ascertain whether the available tools reflect the information and care needs of not just the LTC providers but also the services users (patients and their families). Hence, further studies could look into the experiences and perceptions of older adults and their family caregivers on the kind of supports they need during LTC transition information exchange process and the how to prepare them to be good information bridges between the discharging and receiving care providers.

Fifth, this work yielded rich insights that describe the current practices and challenges to informational continuity of care during LTC transition from the healthcare professionals' perspective. However, several stakeholders are involved in one way or the other in the LTC transition process. For instance, hospital discharge planners, social workers, and nurses may be key actors when a LTC transition occurs from the hospital. Care coordinators from Ontario Health atHome serve as conduits for information transmission and equally complete the RAI-MDS assessments. These care coordinators are important players in the information sharing process. Therefore, future research should investigate the roles of these stakeholders, factors that influence how they engage with the LTC transition process, including information exchange, and possible transformations in their activities that could enhance informational continuity.

Lastly, while the framework developed in this dissertation may have wider application, it largely reflects the realities of the Ontarian context. Subsequent research should consider the peculiarities of other jurisdictions across Canada and other countries in order to develop informational continuity frameworks that articulate the distinctive features of those contexts.

6.6 Reflection

The transition to LTC marks a profound transformation in approach to care, it often implies a decisive philosophical shift from a curative medical orientation to one that prioritizes palliation, i.e., focusing more on comfort, symptom relief, and the preservation of dignity than on cure [26]. The shift in philosophy of care bears relevance, specifically, to frail older adults who constitute the current majority of individuals entering LTC. Reflecting on the thesis study results, I sense that the philosophical differences at both ends of care transition spectrum (discharging and receiving) may contribute to suboptimal information exchange practices. While this work suggests that family physicians are not necessarily oblivious of the several important information

to send to LTC, the inability to allocate more time to information exchange during the transitions over competing practice priorities probably underpins a predilection for curation over palliation. Effective communication and collaboration among care providers is theorized to build shared understanding [20]. However, the healthcare system fragmentation often results in minimal or no interaction between these care providers and further exacerbates the disconnect in orientation between both sets of providers. Manifestations of this can be seen in the study findings. An example is family physicians' inability to send comprehensive information due to perceptions of redundancy since LTC providers will conduct fresh assessments. Also, they were concerned the information they provide may become obsolete and may not be used by the LTC team. These challenges indicate more than a documentation issue; they reflect a deeper misalignment between the biomedically-focused curative and preventative perspectives of primary care and the maintenance-oriented goals of LTC, which are often guided by a different set of priorities, policies, and care philosophies.

Aside the philosophical contention, I noted that the LTC-HAF is currently unable to meet the information needs of LTC care teams. The LTC-HAF is currently at the centre of this transition. It is a policy-driven document meant to serve as the primary tool for information exchange between the patient-discharging and receiving care providers during LTC transitions. Ideally, the LTC-HAF is expected to facilitate informational continuity. The synthesized findings in Chapter 5 unpacked the documents limitations, including lacking several psychosocial details and its content being outdated at the time of LTC admission. This disconnection disrupts informational continuity and undermines the principles enshrined in the Resident Bill of Rights outlined in Ontario's *Fixing Long-Term Care Act, 2021,* which mandates that LTC homes operate in a manner that upholds residents' dignity, safety, comfort, and cultural and spiritual

well-being [27]. If documentation does not serve to support holistic and timely understanding of the resident's needs, it calls to question how the vision of resident-centred care could be achieved.

This question can be further unpacked using Uijen's framework on continuity of care, which outlines seven dimensions: individual, relationship, communication, longitudinal, cross-sectional, flexibility, and accessibility [28]. Informational continuity, which sits within the communication dimension, is particularly strained in the current model of LTC transitions. The intent of the LTC-HAF is to enable effective transmission of patient information between primary or acute care and LTC settings. Yet, because it is currently seen as functionally redundant and lacking adequate contextual information, as our study results suggests, it fails to meet its purpose. This failure also weakens continuity of care, as LTC care teams are unable to receive satisfactory information and up-to-date meaningful insights from family physicians who have often developed longstanding care relationships with the resident and their family prior to the transition to LTC. The lost potential of longitudinal insight is especially concerning during a transition where familiarity and context could provide immense benefit to care planning. When documentation is reduced to a perfunctory activity rather than a tool for meaningful communication, the impact reflects on the impacts on the LTC residents such as suboptimal care and poorer quality-of-life [29-31].

Sociomaterialist theory offers a compelling lens to understand why these problems persist. It suggests that behaviours, including how physicians engage with the documentation process, are not shaped solely by clinical knowledge or intentions but are deeply intertwined with material elements, such as forms, technologies, and institutional policies [4, 5]. The LTC-HAF, therefore, is more than a form; it is a material actor in a complex system. The current

policy (the *Fixing Long-Term Care Act*), which lacks any mandate for a minimum information standard—the kind and quality of information—or the means for integration with EHRs shapes the physician's sense of its utility. Combined with the fact that the *Fixing Long-Term Care Act* only mandates the transfer of documentation [27] without definition of the depth and scope of information to be transferred, the process becomes merely a routine task rather than an avenue to facilitate meaningful information exchange and enhance continuity of care. This procedural view toward the document completion and transmission is also incompatible with the palliative orientation of LTC, where information exchange should be comprehensive, useful, and inclusive of psychosocial and cultural dimensions.

The Resident Bill of Rights, then, becomes an aspirational standard that is systematically undermined by the lack of informational continuity. If dignity and comfort are central to the resident experience, then information that captures not only biomedical status but also the psychosocial domain such as the resident's preferences, values, and spiritual/cultural practice is vital. The healthcare system is thus unable, in practice, to support the person-centred care it aims to uphold during LTC transition.

In light of this, recent policy reform efforts must be evaluated not only on structural investments but also on their capacity to recalibrate the information exchange landscape of LTC transitions. Canada's Patient's Medical Home ideal [15] and the *Canada Health Act Services Policy* [32] underscore the importance of integrated, team-based primary care. These frameworks envision family physicians as part of interprofessional teams that extend their support longitudinally and collaboratively across care settings and permits some physician-equivalent services to be performed by other professionals – nurse practitioners, pharmacists, midwives. The Ontario government's recent $1.8 billion investment through the Primary Care Action Plan

reflects a timely opportunity to enable such integration [33]. These levers have the potential to reshape the LTC landscape – this could be seen as a fifth era of LTC reform – if they are operationalized in a way that directly supports continuity, particularly around LTC transitions.

Chapter 1 reviewed Daly's [34] description of the four foregoing eras. The first era was the period of minimal regulation with private provider proliferation (1940 to 1966). The second era was the period of expansion of the province's funding and regulatory role (1966–1993). The third era was the period of ministerial consolidation, funding parity, and the shift to medicalized long-term care (1993–2007). Then, the Fourth era: the period of regulatory rigidity, austerity, and commercial consolidation (2007–present), which was ushered in by the *Long-Term Care Homes Act, 2007*. In the fifth era, for these reforms to realize their promise, they must bridge the philosophical and material gaps currently fragmenting care. First, reforms must reimagine the LTC-HAF not as a static form, but as a dynamic documentation tool that evolves with the resident's journey. The current work offers several recommendations aimed precisely at optimizing this transition point: revising the structure of the LTC-HAF to include additional important data elements that reflect not only biomedical but also psychosocial dimensions; integrating the form within EHRs to allow for automation and efficiency in completion and transmission; enabling collaborative documentation; and mandating warm handoffs among patient-discharging care providers, receiving care providers, and family caregivers.

In this regard, I offer that the fifth era should be the period of person-centredness, interprofessional practice, and technologically driven innovations. Considering this next era from the context of information exchange during LTC transition, artificial intelligence and automation of tools and processes would bring about efficient information exchange, save time, and facilitate the transmission of a more comprehensive information than currently done. The growing support

for and investment in interprofessional team models in recent years may support collaborative documentation during LTC transitions. With team-based approach to care it would be logical and may also become normative to have an interprofessional construction of information with various community care providers contributing meaningfully to the narrative. I also anticipate that person-centredness care would take a centre stage during this era. Since about 70% of Ontarian LTC residents have a cognitive impairment [35], families would play a chief role in communicating their loved one's values, wishes, and preferences. They need to be positioned as partners in the transition, capable of articulating needs and preferences and equipped with the tools to do so.

Ultimately, the shift in philosophy away from cure and prevention toward comfort that marks the transition to LTC demands more than a change in medical practice. It demands a cultural and material transformation in how information, relationships, and responsibility are negotiated across settings. A palliative philosophy of care cannot be enacted through a curative orientation-informed approach to documentation. It requires forms and care transition tools that convey comprehensive biopsychosocial dimensions of older adult's care, systems that support flexibility and empathy, and care providers who see their roles as interdependent in their patient's circle of care. If we are to honour the dignity and comfort of every older adult moving into LTC, our tools, our policies, and our practices should be reflective of the care we hope to provide.

6.7 Conclusion

Informational continuity is a feasible approach to mitigate the loss of relational continuity during most LTC transitions. However, the information transmitted in the current document-based approach to information exchange is inadequate to foster informational continuity. The

document should be upgraded to include more comprehensive information and automated improve efficiency in completing it. Complementary strategies such as warm handoffs and improved family engagement in the care transition communications would facilitate informational continuity. Additionally, adopting an interprofessional approach to the construction of the transitional care information would result in a well-rounded biopsychosocial information that convers the full scope of information needed by the LTC care teams. Then, LTC-relevant education is essential in this discourse as has the potential to impress on practitioners the orientation and knowhow to adopt best practices for effective information exchange.

Hopefully, the study findings would challenge policymakers, practitioners, and education program leaders to pay closer attention to recommendation, including supporting effective collaborative practices in the healthcare system and LTC transition practices particularly. Lastly, we hope that this work would spur future research to develop digital solutions for the technologically gaps; elucidate patients, family caregivers, hospitalists, and care coordinators' perspectives on the informational continuity discourse; and develop context-relevant informational continuity frameworks in others jurisdiction.

6.8 References

1. Staykov E, Qureshi D, Scott M, Talarico R, Hsu AT, Howard M, Costa AP, Fung C, Ip M, Liddy C *et al*: **Do Patients Retain their Family Physicians after Long-Term Care Entry? A Retrospective Cohort Study**. *Journal of the American Medical Directors Association* 2020, **21**(12).
2. King M, Steele Gray C, Kobewka D, Grudniewicz A: **Continuity of care for older adults in a Canadian long-term care setting: a qualitative study**. *BMC Health Services Research* 2022, **22**(1):1-11.
3. Gorenko JA, Konnert C, Speirs C: **Does Caregiving Influence Planning for Future Aging?: A Mixed Methods Study Among Caregivers in Canada**. *Research on Aging* 2021, **43**(5-6):203-213.
4. Haider J, Sundin O: **Sociomateriality**. In: *Information Literacy through Theory.* edn. Edited by Hicks A, Loyd A, Pilerot O: Facet Publishing; 2023.
5. Kim Y, Yang E: **Theoretical understanding of sociomateriality in workplace studies**. *Facilities* 2020, **38**(13-14):927-942.
6. Moura EOd, Bispo MdS: **Sociomateriality: Theories, methodology, and practice**. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration* 2020, **37**(3):350-365.
7. Leonardi PM: **Theoretical foundations for the study of sociomateriality**. *Information and Organization* 2013, **23**(2):59-76.
8. Fenwick T: **Sociomateriality in medical practice and learning: attuning to what matters**. *Medical Education* 2014, **48**(1):44-52.
9. Adler-Milstein J, Raphael K, O'Malley TA, Cross DA: **Information sharing practices between US hospitals and skilled nursing facilities to support care transitions**. *JAMA network open* 2021, **4**(1):e2033980-e2033980.
10. Peters MDJ, Marnie C, Tricco AC, Pollock D, Munn Z, Alexander L, McInerney P, Godfrey CM, Khalil H: **Updated methodological guidance for the conduct of scoping reviews**. *JBI Evidence Synthesis* 2020, **18**(10):2119-2126.
11. Yin RK: **Case study methods**. *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* 2012:141-155.
12. Sandelowski M: **What's in a name? Qualitative description revisited**. *Research in Nursing and Health* 2010, **33**(1).
13. Martin AK, Green TL, McCarthy AL, Sowa PM, Laakso EL: **Healthcare Teams: Terminology, Confusion, and Ramifications**. *Journal of Multidisciplinary Healthcare* 2022, **15**:765-765.
14. Meleis AI: **Transitions theory**. *Nursing theories and nursing practice* 2015, **4**:361-380.
15. Cfpc: **a New Vision for Canada**. In: *https://patientsmedicalhomeca/files/uploads/PMH_VISION2019_ENG_WEB_2pdf*. 2019: 40-40.
16. Brazile T, Hostetter Shoop G, McDonough CM, Van Citters DW: **Promoting innovation: Enhancing transdisciplinary opportunities for medical and engineering students**. In: *Medical Teacher.* vol. 40; 2018: 1264-1274.
17. Price D, Howard M, Hilts L, Dolovich L, McCarthy L, Walsh AE, Dykeman L: **Interprofessional education in academic family medicine teaching units: A functional program and culture**. In: *Canadian Family Physician.* vol. 55; 2009.

18. Okoh AE, Akinrolie O, Bell-Gam HI, Adandom I, Ibekaku MC, Kalu ME: **Nigerian healthcare workers' perception of transdisciplinary approach to older adults' care: A qualitative case study**. *International Journal of Care Coordination* 2020, **23**(2-3):92-106.
19. Van Bewer V: **Transdisciplinarity in Health Care: A Concept Analysis**. *Nursing Forum* 2017, **52**(4):339-347.
20. Jasani S: **Using a one health approach can foster collaboration through transdisciplinary teaching**. *Medical Teacher* 2019, **41**(7):839-841.
21. George A, Renjith V, Renu G: **Inter-Professional Education**. *IOSR Journal of Dental and Medical Sciences* 2015, **14**(3):35-28.
22. Weiss D, Cook B, Eren R: **Transdisciplinary Approach Practicum for Speech-Language Pathology and Special Education Graduate Students**. *Journal of Autism and Developmental Disorders* 2020, **50**(10):3661-3678.
23. Nancarrow SA, Booth A, Ariss S, Smith T, Enderby P, Roots A: **Ten principles of good interdisciplinary team work**. *Human Resources for Health* 2013, **11**(1):1-11.
24. OH@H: **Guide to Placement in Long-Term Care Homes**. In: *Ontario Health atHome.* 2024.
25. Oma: **Access OHIP billing codes and forms fast**. In: *Ontario Medical Association.* 2025.
26. White-Chu EF, Graves WJ, Godfrey SM, Bonner A, Sloane P: **Beyond the Medical Model: The Culture Change Revolution in Long-Term Care**. *Journal of the American Medical Directors Association* 2009, **10**(6):370-378.
27. Government of O: **Fixing Long-Term Care Act, 2021, S.O. 2021, c. 39, Sched. 1**. In.; 2021.
28. Uijen AA, Schers HJ, Schellevis FG, Van den bosch WJHM: **How unique is continuity of care? A review of continuity and related concepts**. *Family Practice* 2012, **29**(3):264-271.
29. Naylor M, Keating SA: **Transitional care: Moving patients from one care setting to another**. *The American journal of nursing* 2008, **108**(9 Suppl).
30. Chan KS, Wan EYF, Chin WY, Cheng WHG, Ho MK, Yu EYT, Lam CLK: **Effects of continuity of care on health outcomes among patients with diabetes mellitus and/or hypertension: a systematic review**. *BMC Family Practice* 2021, **22**(1).
31. Worrall G, Knight J: **Continuity of care for older patients in family practice: how important is it?** *Canadian Family Physician* 2006, **52**(6):754-755.
32. Zborovski S, Trimble I: **Federal Government Announces Policy on Canada Health Act Status of Payments to Regulated Healthcare Professionals Providing Physician-equivalent Services**. In: *Stikeman Elliott Business Law firm.* 2025.
33. Ministry of H: **Ontario's Primary Care Action Plan, January 2025**. In: *Government of Ontario.* 2025.
34. Daly T: **Dancing the two - Step in Ontario's long - term care sector: Deterrence regulation = consolidation**. In: *Studies in Political Economy.* vol. 95; 2015.
35. Oltca: **The Data: Long-Term Care in Ontario**. In: *Ontario Long-Term Care Association.* 2024.

Appendices: Recruitment materials

Appendix A: Recruitment flyer

RESEARCH STUDY:

Optimizing health information exchange during patient transitions into long term care: a multi-phase practitioner-focused research program to support informational continuity.

We are a group of researchers from McMaster University conducting a research study that aims to understand the perspectives of family physicians and care providers in long-term care (LTC) concerning ways to improve continuity of care during transition to LTC.

For one arm of the study, we are looking for ***Family Physicians*** that graduate older adults into long-term care and have set up practice in Ontario. For the other arm of the study, we are looking for practitioners (***registered nurses, nursing practitioners, social workers, PSWs, Physiotherapists, physicians, etc.***) providing care to older adults in private and public-run LTC facilities.

Your participation will consist of a single, one-hour long interview about the information exchanged during LTC transitions, facilitators and barriers to informational continuity, and thoughts on an ideal LTC transition process that fosters continuity of care. Your individual participation is voluntary.

You will be provided with a $50.00 CAD gift card honorarium for your time and participation.

If you have any questions about this study or are willing to be interviewed, please contact:
The project team at carecont@mcmaster.ca.

McMaster University
FAMILY MEDICINE

Primary Investigators: Dr. Lawrence Grierson
Department of Family Medicine
David Braley Health Sciences Center, McMaster University
100 Main Street West, Hamilton, ON L8P 1H6

This research study has been reviewed by the Hamilton Integrated Research Ethics Board, under #16209

Appendix B: Recruitment email for family physicians

Grierson, Okoh, et al. Recruitment Email Version 2, 2024/01/25

+Title: Optimizing health information exchange during patient transitions into long term care: a multi-phase practitioner-focused research program to support informational continuity.

Subject: Investigating the Perspectives of Family Physician in Ontario on Enhancing Informational Continuity during Transition to Long-Term Care: Research Study Invitation

Dear Dr. …,

I am writing to you to invite you to participate in our research study that aims to understand the perspectives of family physicians with respect to the information they provide during Long-Term Care (LTC) transitions and their aspirations for the utility of this communication. This project is being led by Dr. Lawrence Grierson (McMaster University) and Augustine Okoh (PhD Candidate, McMaster University).

Patients enjoy better health outcomes when they receive consistent and coherent care coordinated by a family physician who journeys with them across the continuum of care. However, the provider-patient relationship is often interrupted when older adults transition to LTC. In support of improved transition processes, this study aims to describe the communication activities in which family physicians engage to enhance informational continuity for patients transitioning to long-term care.

This study involves conducting interviews with family physicians in Ontario. Accordingly, we are interested in speaking with family physicians, like yourself, who have been involved in the process of preparing and handing over the care of older adults to the LTC homes.

Please note that your individual participation is entirely voluntary. Should you decide to participate, please know that the interview will last 45 to 60 minutes, and can be scheduled at a time and on a platform that is convenient to you. Participants will receive a $50 gift card honorarium.

If you would like more information about this study, please read the following letter of information and consent form: [https://dfmgp.mcmaster.ca/surveys/?s=HLRDME98E8RWT3YF]. Please read this information carefully. After learning about the study, you will have the option to either accept or decline the invitation to participate. If you decide to participate, the research team will then arrange an interview time and platform that is convenient to you.

If you have any questions, please contact the project team (carecont@mcmaster.ca) for further details regarding the research study. You may also contact the Primary Investigator directly – Dr. Lawrence Grierson (griersle@mcmaster.ca, 905-525-9140 x 22738).

Thank you for considering this request.

Sincerely,

Augustine Okoh
Health Policy PhD Program
McMaster University

Dr Lawrence Grierson
Associate professor
Department of Family Medicne
McMaster University

Appendix C: Recruitment email for LTC facilities

McMaster University | Health Sciences

Department of Family Medicine
David Brailey Health Science Centre
100 Main Street West,
Hamilton, ON L8S 4L8

(905) 525-9140 x 22738
carecont@mcmaster.ca

xx/xx/2024

The Chief Executive Officer
LTCF address.

Dear [name],

Requesting to Recruit Research Participants at [Name of LTC Home]

On behalf of the project team, I am seeking permission to recruit participants for our research from your long-term care (LTC) facility. Our research study aims to understand the perspectives of care providers in LTC homes concerning the quality of the information they receive during LTC transitions and their utility in facilitating continuity of care when older adults transition to LTC. This project is being led by Dr. Lawrence Grierson (Associate Professor, Department of Family Medicine, McMaster University) and Augustine Okoh (PhD Candidate, McMaster University).

Why this study is important

Patients experience better care outcomes and quality of life when they receive continuous and consistent care from a family doctor who journeys with them across the care continuum. However, most older adults lose their lifelong relational contact with their family doctors after moving to an LTC facility. We intend to use the quality of information exchanged during the LTC transitions to mitigate the impact of loss of relational continuity. In this research project, we will collect data to develop a set of recommendations and tools that would facilitate comprehensive information exchange and continuity of quality care for older adults during their transition from independent living in the community to LTC.

Our approach

To achieve these goals, we have designed a **multiple case study of 6 LTC facilities in Ontario**. we will conduct interviews with participants recruited from the 6 selected LTC facilities. Each case will be either *a small (<97 beds), medium (97-160 beds) or large (>160 beds) size* LTC facility in Ontario. We will be interviewing healthcare workers within these LTC homes to explore the information that care teams in LTC facilities receive and consider to be most important in supporting new LTC patients. Participant categories include registered nurses/nursing practitioners/social workers/ Personal Support Workers/ Physiotherapists/physicians, etc. Participants recruited from each site would depend on their staff mix.

What we are asking for

McMaster University | Health Sciences

Your facility meets the case description for the second study. Thus, we are requesting your permission to recruit participants from [LTCF name] as one of the 6 study sites. Accompanying this letter is the research information sheet and the recruitment email that will be distributed to each interview participant.

Thank you for considering this request.

Sincerely,

Augustine Okoh
Health Policy PhD Program
McMaster University
carecont@mcmaster.ca

Appendix D: Recruitment email for LTC practitioners

Grierson, Okoh, et al. Recruitment Study Version 2, 2024/01/25

+Title: Optimizing health information exchange during patient transitions into long term care: a multi-phase practitioner-focused research program to support informational continuity.

Subject: Investigating the Perspectives of Care Providers in Long-Term Care Homes in the Ontario on Enhancing Informational Continuity during Transition to Long-Term Care: Research Study Invitation

Dear …,

I am writing to you to invite you to participate in our research study that aims to understand the perspectives of care providers in long-term care (LTC) homes with respect to the quality of the information they receive during LTC transitions and their utility to facilitating continuity of care when older adults transition to LTC. This project is being led by Dr. Lawrence Grierson (McMaster University) and Augustine Okoh (PhD Candidate, McMaster University).

Patients enjoy better health outcomes when they receive consistent and coherent care coordinated by a family physician who journeys with them across the continuum of care. However, the provider-patient relationship is often interrupted when older adults transition to LTC. In support of improved transition processes, this study aims to describe the communication activities in which family physicians engage to enhance informational continuity for patients transitioning to long-term care.

This study involves conducting interviews with practitioners providing care LTC residents in Ontario, including registered nurses, nursing practitioners, social workers, Personal Support Workers, Physiotherapists, and physicians. Accordingly, we are interested in speaking with [Director of care/Admissions coordinator/Registered nurses/Nursing practitioners/Social workers/Physicians, etc.], like yourself, who have been involved in providing care to LTC residents using the handover notes to set care goals and deliver health and personal care services LTC residents.

Please note that your individual participation is entirely voluntary. Should you decide to participate, please know that the interview will last 45 to 60 minutes and can be scheduled at a time and on a platform that is convenient to you. Participants will receive a $50 gift card honorarium.

If you would like more information about this study, please read the following letter of information and consent form: [https://dfmgp.mcmaster.ca/surveys/?s=XIpGPg6aXI75GDhH]. Please read this information carefully. After learning about the study, you will have the option to either accept or decline the invitation to participate. If you decide to participate, the research team will then arrange an interview time and platform that is convenient to you.

If you have any questions, please contact the project team (carecont@mcmaster.ca) for further details regarding the research study. You may also contact the Primary Investigator directly – Dr. Lawrence Grierson (griersle@mcmaster.ca, 905-525-9140 x 22738).

Thank you for considering this request.

Sincerely,

Augustine Okoh
Health Policy PhD Program
McMaster University

Dr Lawrence Grierson
Associate professor
Department of Family Medicne
McMaster University