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Typologies of Long-Term Care: Classifying Ontario's Long-Term Care System

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About this working paper series

In 2021, a team of researchers at the University of Waterloo¹ was hired by a project oversight group formed by the Canadian Institute of Actuaries (CIA). The mandate was to produce a report regarding the direction of long-term care (LTC) in Canada,² which would be useful to the CIA membership in considering policy issues regarding LTC. Given the CIA's current framework for research publications, a decision was taken to release information from the report, as well as related research from the University of Waterloo research team, in a series of working papers.

This is the second paper in the series.³ Its aim is to provide background information regarding different approaches to LTC provision, based on an international perspective. Such background will offer insights upon which subsequent working papers may build.

For ease of reading, a list of initialisms and acronyms used, and texts referenced in this working paper series may be found at the end of this document. The reference list contains references for both working papers 1 and 2 in this series.

Typologies for long-term care

1.0 Introduction to typology

A typology is a method of classifying entities – in this context, approaches to provision of LTC – based on some set of characteristics. A presumed benefit of creating a typology is that it helps to identify key similarities and differences among approaches, which can be helpful in understanding them, and may also be useful in considering how a specific approach may affect policy decisions.

This working paper briefly discusses a number of typologies used to classify LTC approaches. It then applies the six-cluster typology of Ariaans et al. (2021) to classify Ontario's approach to LTC provision. LTC provision is primarily the responsibility of the provinces and territories. To demonstrate how the typology might be applied, Ontario has been selected. Although it may be the case that all approaches used in Canada are sufficiently similar to be classified similarly, such an analysis has not been undertaken.

1.1 Suen et al. (2023)

The most recent paper identified regarding LTC typologies was written by Suen et al. (2023). They performed a systematic review of studies that discussed typologies by searching databases Medline and EconLit as well as specific grey literature sources, and consulted with experts and relevant websites, from inception to July 9, 2020 (Suen et al. 2023). They identified 14 aged care typologies; five applied to residential care, two to home care and seven to mixed settings (Suen et al. 2023). Of these 14 typologies, five were considered as high quality, where quality was assessed based on the following five aspects, as well as on the risk of bias.

- (i) Is the typology information or data used to inform the typology development clearly reported?
 - (ii) Are typology labels meaningful, i.e., allow understanding of the category?
 - (iii) Is the typology presentation clear and readily understandable, i.e., provides enough detail to understand how to categorise information according to the typology?
 - (iv) Are categories mutually exclusive where each case can only be categorised into a single category?
 - (v) Can the typology presented be used across all cases illustrated in the paper?
- (Suen et al. 2023, p. 3)

Other ways identified by Suen et al. (2023) to differentiate typologies included the level of system (e.g., national, regional or provider) or the main aspect of organization, i.e., the setting and focus (e.g., financing, quality of care,

¹ Doug Andrews and Lori J. Curtis were the co-principal investigators, and Karen El Hajj and Paul Stolee were co-investigators.

² To limit the scope of the research, the focus in this working paper is on LTC delivered in institutions, i.e., primarily care homes but also hospitals.

³ This paper draws heavily, with only minor revisions and reorganization, on the second chapter of a thesis written by Doug Andrews titled *Considerations Regarding Incorporating a Cash-for-Care Program in Ontario's Approach to Care for Older Adults*, which is used with the author's permission. Doug Andrews acknowledges the helpful guidance and support provided by thesis committee members Lori Curtis, Katy Fulfer, and Paul Stolee.

provision of care, provision of services). For the five typologies Suen et al. (2023) considered to be high quality, the reference, level, setting and focus are shown in Table 1-1.

Table 1-1: Level, setting and focus of high-quality typologies assessed by Suen et al. (2023)

Reference	Level	Setting and focus
Kraus et al. (2010)	National	Funding in LTC
Lehning et al. (2012)	Regional and providers	Change in community aged care initiatives
Van Eenoo et al. (2018)	National and providers	Service provision in home care
Beeber et al. (2014)	Provider	Staff hours and services in residential care and assisted living
Nusem et al. (2017)	Provider	Services in LTC

Source: Based on Tables 1, 2 and 3 in Suen et al. (2023).

1.2 Fischer et al. (2022)

Another recent paper regarding LTC typologies was written by Fischer et al. (2022). Many typologies are developed from examination of existing LTC systems; in contrast, Fischer et al. (2022) developed a conceptual framework. To illustrate how the conceptual framework could be applied, they analyzed the systems of three countries, Germany, Japan and South Korea. Before presenting their framework, they summarized the literature they reviewed.⁴ They identified 17 typologies (Fischer et al. 2022, p. 35), of which:⁵

- “...five ... use quantitative methods, mostly cluster analysis, to group countries...”
- most arrived at classifications using inductive reasoning based on observed characteristics, but three used deductive reasoning based on theoretical considerations;
- eleven used financing as the topic of consideration;
- “Eight classifications are concerned with at least one aspect of regulation...”;
- “...seven typologies include at least one criterion which is concerned with provision of LTC...”
- “... six addressed aspects of integration or fragmentation - of LTC systems ...”, either with respect to coordination within a country or with other social protection schemes.

No attempt was made to assess quality. However, the authors stated that “... most typologies seem to select the criteria rather arbitrarily without clear theoretical considerations of how to differentiate among types” (Fischer et al. 2022, p. 37).

⁴ There is little information provided regarding the constraints on the literature review. However, the article was first received for consideration of publication on March 12, 2021, so literature after that date (and likely some time before) would not have been included.

⁵ In the following list, a typology may appear in more than one item, so totalling items does not add to 17.

In constructing their conceptual framework, they argued that the following three constitutive elements – service provision, financing, and regulation – are important dimensions, and as such, they used them as the foundation of their typology (Fischer et al. 2022). They also considered five different types of actors: the state, societal actors (which are non-governmental public actors), private for-profit actors, private individual actors (which include households) and global actors (Fischer et al. 2022). To simplify, they combined the private actors along the dimension of regulation (Fischer et al. 2022). This resulted in 100 possible types, i.e., four types of regulation by five types of financing by five types of provision (Fischer et al. 2022). They then suggested some simplification based on what has been observed and what they considered likely to be observed and reduced the typologies to 22 (Fischer et al. 2022). These remaining typologies were four pure types (i.e., the same actor for regulation, financing and provision) and 18 other types, which they considered plausible (Fischer et al. 2022).

1.3 Ariaans et al. (2021)

Another relatively recent and comprehensive analysis was prepared by Ariaans et al. (2021). They provided a formal classification of care approaches in 25 Organisation for Economic Co-operation and Development (OECD) countries⁶ but did not include Canada (or Ontario) because data were missing on at least one indicator or measure in the data source used (Ariaans et al. 2021).

The authors conducted 24 cluster analyses. Based on measures or indicators on the four dimensions of supply, public-private mix, access regulation, and performance, they used cluster analysis and suggested either a nine-cluster classification or a six-cluster classification (Ariaans et al. 2021). The nine-cluster analysis is based purely on methodology, whereas the six-cluster analysis used both methodological and content-based grounds. Although the nine-cluster classification may be more theoretically rigorous, it included clusters containing only one country. Consequently, for practical purposes, Ariaans et al. (2021) suggested using the six-cluster classification.

Ariaans et al. (2021, p. 610) stated that: supply indicators include “...financial resources..., staff and staffing levels..., and bed intensity in institutional LTC...”; public-private mix refers to the intensity of the three forms of care identified by Wittenberg (2016)⁷; and access regulation examines “...barriers to access care, especially for groups with lower social status” such as means-testing (Ariaans et al. 2021, p. 610).

Ariaans et al. (2021, p. 610) used a broad definition of LTC,⁸ which they attributed to Colombo et al. (2011, as cited in Ariaans et al. 2021), namely:

Range of services required by persons with a reduced degree of functional capacity, physical or cognitive, and who are consequently dependent for an extended period of time on help with basic activities of daily living (ADL). This “personal care” component is frequently provided in combination with help with basic medical services such as “nursing care” (help with wound dressing, pain management, medication, health monitoring), as well as prevention, rehabilitation or services of palliative care. Long-term care services can also be combined with lower-level care related to “domestic help” or help with instrumental activities of daily living (IADL). (Ariaans et al. 2021, p. 610)

Ariaans et al. (2021, p. 611) acknowledged that it can be difficult to apply this definition consistently because some “... data were extremely limited...” such as with respect to IADL, and because “... comparative quantitative data is not available for many countries.”

They identified some measures or indicators used to assess the four dimensions, with respect to institutional LTC, on the six-cluster classification (Ariaans et al. 2021, Table 1, p. 611). Their work relied on data related to 2014 to 2016, in which 2016 might be considered the reference year. The measures or indicators are discussed in more detail in their paper, and are abbreviated for this description as follows: for supply, “expenditure, beds, recipients”; for public-private mix, “private expenditure, cash benefits”; for access regulation, “choice restrictions, choice home care, choice institutional care, choice cash, means-testing”; for performance, “life expectancy, self-perceived health” (Ariaans et al. 2021, Table 1, p. 611).

⁶ Ariaans et al. (2021) list 11 OECD countries, including Canada, that were excluded because the data were incomplete. Subsequent to their cut-off date in 2019 for data receipt, two countries, Colombia and Costa Rica, have deposited their instruments of ratification. Hence, the current list of 38 OECD countries is accounted for.

⁷ Wittenberg (2016) distinguished unpaid care, publicly funded care and privately purchased care services, which appears to distinguish care forms based on financing considerations.

⁸ This is consistent with my definition of C4LT.

1.4 Colombo et al. (2011)

A less recent but detailed analysis was provided by Colombo et al. (2011),⁹ who authored a lengthy book regarding LTC in OECD countries, which covered a breadth of topics such as cost, impact on family carers, public financing arrangements and value. They discussed the multi-faceted nature of LTC systems, noting that systems are diverse and evolving, and presented many comparisons across multiple countries (Colombo et al. 2011). Perhaps because of this diversity, and the range of possible comparisons, they refrained from specifying a typology.

Nonetheless, in Chapter 7, which focused on the public financing arrangements, they used two criteria, which provided a way to cluster countries into three main groups (p. 213). These criteria were “the scope of entitlement to long-term care benefits...” whether there is universal or means-tested entitlement to public funding; and “whether LTC coverage is through a single system, or multiple benefits, services and programmes” (p. 215).

The resulting clusters are as follows:

- a means-tested system
- universal and comprehensive coverage within a single program
- a system with a mix

These clusters are broad, and the authors identified a number of different approaches within the latter two clusters (Colombo et al. 2011).

Within universal coverage within a single program, they identified the following three different approaches: “... i) tax-based models (e.g., Nordic countries); ii) public long-term care insurance models (e.g., Germany, Japan, Korea, the Netherlands and Luxembourg); iii) personal care and nursing care through the health system (e.g., Belgium)” (Colombo et al. 2011, p. 222). Even though coverage is universal, there may be co-payments and maxima.

Within mixed systems, they identified the following variations: “... parallel universal schemes” (p. 223), e.g., Scotland, Italy, Czech Republic and Poland; “...income-related universal benefits...” (p. 223), e.g., Ireland, Australia, Austria and France; “...mix of universal and means-tested (or no) benefits” (p. 223), e.g., Greece, Switzerland and Spain (Ariaans et al. 2021, p. 223). Of particular relevance to Canada, they stated that many Canadian provinces fall into this latter classification within mixed systems, because they provide universal coverage without charges for nursing services that are part of (required) home care but have income tests for admission to nursing care facilities, and in institutional LTC, health care services are provided without charges but accommodation charges are assessed but adjusted based on income (Colombo et al. 2011).

1.5 Some other typologies

Some other typologies identified, such as Da Roit and Le Bihan (2010), Campbell et al. (2016) and Le Bihan et al. (2019), provided some interesting criteria for analyzing systems, although the analysis in these papers related primarily to European systems.

Da Roit and Le Bihan (2010) examined cash-for-care (CfC) programs in six European countries (Austria, France, Germany, Italy, the Netherlands and Sweden). Based on this examination, they proposed “A new typology of long-term care configurations ... based on the inclusiveness of the system, the role of cash-for-care schemes and their specific regulations, as well as the views of informal care and the care work they require” (p. 286). In this typology, there are the following three configurations:

- A persistent social service model. Key characteristics include (Da Roit and Le Bihan 2010, p. 305):
 - “...making the plan more flexible with increasing differentiation of demand, and also more cost-effective”;
 - the idea that “...care allowances are instruments through which free choice and the development of markets in the care sector are encouraged”; and

⁹ A very similar article, Colombo (2012), is occasionally cited in the literature rather than Colombo et al. (2011). For the purpose of this description, the two are treated as interchangeable.

- "... an attempt to bring care back to the family..."
- A LTC system based on a highly regulated CfC program. Key characteristics include (Da Roit and Le Bihan 2010, p. 305):
 - "...development of a cash-for-care intervention that uses most of the public resources allocated to the policy towards elderly people (distinct from the health system)";
 - "Access, care management, and use of the benefit ... are strictly regulated by social services"; and
 - "...an attempt to formalize and recognize informal care and to remove care from the family..."
- An LTC system based on little-regulated CfC transfers. Key characteristics include (Da Roit and Le Bihan 2010, p. 306):
 - the view that "...the cash-for-care system is the most important form of intervention in LTC"; and
 - reduced oversight of CfC programs.

Regardless of the configuration to which the analyzed countries belong, Da Roit and Le Bihan (2010) observed that although theoretically they are universal – i.e., providing support to all dependents regardless of income – practically they are not because of "... their limited ability to cover (high) care needs, their explicit reliance on the care, organizational capacity, and monetary contributions provided by families, and their implicit reliance on an unregulated and low-quality care market" (Da Roit and Le Bihan 2010, p. 306).

Perhaps one of the most widely discussed typologies is Esping-Andersen's three worlds of welfare capitalism, which provided a foundation for understanding the welfare state within capitalist societies. Esping-Andersen's three worlds are differentiated based on observations concerning the strength of the left (wing parties), the nature of organized labour and the extent of commodification of the labour market within a country, and are as follows: Conservative, Liberal, and Social Democratic¹⁰ (Gingrich 2015).

Campbell et al. (2016) applied and extended Esping-Andersen's classification to seven countries, as follows: "...Sweden in social democratic Northern Europe, Italy in familial Southern Europe, Germany in corporatist mid-continent, Australia, the US and England as quite different versions of the Anglo-Saxon 'residual' model, and Japan as the relatively new entry that shares aspects of all the other models" (Campbell et al. 2016, p. 47). They then compared these countries with respect to programs (institutional care, home and community-based care, cash allowances, administration), cost-control in LTC policy (limit access by controlling eligibility, limit access by means-testing, limit public spending and usage with higher out-of-pocket charges, modify the supply side, adjust the policy mix: cash over services, adjust the policy mix: care at home over institutions, systematize LTC systems). In a subsequent chapter, Gori et al. (2016)¹¹ investigated how resource allocation regarding older users of LTC in each country has changed from the 1990s to the 2010s, which provided another dimension for comparison.

Le Bihan et al. (2019) examined how CfC programs within broader LTC policies have been used differently by countries to "... envision, frame, and aim to condition informal care..." (Le Bihan et al. 2019, p. 579), with specific attention to the role of family carers. The countries they examined and their placement within Esping-Andersen's terminology are as follows: "Austria, Germany, and France represent the conservative welfare regimes. Italy and Spain are the strong familialistic variation of the conservative regime. Given the universalism and generosity of its LTC policies, the Netherlands has LTC features that resemble those of the social-democratic welfare regime. Finally, England is associated to the liberal welfare regime." (Le Bihan et al. 2019, p. 583).

¹⁰ The foregoing is sufficient typological background to the discussion of the typology of Esping-Andersen. The following passage from Gingrich (2015, p. 72) provides greater general context: "The Liberal world, which includes the Anglo-Saxon countries, provides meager benefits, producing little decommodification and encouraging citizens' reliance on the market. By contrast, the Social Democratic countries of Scandinavia produce ample decommodification, providing generous benefits extending across classes and crowding out market provision and empowering workers in the broader labor market. The Conservative welfare states of Continental Europe (and Japan), despite high spending, look to preserve the status of privileged groups and thus are less decommodifying."

¹¹ Campbell et al. (2016) and Gori et al. (2016) are mainly the same group of authors, but their discussion is presented in the book in consecutive chapters. For brevity of discussion in this thesis, they have been presented under the heading Campbell et al. (2016).

This typology built on Leitner (2003), which specified four varieties of familialism, in discussing the caring function of the family. Leitner (2003) defined familialistic policies as ones that "... not only oblige (and at the same time: enable) the family to meet the care needs of its members, they also enforce the dependence of people in need of care on their family" (p. 358). He stated that defamilialism not only involves "...taking away care responsibilities from the family..." but "...also reduces the extent to which the satisfaction of individual care needs is dependent on the individual's relation to the family" (McLaughlin and Glendinning 1994, p.65, as cited in Leitner 2003, p. 358). The strength and explicitness of these familialistic or defamilialistic policies were used to create four varieties.

Le Bihan et al. (2019) used two criteria: extent of support for informal care (either supporting or no policy or no support), and care service policies (strong public/subsidized service development, market service development or weak/no service development). This two-by-three combination provided six possible approaches, labelled optional familialism, optional familialism through the market, supported familialism, defamilialism, defamilialism through the market and unsupported familialism (Le Bihan et al. 2019, p. 582). The first three are based on support for informal care, and the last three on no policy or no support for informal carers. They illustrated how the different use of CfC programs may move a country from one approach to another although the move is not always in the same manner (Le Bihan et al. 2019). In this regard, Le Bihan et al. 2019 concluded that "Depending on the overall policy context, cash [for care] payments may entail familialization or defamilialization" (p. 593).

1.6 Observations on this literature

On comparing the 14 typologies identified by Suen et al. (2023) to the 17 typologies identified by Fischer et al. (2022), we found that Fischer et al. counted two typologies within the paper by Kraus et al. (2010) whereas Suen et al. counted Kraus et al. as one typology. Among the remaining articles, only four appeared in both the literature reviews by Suen et al. and Fischer et al. This is quite surprising, given that both literature reviews covered a similar time period, and especially because Suen et al. (2023) represented their review as a systematic one.

Moreover, with respect to the typologies discussed in this section, only two are reported by both Suen et al. (2023) and Fischer et al. (2022) – namely, Da Roit and Le Bihan (2010) and Colombo et al. (2011) or its comparable article, Colombo (2012). Suen et al. (2023, p. 6) assessed Da Roit and Le Bihan to be of low quality and the quality of Colombo (2012) to be unclear. Campbell et al. (2016) is a book chapter not identified to describe typologies, so it may have been missed in a grey literature search. The article by Le Bihan et al. (2019) does not appear in Medline or EconLit, which may explain why it was not included by Suen et al., and possibly may have been outside the date range for Fischer et al. (2022)¹². The article by Ariaans et al. (2021) is certainly beyond the date range for Suen et al. and likely beyond the date range for Fischer et al. (2022) as well. This suggests that the number of relevant articles regarding typologies is closer to 30 than 14 or 17. Assuming that both sets of authors diligently followed a thorough search strategy, this illustrates the extent of the literature on this topic and how wide a net one must cast in order to capture it all.

Based on previous work and many years of experience examining international LTC approaches, and discussing them with colleagues (see, for example, University of Southampton [2011]; Andrews [2014a]; Andrews [2014b]),¹³ the following characteristics seem relevant in classifying approaches to LTC provision, although this list may not be complete:

- Mix of responsibilities for providing care among individuals and families, governments (federal or lower level) or private sector providers.
- Covered services, e.g., only in institutional settings (and then fully or partially) or also provided outside an institution, or e.g., both health and social care or some limitations thereon.
- Payment for services, e.g., through general taxation, specific taxes or premiums, or at the point of service delivery.
- Access to services, e.g., universal, means-tested or needs-tested.
- Supply of services, e.g., adequate, or some involve long waiting lists, or some services are only available in certain locales.

¹² Fischer et al. (2022) do not specify the date range for their search.

¹³ In 2022, a report was prepared by Doug Andrews and Lori Curtis, principal investigators, and Paul Stolee and Karen El Hajj, co-investigators, for the Canadian Institute of Actuaries, titled *The Direction of Long-term Care in Canada* (which requires translation into French before public release), which involved discussion regarding relevant characteristics of LTC, and some international comparisons. This discussion draws on that report.

Other items that might have been considered but were excluded include:

- Measures of service quality or service adequacy. It is very hard to assess these matters without detailed measures or statistics. Because the objective is to classify approaches, one might begin with classification characteristics, as listed above, and treat assessment of how well entities within a classification perform as not relevant to how the approach is classified. In other words, there could be entities that fall into the same classification but have very different service quality or service adequacy.
- Cultural, ethnic or religious factors. Because entities may not be culturally, ethnically or religiously homogeneous, there could be difficulties in trying to classify by such factors.

Fischer et al. (2022) have argued that regulation is an important differentiator. We have not included it above as a separate item on the list, although arguably, it may be present in any of the listed categories. Fischer et al. (2022) have also proposed that the typology be focused on actors, and a dominant actor is selected for each typology. In order to do this, one must assess the actor who has the principal or dominant responsibility. Such an assessment hides the responsibilities of other actors. When we consider the complexity of finance-provision-regulation, the dimensions important to Fischer et al. (2022), it seems that a lot of information is lost by assigning a single actor designation, and thus the usefulness of the typology is reduced. As listed, the characteristics are descriptive; however, adding quantitative measures could also help, e.g., supply of beds on some per capita measure, such as for those age 65 or older, or level at which means-testing occurs. Another useful feature of a typology would be that it can be applied beyond the range of entities on which it has been developed, as opposed to being closed, i.e., limited to the entities analyzed. Theoretically, and metaphysically, a typology could be developed without reference to any entity's approach, as Fischer et al. (2022) purport to have done. In practice, most typologies are developed based on a selection of entities, which may limit their generalizability and comprehensiveness. Conversely, a conceptual approach such as that of Fischer et al. (2022), which results in 100 possible types, would be very hard to apply and might have many empty types.

2.0 Application to Ontario

The approach to LTC provision in Ontario was not specified by any of the typologies described in the previous section, although Colombo et al. (2011) did make a reference to Canadian provinces. In this subsection, the six-cluster typology of Ariaans et al. (2021) was used to classify Ontario's approach. Some of the reasons for selecting this typology follow.

The typology of Da Roit and Le Bihan (2010) was developed based on countries with CfC programs, but Ontario does not have a CfC program. Colombo et al. (2011) stated that many Canadian provinces have a mixed system, requiring charges for some services but not others. This is true of Ontario; e.g., care in LTC institutions, other than accommodation, is provided free at the point of service, but there are accommodation charges, which may be reduced based on income. One would expect that within Campbell et al. (2016), Ontario's approach would be classified as Anglo-Saxon residual. Ontario has weak or no policy with respect to supporting family carers, and services may be accessed through the market, which suggests that Ontario's approach is defamilialism through the market, on the typology of Le Bihan et al. (2019). If one were to consider only state-provided care, then Ontario's approach would belong to type 1 of Fischer et al. (2022), i.e., state regulated, state financed and state provided. However, such a narrow focus does not appear to capture the variation within the approach to care provision. Such classifications of Ontario's approach do place it within the typology but do not appear to provide as much information regarding how policy decisions might be made as would one of the cluster classifications of Ariaans et al. (2021).

Ariaans et al. (2021) suggested that the six-cluster classification may be preferred to the nine-cluster classification because there are some clusters in the nine-cluster classification that only contain one or two countries. Although the code that they used is not available for either of the two classifications, so further cluster analysis is not possible, they have provided a table showing the means of quantitative indicators for the six-cluster analysis (Ariaans et al. 2021, Table 3, p. 614) and have provided an overview of cluster labels and characteristics for the six-cluster LTC types (Ariaans et al. 2021, Table 4, p. 614). It therefore seemed appropriate to work with the six-cluster classification rather than the nine-cluster classification. The six clusters are labelled the residual public system, the private supply system, the public supply system, the evolving public supply system, the need-based supply system and the evolving private need-based system (Ariaans et al. 2021).

Examining the six-cluster typology of Ariaans et al. (2021) with respect to the quality criteria identified by Suen et al. (2023), we believe that all the criteria are satisfied, with the possible exception of (iv),¹⁴ which pertains to mutual exclusivity such that each case may belong to only one category. Within some clusters, there are certain countries that are very close together, i.e., forming the core of the cluster, but other countries that are farther away and approaching countries in another cluster. Picturesquely, we refer to such latter countries as being in the former countries' orbit; i.e., they belong to the assigned cluster but are at a distance from the core and approaching another cluster's orbit. Although each case (country) belongs to a distinct cluster, when one looks at Fig. 1 (Ariaans et al. 2021, p. 613), one observes that, first, the orbits of the need-based supply system and evolving private need-based system are close and that three countries (Slovakia, Slovenia, New Zealand) are on the outer reaches of those orbits, and second, to a much lesser extent, the orbits of the private supply system and evolving private supply system are close. Given the complexity of measuring and assessing so many indicators of a country's approach and the high likelihood that the approach is undergoing change and does not necessarily follow a strict and consistent rationale for each of its components, the potential for countries to lie on the outskirts of a cluster seems understandable and not a failing of the typology. Accordingly, on the criteria stated by Suen et al. (2023), we would consider the quality of the Ariaans et al. (2021) six-cluster typology to be high.

Positioning the six-cluster typology of Ariaans et al. (2021) within Table 1-1, along with the other high-quality typologies identified by Suen et al. (2023), it would be national level, with a focus on funding (i.e., expenditure) and provision. However, in Canada, LTC is primarily a provincial (i.e., regional) responsibility. So, by applying the typology to Ontario, we have used it in a regional context.

In comparing the items included in determining the six-cluster typology of Ariaans et al. (2021) to those listed in subsection 1.6.5, it is noteworthy that their typology includes some aspect of each of the relevant characteristics, as shown in Table 1-2.

Table 1-2: Matching of relevant characteristics and indicators in Ariaans et al. (2021)

Relevant characteristic	Indicator in Ariaans et al. (2021)
Mix of responsibilities	Private expenditure; cash benefit
Covered services	Included in index of choice restrictions
Payment for services	Means-testing
Access to services	Choice restrictions
Supply of services	Expenditure; beds; recipients

Another reason to work with the typology of Ariaans et al. (2021) is that it is recently published.

2.1 Placing Ontario within the Ariaans et al. (2021) six-cluster typology

In their analysis, Ariaans et al. (2021) excluded Canada (and Ontario) due to limited data. This subsection presents data that are closely related to those that they used in their six-cluster analysis, in order to place the provision of LTC within Ontario within one of the six clusters in the typology. It is hoped that, with this context, further analysis of Ontario may benefit from an analysis of related (similarly clustered) countries.

It was challenging to find data that corresponded completely to the data presented by Ariaans et al. (2021). Perhaps this is unsurprising, given that they excluded Canada because some data were missing. There were also some procedural questions because it was not completely clear from the article by Ariaans et al. (2021) how they

¹⁴ "Are categories mutually exclusive where each case can only be categorised into a single category?"

proceeded, and it appeared, in places, that theoretical objectives may have had to be compromised because of lack of available information.

The values developed for Ontario related to institutional LTC as reported by provincial agencies (e.g. Ontario Ministry of Finance 2022) or CIHI. In Table A-1 in Appendix A, the means of the indicators from Table 3 (Ariaans et al. 2021, p. 614) for each of the six clusters are shown, followed by a figure in bold, derived for Ontario. At the end of Appendix A, there is an explanation of the derivation of the numbers for Ontario and the source of the data. Some of the indicators are complex but have the advantage of reducing data to a single number, which facilitates comparisons. The indicators are described in Table 1-3.¹⁵

¹⁵ Note that in the ensuing discussion, numbers that refer to Ontario or Canada have been calculated or sourced by DA, whereas numbers for countries other than Canada were presented in the paper by Ariaans et al. (2021).



Table 1-3: Description of indicators and how they are measured corresponding to Ariaans et al. (2021, Table 3, p. 614) and Table A-1 in Appendix A

Indicator	Verbs
Expenditure ¹	LTC (health) expenditure per capita in US\$ of purchasing power parities. It includes all expenditure on body-related LTC, mainly on (basic) activities of daily living (ADLs) such as bathing, dressing or eating. We did not include LTC (social) expenditure.
Beds ²	The number of LTC beds per 1,000 population aged 65 and older.
Recipients ³	The number of LTC recipients in institutions measured as the percentage of all people.
Private expenditure ⁴	The private (voluntary and out-of-pocket) expenditure as a percentage of total expenditure to measure public and private involvement in payments for care.
Cash benefit ⁵	The availability of cash benefits as an approximation of formal and informal care provision. The cash benefit indicators may take the value 0, describing a system in which only in-kind benefits are available. If the use of cash benefits is bound to specific services and aids, the indicator is coded as 1, while unbound benefits, for which the use of the benefit is at the beneficiary's own discretion, are coded as 2.
Choice restrictions ⁶	The indicators are choice of home-care provider (choice home care), choice of institutional care provider (choice institutional care), and choice between cash and in-kind benefits (choice cash), which are combined to create an index. This index may take values between 0 and 4, with 0 representing absolute freedom of choice and 4 strong restrictions.
Means-testing ⁷	A country system was coded 0 if it applies no means-testing in LTC systems at the stage of LTC provision at all and 1 if means-testing takes place.
Life expectancy ⁸	Life expectancy of people aged 65 and older in years.
Self-perceived health ⁹	The percentage of the population who are 65 years and older and perceive their health as good or very good.

The first point to note, in examining the data for Ontario in Table A-1 in Appendix A and the Table 3 information from Ariaans et al. (2021, p. 614), pertains to means-testing. Ontario requires a daily accommodation charge to be paid in LTC homes, which may be reduced for those with insufficient means (e.g., Ontario's Long-term Care Commission 2021). On this basis, Ontario belongs to either the need-based supply system or the evolving private need-based system. This is consistent with Ariaans et al.'s comment that in the typology by Colombo et al. (2011), "...New Zealand and Canada are clustered with Greece, Spain, and Switzerland due to their universal but means-tested financing approach..." (Ariaans et al. 2021, p. 610).

In their comparison of these two systems (need-based supply system and evolving private need-based system), Ariaans et al. (2021, p. 614) stated “The main difference [of the evolving private need-based system] to the previous system type [need-based supply system] is low supply, especially low expenditure, but also the provision of beds in residential care and the number of recipients of residential care are at a lower level.” Examining these three measures,¹⁶ expenditure for Ontario is 432.96 compared to 819.81 for need-based supply and 459.42 for evolving private need-based; beds for Ontario are 30 compared to 64.28 for need-based supply and 43.43 for evolving private need-based; recipients for Canada are 4.5 (Ontario is not shown separately in the data source) compared to 5.51 for need-based supply and 3.46 for evolving private need-based. On all these measures Ontario appeared to lie closer to the evolving private need-based system than to the need-based supply system.

The countries in the evolving private need-based system in the six-cluster grouping of Ariaans et al. (2021, p. 614) are “France, Israel, Spain, the United Kingdom, and the United States... Estonia and New Zealand...”. Given Canada’s historical heritage of having developed many laws and practices based on the UK and its close geographical proximity to the US, which has a policy influence, it does not seem counterintuitive that Ontario’s approach would have similarities to the UK and the US.

2.2 Some future policy considerations

This research was being conducted within a broader research agenda of examining the impact of population aging on Canada’s social safety net. Ontario’s population is aging, as shown in Table 2-4, on three different population growth projections from the Ontario Ministry of Finance (2022), labelled Tables 2-4-1, 2-4-2 and 2-4-3. Table 2-4 shows that the size of the older-aged population (65+) is increasing, and its age distribution is changing, regardless of the growth projection (Ontario Ministry of Finance 2022). On all projections, the percentage of the population in Ontario aged 65 or older by 2043 will increase to more than 20%, and between 2023 and 2043, both the number of people and the percentage of the population aged 85 and older will increase (Ontario Ministry of Finance 2022). Note that the projected increase in the 85-and-over population is larger between 2033 and 2043 than between 2023 and 2033, on all projections; i.e., one might describe this as accelerated aging among the oldest age group. These population projections suggest strongly that the need for care among older adults is likely to increase and the proportion of the population under age 65, who might be available to work as carers, will decline over the 20-year projection period.

A possible policy response might be to build more beds in LTC facilities and hire and train more care workers. The Government of Ontario tabled legislation in 2021 to increase spending on LTC, increase the number of beds by 30,000 (over a 10-year period) and increase the number of workers in that sector (Financial Accountability Office [FAO] 2021). The FAO (2021) analyzed the projected spending increases, bed-building plans and staffing projections. It expressed a number of concerns regarding the projections, including the following:

- If the spending commitments to LTC are met, the available spending for “...other health care sector programs will be able to grow by only an average annual rate of 1.6% over the six-year period” (FAO 2021, p. 6).
- There are risks that the forecast of the number of available beds will not be met. These include the risks that beds temporarily out of service may not return, construction timelines may not be met, and some beds with expiring licences may be taken out of service permanently (FAO 2021).

But even if the spending-construction-hiring projections are met, because of the aging of the population over the projection period, the number of beds per 1,000 people aged 75 and over will decline to 66 in 2029-30, the lowest number over the 20-year period commencing in 2008-10 (FAO 2021, Figure 3-6, p. 16).¹⁷

Writing about Canada, MacDonald et al. (2019) projected strong increases in the need for care and significant shortages in care supply, requiring large increases in caring by family and friends; e.g., they claim that in the next 30 years, costs of care will triple in LTC and home care. They additionally projected that the number of older adults requiring home care will increase while the number of family members who can provide care for older adults will witness a decrease (MacDonald et al. 2019). Although MacDonald et al. (2019) did not provide projections for Ontario, it is relatively safe to assume that Ontario, Canada’s most populous province, will experience similar pressures.

¹⁶ Please refer to Table 1-3 for measurement units.

¹⁷ In the year in which the projections were made, 2018-19 the number of beds per 1,000 Ontarians aged 75 or older was 73.

Based on the analysis in this paper, Ontario’s approach is classified as an evolving private need-based system. This might be rephrased, somewhat uncharitably, as meaning that when taking action to address needs that are pressing, private sector approaches are preferred. This seems to be an accurate assessment of the situation in Ontario with the current provincial government. From the earlier paragraphs in this section, it can be seen that needs are likely to increase and may outpace the actions taken by the government regarding LTC spending, bed supply, and staffing (FAO 2021). A CfC program – in which care recipients, or possibly their carers, are offered cash in lieu of provision of care services – is a private sector approach. It may be easier for the province to provide cash rather than to ensure that care services are available. As far as we can ascertain, all the other countries that fall within the evolving private need-based system do have some type of CfC program, at least in some of their constituencies. It seems likely that Ontario will consider the possibility of implementing a CfC program.

Table 2-4-1: Projected population* Ontario older age ranges¹⁸

Age group/population projection	2023 # millions	2023 %	2033 # millions	2033 %	2043 # millions	2043 %
65-74	1.597	10.4	1.927	11.0	1.779	9.0
75-84	0.910	5.9	1.325	7.6	1.651	8.4
85+	0.364	2.4	0.563	3.2	0.897	4.6
Total 65+	2.871	18.7	3.815	21.8	4.327	22.0

* Reference population projection.

Author’s calculations based on projections from the Ontario Ministry of Finance (2022).

Table 2-4-2: Projected population* Ontario older age ranges

Age group/population projection	2023 # millions	2023 %	2033 # millions	2033 %	2043 # millions	2043 %
65-74	1.591	10.5	1.898	11.5	1.725	9.6
75-84	0.907	6.0	1.309	7.9	1.614	9.0
85+	0.364	2.4	0.558	3.4	0.881	4.9
Total 65+	2.862	18.9	3.765	22.8	4.221	23.5

* Low-growth population projection.

Author’s calculations based on projections from the Ontario Ministry of Finance (2022).

¹⁸ The population projections were made by the Ontario Ministry of Finance (2022), the reference population is the most likely, in its opinion. The other two provide a range of possible outcomes. The Ontario Ministry of Finance (2022, n.p.) stated in the section Projection Results that “In the reference scenario, population is projected to grow 43.6 per cent, or almost 6.6 million, over the next 24 years, from an estimated 15.1 million on July 1, 2022, to almost 21.7 million on July 1, 2046. ... In the low-growth scenario, the annual rate of population growth is projected to decline rapidly over the first five years of the projections, from 1.5 to 0.9 per cent by 2026–27, and then to slowly reach 0.8 per cent by 2046. In the high-growth scenario, the annual population growth rate is also projected to fall quickly over the first five projected years, from 4.9 to 1.8 per cent by 2026–27, and then to reach 1.6 per cent by 2046.”

Table 2-4-3: Projected population* Ontario older age ranges

Age group/population projection	2023 # millions	2023 %	2033 # millions	2033 %	2043 # millions	2043 %
65-74	1.603	10.3	1.955	10.5	1.834	8.5
75-84	0.912	5.8	1.342	7.2	1.688	7.8
85+	0.365	2.3	0.568	3.0	0.912	4.2
Total 65+	2.880	18.4	3.865	20.7	4.434	20.5

* High-growth population projection.

Author's calculations based on projections from the Ontario Ministry of Finance (2022).

Appendix A: Data to place Ontario in the Ariaans et al. (2021) typology

Table A-1 is based on Table 3 (Ariaans et al. 2021, p. 614). The numbered footnotes in the first column refer to how Ariaans et al. (2021) define the item (see corresponding numbering and description in Table 1-3). The lettered footnotes in the last column refer to how the data for Ontario was derived. For Ariaans et al. (2021), the target year for the indicators was 2016.

Table A-1: Means of quantitative indicators of six LTC types in Ariaans et al. (2021) and Ontario

Indicator/type	Residual public systems	Private supply system	Public supply system	Evolving public supply system	Need-based supply system	Evolving private need-based system	Ontario
Expenditure ¹	161.82	811.33	1369.15	603.97	819.81	459.42	432.96 ^a
Beds ²	21.76	56.33	53.21	24.28	64.28	43.43	30 ^b
Recipients ³	1.18	4.4	4.16	2.63	5.51	3.46	4.5 ^c
Private expenditure ⁴	5.77	23.94	10.49	18.17	11.81	24.25	19.9 ^d
Cash benefit ⁵	1.67	2	0.25	0	1.57	0.86	0 ^e
Choice restrictions ⁶	1	1	3	2	0.57	2.29	3.3 ^f
Means-testing ⁷	0	0	0	0	1	1	1 ^g
Life expectancy ⁸	17.49	19.84	19.93	21.06	19.90	20.15	21.03 ^h
Self-perceived health ⁹	16.08	42.73	63.43	22.68	49.99	52.88	45.9 ⁱ

Based on Table 3 (Ariaans et al. 2021, p. 614).

Data gathered for Ontario – lettering refers to item in last column

- FAO Table 2-2 (estimate for 2021-22) shows total expenditure of \$7,925 millions (FAO 2021, p. 5). Adjust by population projection 2021 of 14,826,276 (Statistics Canada 2022b, Table 2). Purchasing power parity of C\$1 is US\$0.81.¹⁹ Converted expenditure per capita = 432.96.
- Ontario had 30 beds per 1,000 people aged 65 or older at March 31, 2021 (CIHI 2021b).
- 4.5% living in nursing homes, chronic care or long-term care hospitals (Statistics Canada 2012, Box 2).
- FAO Table 2-2 (estimate for 2021-22) shows resident expenditures of \$1,580 millions out of total expenditure of \$7,925 millions or 19.9% voluntary and out-of-pocket (FAO 2021, Table 2-2, p. 5).

¹⁹ [Purchasing Power Parity Salary Converter website.](#)

- e. The availability of cash benefits (cash benefit) as an approximation of formal and informal care provision. The cash benefit indicators may take the value 0, describing a system in which only in-kind benefits are available. If the use of cash benefits is bound to specific services and aids, the indicator is coded as 1, while unbound benefits, for which the use of the benefit is at the beneficiary's own discretion, are coded as 2.
Decision:
Ontario 0 no CfC benefits.
- f. *Decision:* Choice home care – 4; choice institutional care – in theory choice but due to waiting lists, limited – 2; choice cash – 4. Index 3.3.
- g. Accommodation charges are based on ability to make payment, code as 1.
- h. 21.03 is the life expectancy in years of people aged 65 or older for the reference period 2015-17 for Ontario, both sexes (Statistics Canada 2023).
- i. For Ontario in 2016, 45.9% of the population 65 years and older perceived their health as very good or excellent-(Statistics Canada 2022a).

List of initialisms and acronyms

The initialisms and acronyms may denote the singular, or the plural as required by the context.

ADL – activities of daily living

ALC – alternate level of care

CAF – Canadian Armed Forces

CALTC – Canadian Association for Long Term Care

CCA – continuing care assistants

CCAC – Community Care Access Centres

CISSS – integrated health and social services centres

CIUSSS – integrated university health and social service centres

CHW – community health worker

CLSC – home and community-based care

CMI – case mix index

CNA – certified nursing assistant

CIHI – Canadian Institute for Health Information

DCH – direct care hours

FMSQ – Fédération des médecins spécialistes du Québec

FNIHCC – First Nations and Inuit Home and Community Care

FP – for profit

FRI – febrile respiratory infection

HCA – health-care assistants

IADL – instrumental activities of daily living

IPAC – Infection Prevention and Control

IR – intermediate resources

LHIN – Local Health Integration Network

LPN – licensed practical nurses

LTC – long-term care

LTCNH – long-term care nursing home

MOHLTC – Ministry of Health and Long-Term Care

MSSS – Ministère de la Santé et des Services sociaux

NFP – not for profit

NH – nursing homes

NP – non-profit

OAS – old age security

OECD – Organisation for Economic Co-operation and Development

PIDAC – Provincial Infectious Diseases Advisory Committee on Infection Prevention and Control

PPE – personal protective equipment

PSW – personal support worker

QI – quality indicators

RAI – resident assessment instrument

RAI-MDS – resident assessment instrument – minimum data set

RAMQ – Régie de l'assurance maladie du Québec

RCA – resident care aides

RN – registered nurse

RPN – registered practical nurse

RQI – resident quality inspection

SMAF – Système de mesure de l'autonomie fonctionnelle

WHO – World Health Organization

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