Abstract
The next 20 years will see unprecedented growth in Canada’s senior population, with higher demands and changing expectations challenging long-term care systems. The Canadian Institute for Health Information (CIHI) linked long-term and acute care data for over 59,000 seniors across six provinces and territories to analyze the pathways and transition patterns of seniors receiving long-term care services. The analysis revealed factors related to residential care entry and identified profiles of seniors admitted into residential care before it may be clinically necessary. This work provides critical information for health system decision-makers to ensure that our long-term care systems are responsive, effective and sustainable.

Introduction
Health systems across Canada face challenges in providing appropriate and timely publicly funded or subsidized home care, assisted or supportive living and residential care services. These services form the foundation of long-term continuing care. Specific services, eligibility requirements and funding models vary by jurisdiction. Services range from home support, assisting individuals with activities of daily living, such as personal care and medication management, to intensive 24/7 facility-based residential care for individuals who can no longer safely remain in their own homes.

Over the next 20 years, the population of Canadian seniors will see unprecedented growth. This is especially true for the population aged 75 and over – the group most reliant on continuing care services – which is expected to double by the year 2037 (Statistics Canada 2014). To that ensure services are sustainable and able to meet the changing needs and expectations of Canada’s seniors, innovative solutions are required to address new pressures on already strained systems.

The Canadian Institute for Health Information (CIHI) acquires standardized assessment data from continuing care systems across Canada on individuals receiving home and residential care. These assessments support monitoring and evaluation of client health status and care needs that are vital for developing individual care plans, as well as system-wide planning.

CIHI (2017) released a report and accompanying products that explores the population accessing continuing care services. This project, titled Seniors in Transition: Exploring Pathways Across the Care Continuum, linked continuing care assessments and hospital discharge records over time for 59,171 seniors in 35 health regions across Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and Yukon. The focus was to better understand how Canada’s seniors transition from living independently to receiving continuing care services and factors that influence residential care placement. To guide this work, CIHI established a working group of expert informants that included health region and ministry representatives from the provinces and territories above. This group provided essential contextual information on their respective continuing care systems, informed the analytic approach and identified the information products of greatest value that were developed.

Findings and Implications
The study identified three dominant care pathways. Over the two-year study period, most seniors (60%) received long-term home care only. Although 24% entered residential care after receiving home care, 16% bypassed long-term home care, entering residential care directly (Figure 1).

About one in five (22%) seniors in our study who entered residential care had low to moderate priority levels based on...
MAPLe (Method for Assigning Priority Levels) score and might have been able to be supported in home care. This highlights the potential to better align care needs with care settings. There was agreement within the working group that this signals an opportunity to innovate and explore options to delay or avoid residential care admission.

Factors that increased the likelihood of residential care entry included the need for physical assistance, cognitive impairment, wandering and caregiver circumstances. Across all jurisdictions, however, the greatest factor influencing residential care entry was whether the assessment of initial care needs was performed in hospital. Controlling for potential confounding factors, the odds of seniors entering residential care were 6.4 times greater if they received this assessment in hospital. This result remained significant when stratified by MAPLe, with the greatest difference among those assessed as moderate priority. In addition, compared to those assessed in the community, seniors assessed in hospital entered residential care faster regardless of priority level (Figures 2 and 3).

The working group confirmed that the influence of assessment location highlights the pressure within the hospital sector to release patients occupying beds and is closely linked to policies and processes that prioritize movement between hospital and residential care. This may result in unintended consequences, including longer stays in residential care, poorer outcomes and displacement of higher-needs individuals waiting in the community for residential care.

There is growing recognition of the need to consider a patient’s pre-hospital functioning during continuing care planning and that assessments conducted in hospital may not accurately reflect long-term care needs. Evaluating and coordinating policy and practice across acute and continuing care sectors is an important step toward ensuring that seniors who are able to do so convalesce in their own homes before a determination of the most appropriate long-term care option is made (BC Government News 2013; MOHLTC 2015). Several jurisdictions have implemented policies or programs or adopted philosophies to help seniors return home as quickly as possible following a hospital stay, including Home First (http://www.health.gov.on.ca/en/pro/programs/ecfa/action/community/com_homefirst.aspx) in Ontario (MOHLTC 2014) and Better at Home (http://betterathome.ca/) in British Columbia (United Way of the Lower Mainland 2018). In Winnipeg, initiatives credited with decreasing the number of patients waiting in hospital for placement in residential care have included the introduction of transition beds and increased access to home care nurses for more complex patients (Kusch 2018). These practices align with federal government priorities for continued improvement in access to home and community care (Government of Canada 2017) and reflect not only a system planning priority but also the preference of many seniors to remain at home as long as possible (Carstairs and Keon 2009).
Care models, which foster links between health systems and home care agencies, have the added benefit of strengthening ties across sectors and increasing capacity and efficiency. This may be particularly relevant in rural and remote areas, where the delivery of home care across larger distances presents unique challenges (Canadian Home Care Association 2016).

**Conclusion**

To help ensure that health systems can continue to meet the needs of seniors, it will be essential to expand efforts to support seniors so that they can remain in their homes for as long as possible. Clearly, no single intervention will offset demand for residential care beds while upholding individual preferences to remain in the community. There are many innovative approaches being introduced across the country that address ways to meet client and caregiver needs in the home, often requiring improved integration within and across healthcare systems and leveraging new technologies. The challenge for health system decision-makers, care providers and planners is exploring ways to expedite their implementation to address the future needs of the continuing care sector.

All products from CIHI’s Seniors in Transition project are available online at https://www.cihi.ca/en/seniors-in-transition-exploring-pathways-across-the-care-continuum. This includes a series of interactive web tools that permit users to explore changes in seniors’ population growth and to view information about seniors assessed in home care and residential care across health regions and over time.

**Notes**

1. Standardized interRAI Resident Assessment Instrument–Home Care (RAI-HC)® for home care and standardized interRAI Resident Assessment Instrument–Minimum Data Set 2.0 (RAI-MDS 2.0)® for residential care.
2. The MAPLe (Method for Assigning Priority Levels) decision support tool is a widely used algorithm based on items from the interRAI-HC assessment instrument that categorizes care recipients into one of five categories – low, mild, moderate, high or very high priority levels – with an increased score reflecting an increased need in care and a higher priority for community- or facility-based services (https://www.cihi.ca/sites/default/files/maple_levels_en_0.pdf).

**References**


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