

# Aging in Ontario: An ICES Chartbook of Health Service Use by Older Adults



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# About Our Sponsor Organizations

## Institute for Clinical Evaluative Sciences

The Institute for Clinical Evaluative Sciences (ICES) is an independent, non-profit organization that produces knowledge to enhance the effectiveness of health care for Ontarians. Internationally recognized for its innovative use of population-based health information, ICES' evidence supports health policy development and guides changes to the organization and delivery of health care services. Key to our work is our ability to link population-based health information, at the patient-level, in a way that ensures the privacy and confidentiality of personal health information. Linked databases reflecting 13 million of 30 million Canadians allow us to follow the health and associated health services of the population, and to evaluate outcomes.

ICES brings together the best and the brightest talent under one roof. Many of our scientists are not only internationally recognized leaders in their fields, but are also practicing clinicians who understand the grassroots of health care delivery, and can understand and interpret the data in a clinical and population health context. These characteristics make the knowledge produced at ICES clinically focused and useful in changing practice. Other team members have statistical training, epidemiological backgrounds, project management or communications expertise. The variety of skill sets and educational backgrounds ensures a multi-disciplinary approach to issues and creates a real-world mosaic of perspectives that is vital to shaping Ontario's future health care system.

ICES receives core funding from the Ontario Ministry of Health and Long-Term Care. In addition, our faculty and staff compete for peer-reviewed grants from federal funding agencies, such as the Canadian Institutes of Health Research, and project-specific funds are received from provincial and national organizations. These combined sources enable ICES to have a large number of projects underway, covering a broad range of topics. The knowledge that arises from these efforts is always produced independent of our funding bodies, which is critical to our success as Ontario's objective, credible source of evidence guiding health care.

## Ontario Home Care Research Network

The Ontario Home Care Research Network (OHCRN) is a partnership of researchers, decision makers, policy makers, and stakeholders in the field of home and community care. The OHCRN's mandate is to identify and address research needs and support knowledge-exchange activities with the goal of delivering current research evidence to home care stakeholders in Ontario. OHCRN goals include: identifying gaps and priorities in home and community care research for Ontario; promoting research that will address the knowledge needs of the home and community care sector; and promoting evidence-based policy and practice in the field.

In 2007, the Ontario Ministry of Health and Long-Term Care established the Ontario Home Care Research and Knowledge Exchange Chair to ensure a permanent commitment to advancing home care research. Dr. John Hirdes of the University of Waterloo is the inaugural chairholder.

For more information on the composition and activities of the OHCRN, please visit <http://www.ohcrn.org/>.

# Foreword

It is important to provide Ontarians with comprehensive and transparent reporting on key health outcomes for seniors and the impact on the health system. *Aging in Ontario: An ICES Chartbook of Health Service Use by Older Adults* presents a comprehensive compilation of data about Ontario seniors and their care. It is a welcome opportunity to share the data available to date and to ensure that we continue to work together to effect meaningful, systematic change, in turn creating a more efficient and responsive health care system for Ontario's seniors. The Chartbook provides Ontarians with a high-quality visual representation of baseline data to inform the Ontario Ministry of Health and Long-Term Care's investment in expanding care for older adults and covers information relevant to seniors in each Local Health Integration Network (LHIN). The information provided by the Chartbook's key indicators augments the everyday work of each LHIN and contributes to a vast resource base that will be drawn upon to make evidence-based decisions for senior's programming, ensuring 'the right care at the right time in the right place.'

The LHINs have been instrumental in carrying out the province-wide vision of a stronger level of community support and engagement for aging Ontarians. As the Ontario government's investment in services for aging seniors continues to expand and mature, we must ensure that scientific integrity, accountability, transparency and independence characterize the evaluation process. The release of the Chartbook represents an important early step. ICES and the Ontario Home Care Research Network are pleased to present the Chartbook and its province-wide results to policy-makers, health care providers, Ontario seniors and their families.

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1

# INTRODUCTION

# 1.1 Purpose of the Chartbook

Recent investments by the Ontario Ministry of Health and Long-Term Care (MOHLTC) engaged Local Health Integration Networks (LHINs) and other health and community support organizations to deliver innovative, community-based care with the dual goals of enabling seniors to live safely in their own homes and alleviating related pressures on more costly care settings, such as acute care hospitals and long-term care homes.

Increasingly, ICES is being asked to conduct research directed at decision support. Agencies such as the LHINs, the MOHLTC, Community Care Access Centres and the Ontario Health Quality Council have needs that can be met only with sophisticated analyses that rely on linked, population-based health databases. These analyses enable them to quickly assess the effectiveness of new programs and policies. *Aging in Ontario: An ICES Chartbook of Health Service Use by Older Adults* is an important example of this type of work. Specifically, by examining and analyzing its collection of linked, province-wide health system data, ICES is able to describe patterns of care for seniors over time and across LHINs. This provincial-level view is vital to providing insight and an overall picture of the outcomes being achieved for Ontario seniors, as well as the adaptability of the health system to meet the needs of our aging population.

This Chartbook allows for visual comparisons of health system data analyzed over time and geographically by LHIN, as well as a comparison of several population characteristics including age, sex, income quintile, immigration status and frailty. The Chartbook reports on a set of key indicators vital to older adults, including emergency department visits, use of alternate level of care beds in hospitals, waiting times for long-term care home placement and home care services and self-perceived unmet home services care needs.

It will take some time to be able to measure the full impact of the expanded investment on the Ontario health system because new initiatives and infrastructure are in the process of being implemented and effecting change. As a contributing step toward province-wide evaluation, the Chartbook serves the following two purposes:

- It provides historical baseline data prior to (and during) the expansion of services to support aging populations. This is essential information against which to compare any progress detected in future years and to assess the contribution in improving the sustainability of the health system as a whole.
- It reports on health system performance in a standardized way to allow for cross-provincial and inter-LHIN comparisons. This will ensure that future reports will use the same definitions, allowing for transparency and continuity over time. Through the Chartbook's Technical Report, the "mechanics" behind the reporting are clear and can be adopted, adapted and shared with other organizations.

## 1.2 Key Findings

The Chartbook characterizes Ontario seniors and their health service use over time and across Local Health Integration Networks (LHINs) in five key areas, including:

**Demographic patterns** illustrate that Ontario seniors are living longer. While the relative percentage of seniors in the province's adult population has increased gradually over time (reaching 17% in 2008/09), the absolute number of the oldest seniors (those aged 85 and older) has grown substantially (a 36% increase between 2002/03 and 2008/09). This trend is associated with important challenges as a large proportion of these individuals are frail and have frequent contact with the health system.

**Emergency department visit data** show that although provincial rates of emergency department visits for fall-related injuries by seniors appeared unchanged over time, rates in the oldest age group were highest (111 visits per 1,000 seniors aged 85 and older) and more than double the rate for those aged 75 to 84.

**Alternate level of care data** indicate that the number of seniors who have been designated as alternate level of care in acute and complex care hospitals and who have applied for long-term care placement has almost doubled between 2005 and 2008, and that there is considerable variation across LHINs in the measured level of need among those waiting for placement.

**Long-term care placement process data** reveal that although overall wait times for long-term care placement in Ontario have increased dramatically (a median wait time of 103 days in the last quarter of 2008/09), those placed in crisis (median wait time 79 days) and those placed from acute care (median wait time 55 days) had shorter waits relative to those placed from other settings.

**Home care services data** demonstrate that there are large differences across Ontario in how quickly long-stay home care clients receive the comprehensive, standardized in-home assessment required to help address their care needs (the percentage who were assessed within 14 days ranged from 25% to 70% across the 14 LHINs).

## 1.3 Overview of Data Sources and Methods

Key to the data presented in the Chartbook is our ability to link provincial, population-based health information, at the patient-level, in a way that ensures the privacy and confidentiality of personal health information. The linked data holdings at ICES allow for a unique approach to following the continuum of care, as patient populations can be observed as they move through various sectors of the health system and their outcomes evaluated.

The Chartbook is based on linked administrative databases covering a variety of settings including home care, emergency departments and acute care hospitals, as well as population-based health surveys. Most of the data presented in the Chartbook were analyzed at ICES, although important information on level of need among home care clients was analyzed at the University of Waterloo. The Technical Report that accompanies the Chartbook provides detailed information on the datasets used to produce each exhibit, how specific variables were defined, and the methodology behind our calculations. By providing this information, it is hoped that our methods are transparent and easily reproduced and adapted by others.

The Chartbook is purposefully rich in visual content, and most exhibits are graphs. While the analyses and results described in the Chartbook are based on rigorous scientific methods, a conscious effort was made to avoid presenting complex formulae and figures and to avoid using technical terminology more suited to scientific publications. The Technical Report includes more detail for those who require it.

.....  
Note: For the purpose of the Chartbook, "Ontario seniors" are defined as adults aged 65 years and older who are eligible to receive provincial health services.

## 1.4 List of Exhibits

- 2.1a Age-sex pyramid of seniors in Ontario, 2007/08
- 2.1b Age-sex pyramids of seniors in Ontario, by Local Health Integration Network, 2007/08
- 2.2a Percentage and number of seniors, by age group, in Ontario, 2002/03–2008/09
- 2.2b Percentage change in the number of adults and seniors in Ontario between 2002/03 and 2008/09, by age group
- 2.2c Percentage and number of seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09
- 2.2d Percentage change in the number of adults and seniors in Ontario between 2002/03 and 2008/09, by Local Health Integration Network
- 2.3a Percentage of seniors, by age group, in Ontario, 2002/03–2008/09
- 2.3b Percentage of seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09
- 2.4 Percentage of seniors, by sex, in Ontario and by Local Health Integration Network, 2008/09
- 2.5 Percentage of seniors, by neighbourhood income quintile, in Ontario and by Local Health Integration Network, 2008/09
- 2.6 Percentage of seniors in rural areas and in neighbourhoods with high levels of immigration, in Ontario and by Local Health Integration Network, 2008/09
- 2.7a Percentage of frail seniors, overall and by age group, in Ontario, 2004/05–2008/09
- 2.7b Percentage of frail seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09
- 3.1a Rates of unscheduled emergency department visits by seniors, overall and by age group and sex, in Ontario, 2002/03–2008/09
- 3.1b Rates of unscheduled emergency department visits by seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09
- 3.2a Rates of emergency department visits by seniors for potentially preventable conditions, overall and by age group, in Ontario, 2002/03–2008/09
- 3.2b Rates of emergency department visits by seniors for potentially preventable conditions, by age group, in Ontario and by Local Health Integration Network, 2008/09
- 3.3a Rates of emergency department visits by seniors for fall-related injuries, overall and by age group, in Ontario, 2002/03–2008/09
- 3.3b Rates of emergency department visits by seniors for fall-related injuries, by age group, in Ontario and by Local Health Integration Network, 2008/09
- 4.1a Percentage of inpatient days accounted for by Alternate Level of Care among seniors, by age group, and number of hospital beds per 100,000 seniors, in Ontario, 2002/03–2008/09
- 4.1b Percentage of inpatient days accounted for by Alternate Level of Care among seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09
- 4.2a Distribution of MAPLe priority levels for seniors designated Alternate Level of Care and awaiting long-term care placement, and the number of assessments conducted, in Ontario, 2005/06–2008/09
- 4.2b Distribution of MAPLe priority levels for seniors designated Alternate Level of Care and awaiting long-term care placement, in Ontario and by Local Health Integration Network, 2007/08

## 1.4 List of Exhibits

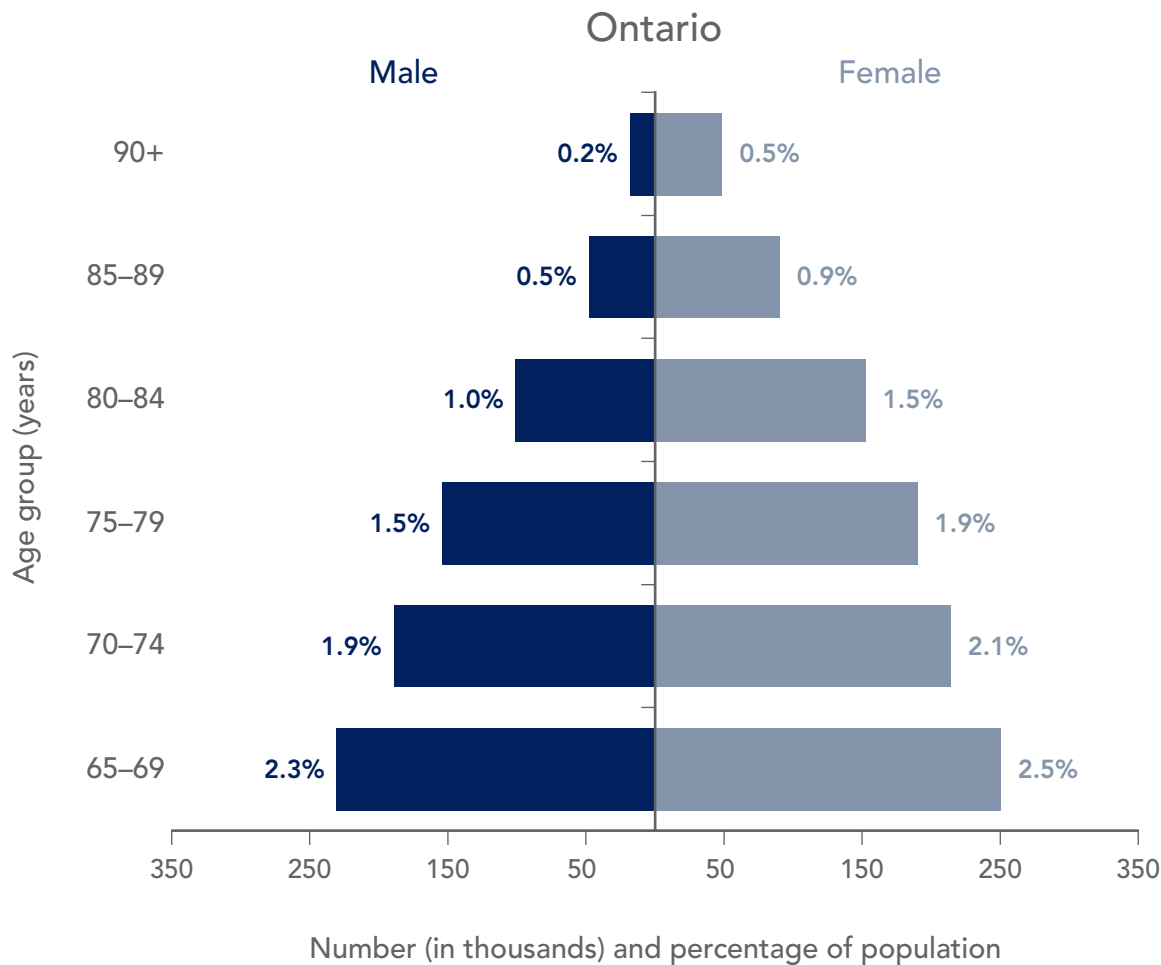
- 5.1a Median and 90th percentile wait times to long-term care placement for seniors, in Ontario, 2002/03–2007/08
- 5.1b Distribution of wait times for long-term care placement for seniors, in Ontario and by Local Health Integration Network, 2008/09
- 5.2a Median wait time to long-term care placement for seniors, by placement priority, in Ontario, 2003/04–2008/09
- 5.2b Median wait time to long-term care placement for seniors, by placement priority, in Ontario and by Local Health Integration Network, 2008/09
- 5.3a Median wait time to long-term care placement for seniors, by location at placement, in Ontario, 2003/04–2008/09
- 5.3b Median wait time to long-term care placement for seniors, by location at placement, in Ontario and by Local Health Integration Network, 2008/09
- 5.4a Distribution of MAPLe priority levels for seniors prior to long-term care placement, and number of assessments conducted, in Ontario, 2005/06–2008/09
- 5.4b Distribution of MAPLe priority levels for seniors prior to long-term care placement, in Ontario and by Local Health Integration Network, 2007/08
- 6.1a Average wait time from home care application to first service for seniors, in Ontario, 2005/06–2008/09
- 6.1b Average wait time from home care application to first service for seniors, in Ontario and by Local Health Integration Network, 2008/09
- 6.2a Percentage of seniors newly receiving home nursing service following hospital discharge, by time to first nursing service visit, in Ontario, 2005/06–2008/09
- 6.2b Percentage of seniors newly receiving home nursing service following hospital discharge, by time to first nursing service visit, in Ontario and by Local Health Integration Network, 2008/09
- 6.3a Distribution of wait time in days to home care assessment among seniors designated for initial assessment, and number of assessments conducted, in Ontario, 2005/06–2008/09
- 6.3b Distribution of wait time in days to home care assessment among seniors designated for initial assessment, in Ontario and by Local Health Integration Network, 2007/08
- 6.4a Distribution of MAPLe priority levels for seniors assessed and receiving home care services, and number of assessments conducted, in Ontario, 2005/06–2008/09
- 6.4b Distribution of MAPLe priority levels for seniors assessed and receiving home care services, in Ontario and by Local Health Integration Network, 2007/08
- 6.5 Percentage of seniors reporting unmet home care needs, by age group, sex, household type and neighbourhood income quintile, in Ontario, 2008

# 2

## DEMOGRAPHIC PATTERNS

## 2.1 Age-Sex Pyramids

### a. Age-sex pyramid of seniors in Ontario, 2007/08



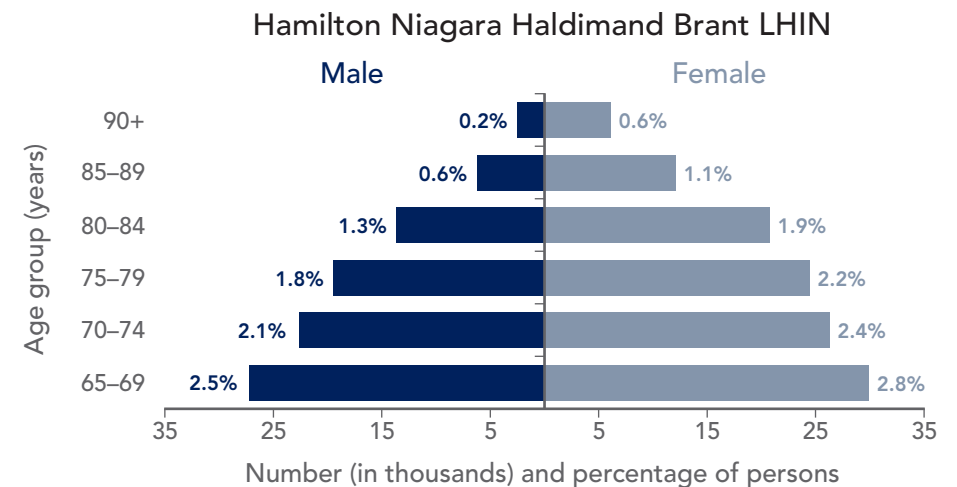
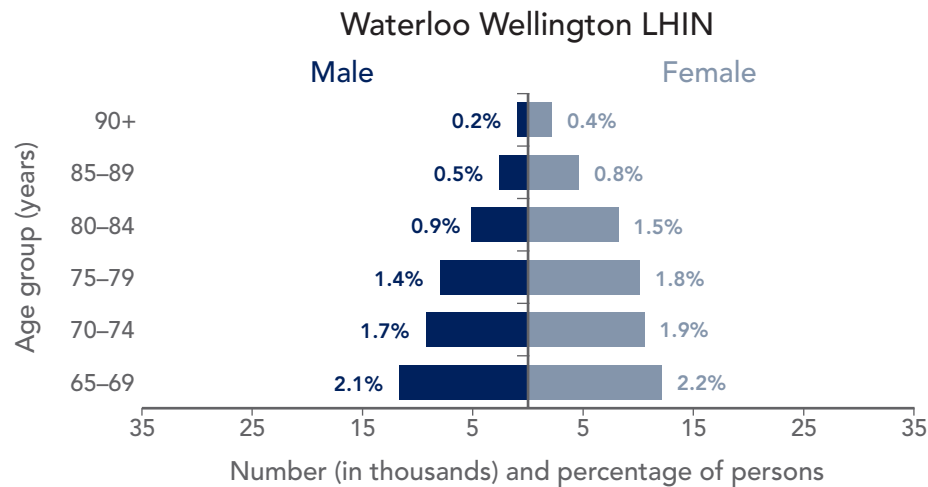
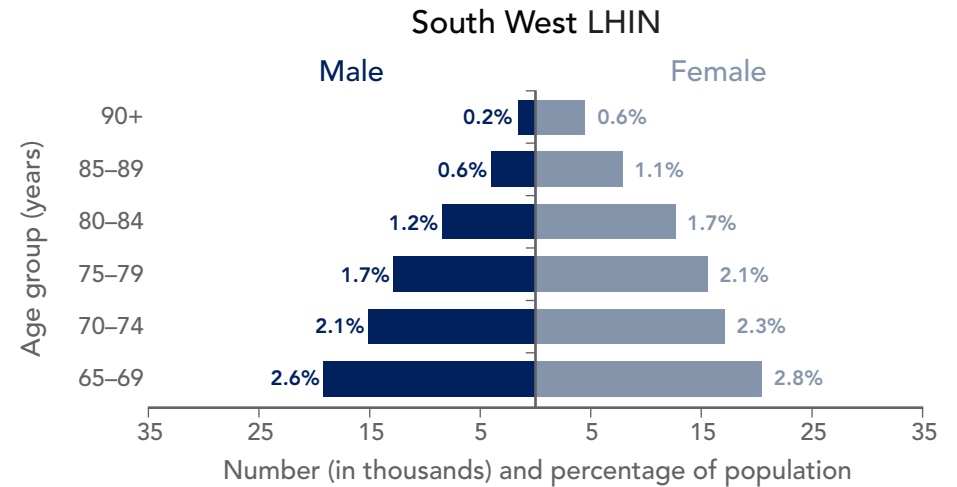
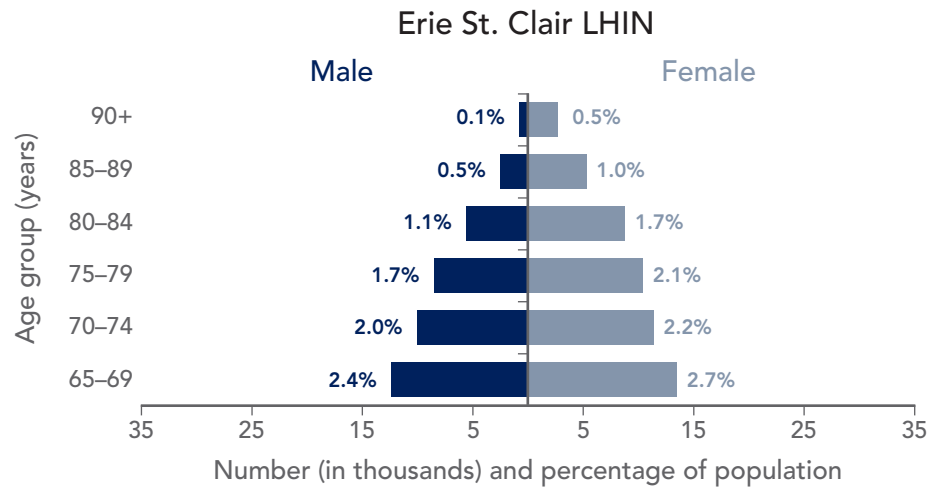
#### Key findings

- In 2007/08, 16.8% of Ontario's adult population was aged 65 and older. The age-sex pyramids in Exhibits 2.1a and 2.1b show the proportion of each age group represented among the adult populations, both provincially and by LHIN. Women aged 65–69 accounted for 2.5% of the adult population overall in Ontario (men aged 65–69 represented 2.3%), and this percentage decreased as the population aged. In the oldest age groups, the percentage of women was greater than the percentage of men.
- Similar patterns were evident across the LHINs (see following pages). The horizontal length of the pyramid bars reflects the variation in the number of Ontario seniors in each LHIN.

Data source: Registered Persons Database (MOHLTC)

# 2.1 Age-Sex Pyramids

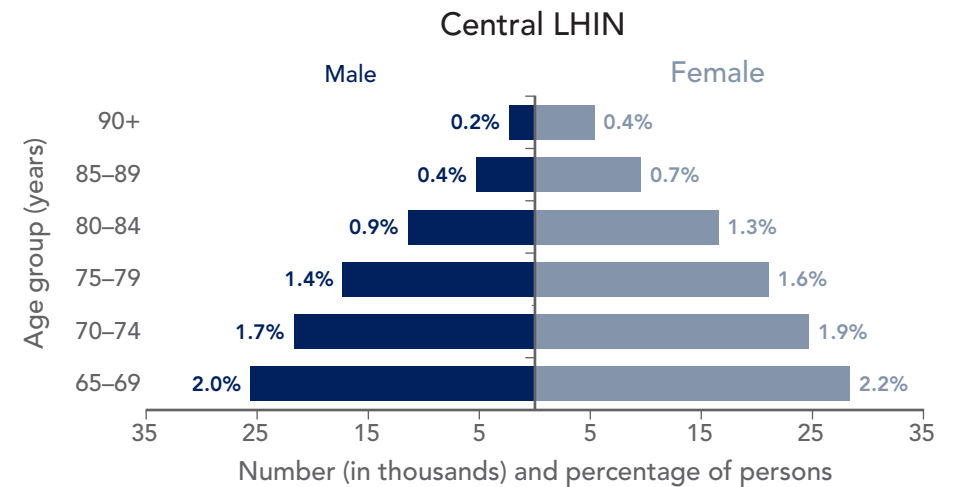
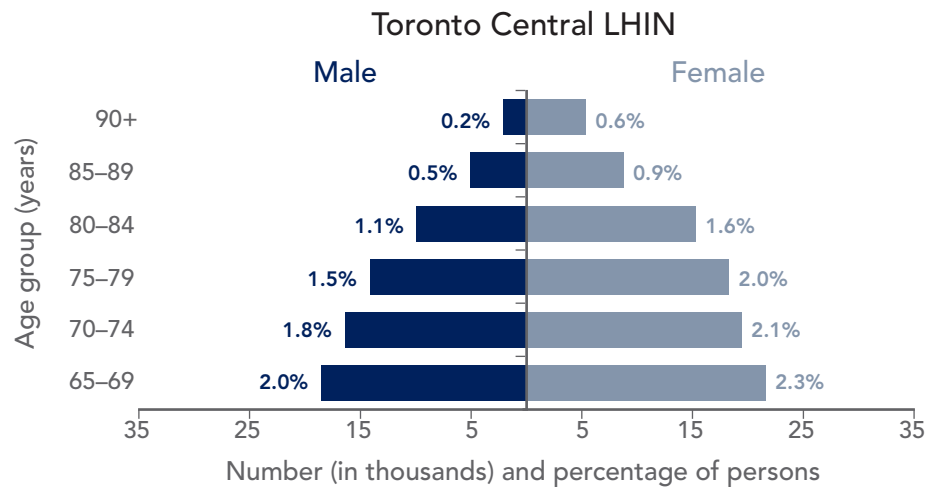
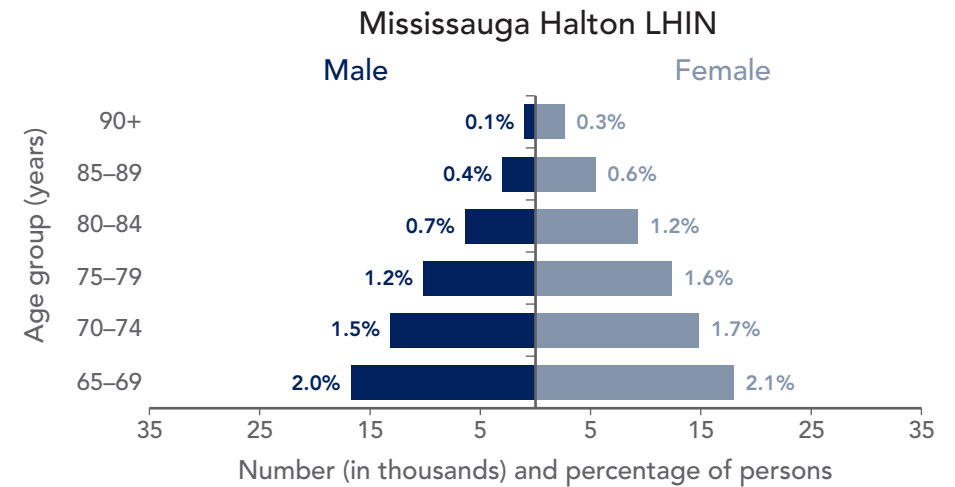
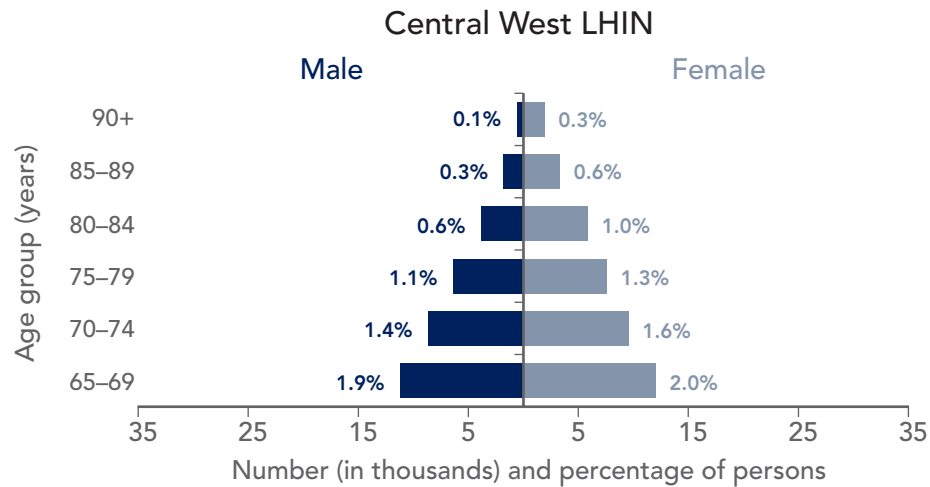
## b. Age-sex pyramids of seniors in Ontario, by Local Health Integration Network, 2007/08



Data source: Registered Persons Database (MOHLTC)

# 2.1 Age-Sex Pyramids

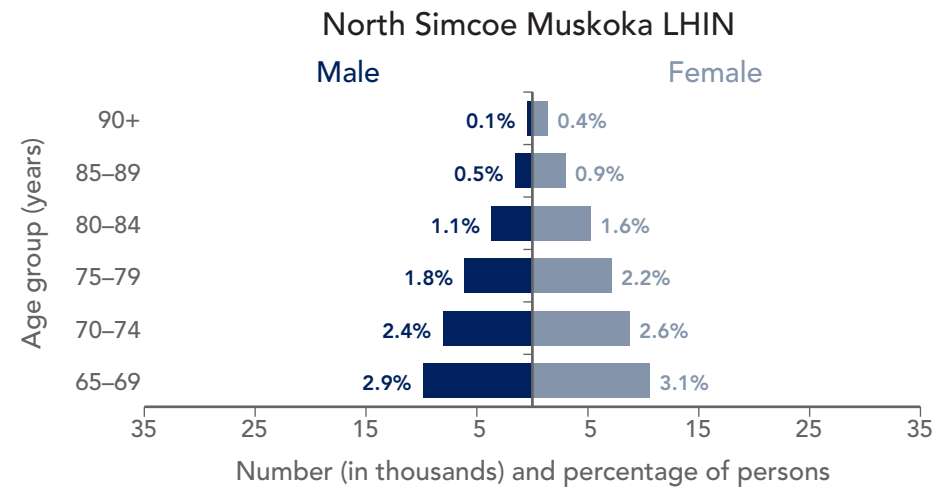
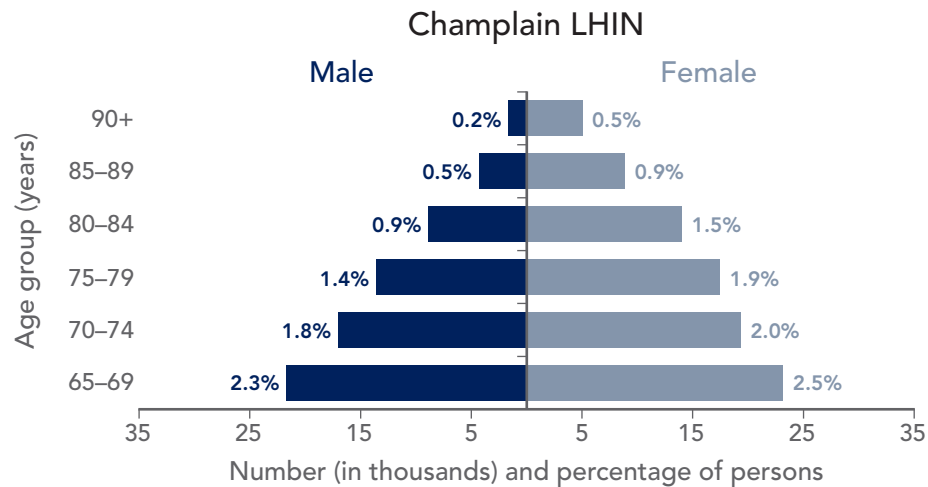
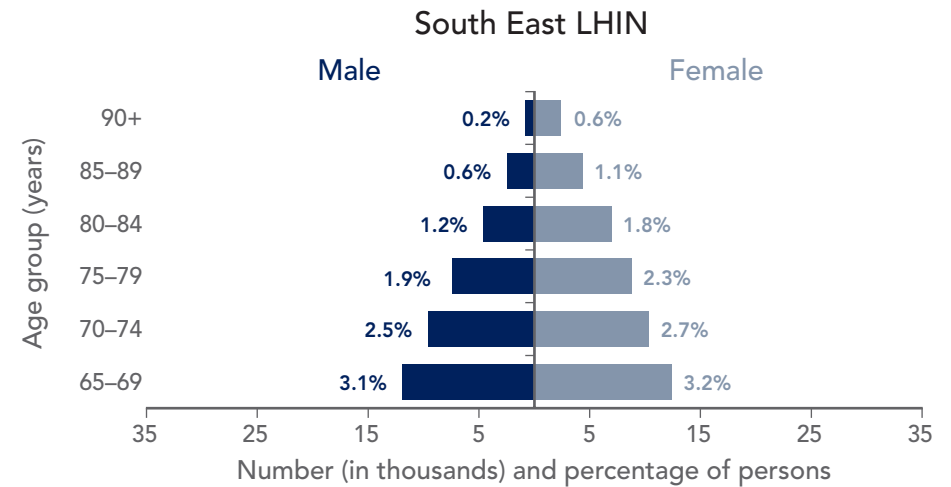
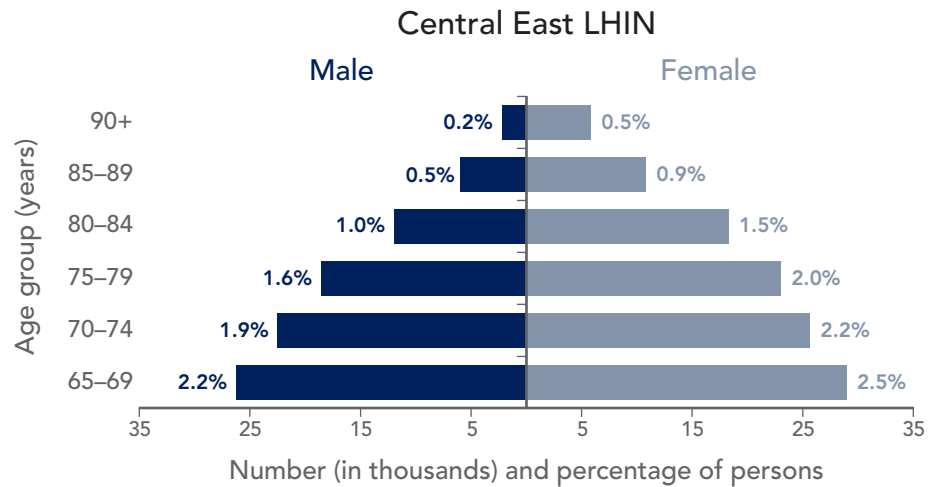
## b. Age-sex pyramids of seniors in Ontario, by Local Health Integration Network, 2007/08



Data source: Registered Persons Database (MOHLTC)

# 2.1 Age-Sex Pyramids

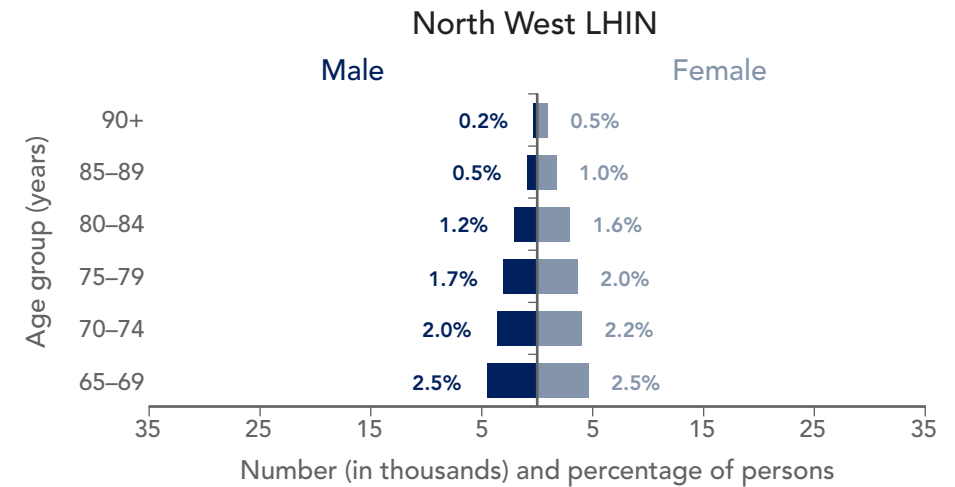
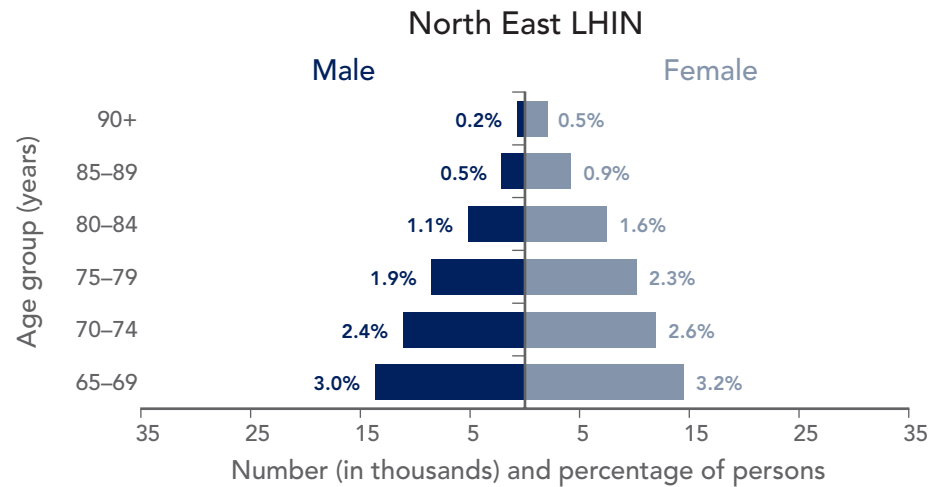
## b. Age-sex pyramids of seniors in Ontario, by Local Health Integration Network, 2007/08



Data source: Registered Persons Database (MOHLTC)

## 2.1 Age-Sex Pyramids

### b. Age-sex pyramids of seniors in Ontario, by Local Health Integration Network, 2007/08



Data source: Registered Persons Database (MOHLTC)

## 2.2 Population Eligible for Health Services

### a. Percentage and number of seniors, by age group, in Ontario, 2002/03–2008/09

Number of Ontario Seniors by Age Group

Year	Percentage of Adult Population <sup>1</sup> Aged ≥ 65 Years	≥ 65 Years	65–74 Years	75–84 Years	≥ 85 Years
2002/03	16.4	1,520,427	831,825	530,653	157,949
2003/04	16.4	1,551,852	839,858	549,240	162,754
2004/05	16.5	1,583,066	849,905	565,836	167,325
2005/06	16.5	1,612,935	857,515	575,389	180,031
2006/07	16.7	1,654,241	872,361	587,600	194,280
2007/08	16.8	1,690,105	887,724	595,472	206,909
2008/09	16.9	1,728,080	912,839	599,694	215,547

#### Key finding

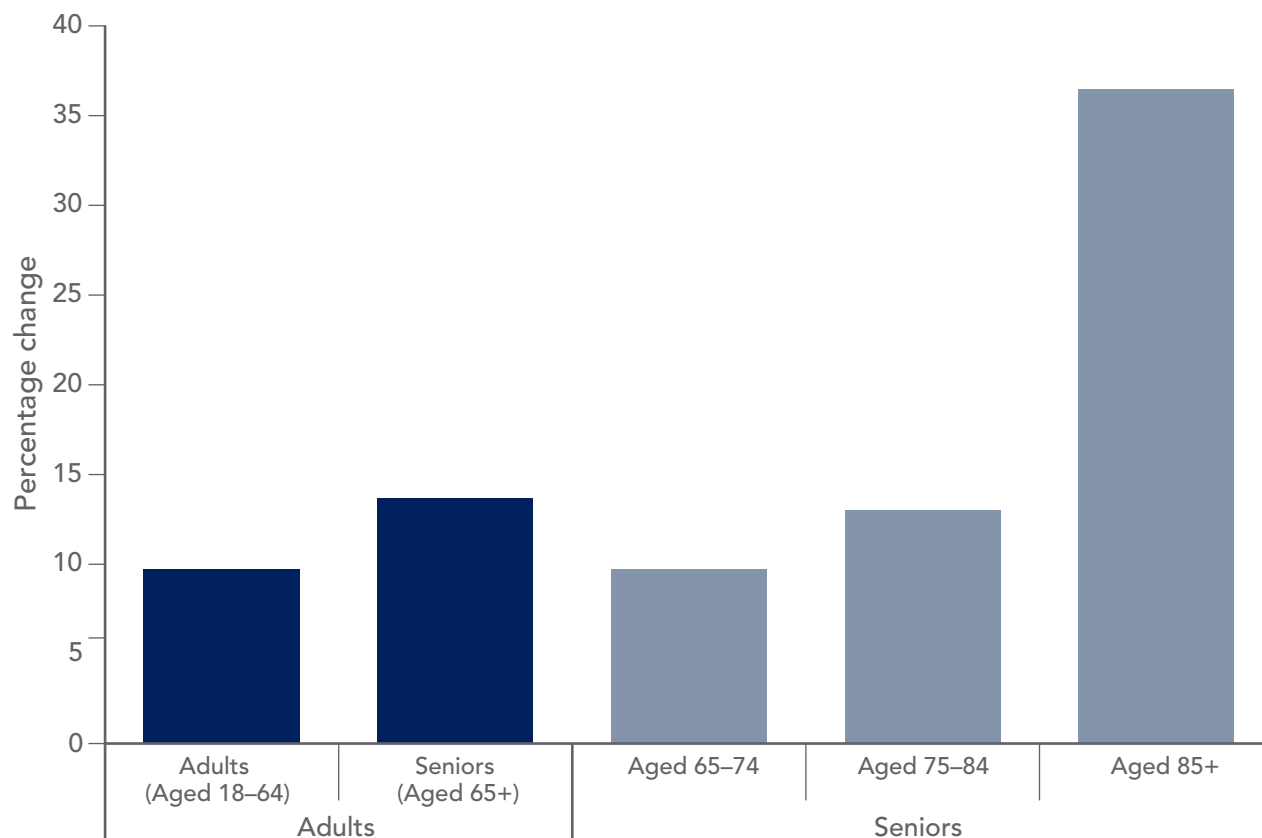
- In Ontario, the percentage of the adult population aged 65 and older increased at a slow but steady rate reaching 17% in 2008/09.

Data source: Registered Persons Database (MOHLTC)

<sup>1</sup> Adults aged 18 years and older in Ontario

## 2.2 Population Eligible for Health Services

b. Percentage change in the number of adults and seniors in Ontario between 2002/03 and 2008/09, by age group



### Key finding

- Consistent with overall population growth, the absolute number of Ontario seniors eligible for health services increased by 14%. This increase was larger than for adults aged 18-64 (10%). The number of seniors aged 85 and older increased by 36% in the seven-year period, the most of any age group in the adult population.

Data source: Registered Persons Database (MOHLTC)

## 2.2 Population Eligible for Health Services

### c. Percentage and number of seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09

Local Health Integration Network	Percentage of Adult Population <sup>1</sup> ≥ 65 Years	Number of Ontario Seniors by Age Group			
		≥ 65 Years	65–74 Years	75–84 Years	≥ 85 Years
Ontario	16.9	1,728,080	912,839	599,694	215,547
Erie St. Clair	18.0	93,453	48,840	33,051	11,562
South West	19.1	143,422	74,631	49,698	19,093
Waterloo Wellington	15.5	88,223	46,097	30,768	11,359
Hamilton Niagara Haldimand Brant	19.4	216,593	109,601	78,366	28,626
Central West	12.5	76,368	44,285	24,093	7,990
Mississauga Halton	13.4	116,437	64,312	39,335	12,790
Toronto Central	16.4	154,225	76,033	55,165	23,027
Central	14.8	194,597	104,237	67,207	23,153
Central East	17.1	205,945	106,823	73,121	26,001
South East	21.0	83,581	45,141	28,341	10,099
Champlain	16.5	159,463	84,730	53,723	21,009
North Simcoe Muskoka	19.3	68,975	38,312	23,369	7,294
North East	20.8	93,709	52,334	31,820	9,556
North West	17.8	33,089	17,464	11,637	3,989

Data source: Registered Persons Database (MOHLTC)

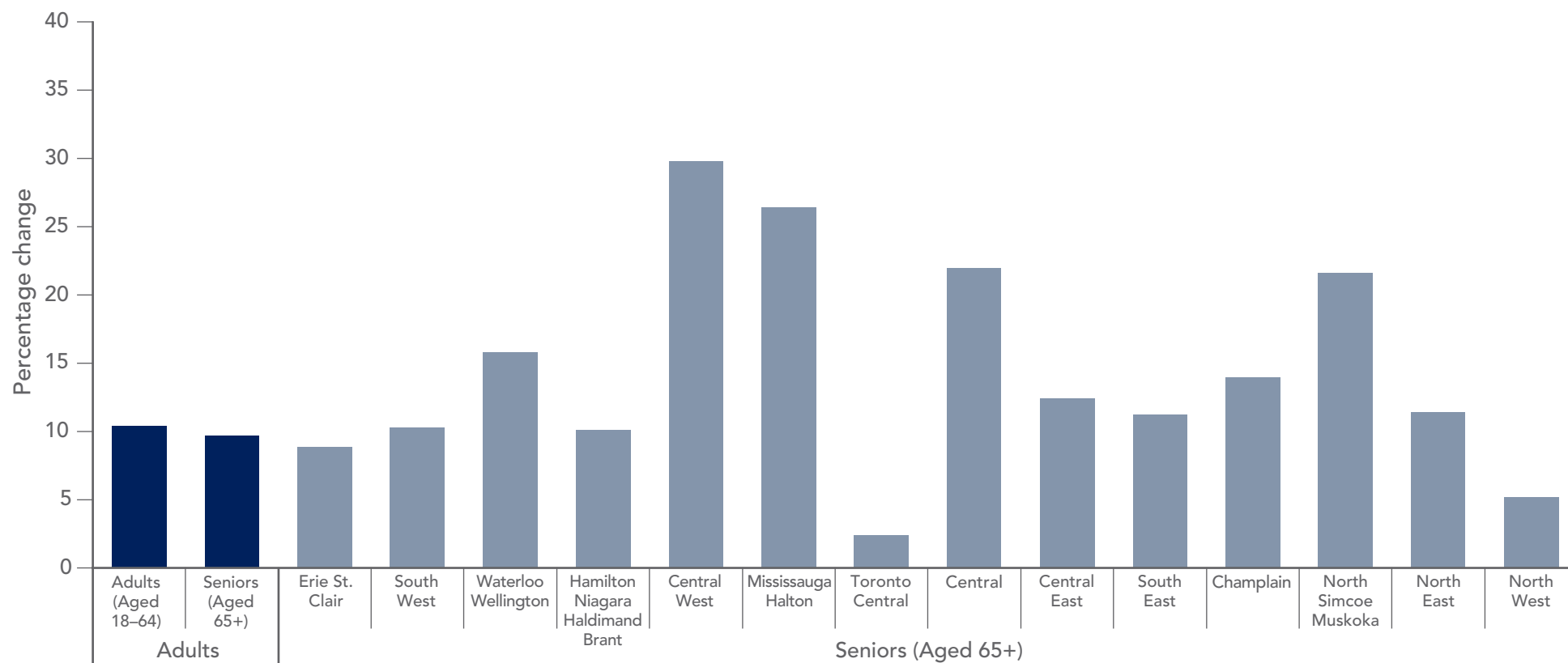
<sup>1</sup> Adults aged 18 years and older in Ontario.

#### Key finding

- Across the LHINs, there was variation in the percentage of the adult population aged 65 and older. This percentage varied from 12% of the adult population in the Central West LHIN to 21% of the adult population in the South East LHIN.

## 2.2 Population Eligible for Health Services

d. Percentage change in the number of adults and seniors in Ontario between 2002/03 and 2008/09, by Local Health Integration Network



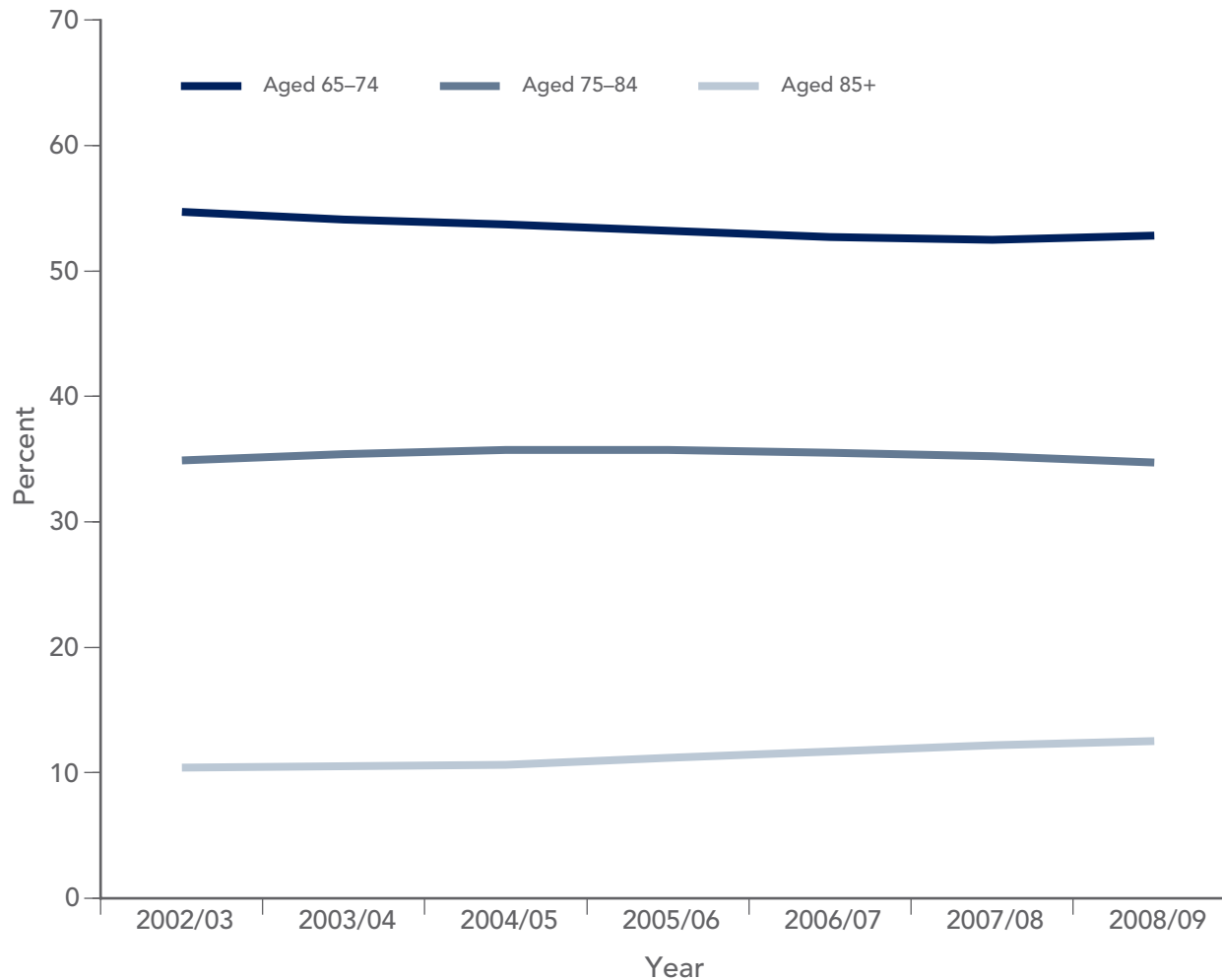
Data source: Registered Persons Database (MOHLTC)

### Key finding

- There was variation in the percentage increase in the absolute number of seniors in each LHIN from 2002/03 to 2008/09. This increase ranged from 2% in the Toronto Central LHIN to 30% in the Central West LHIN.

## 2.3 Age

### a. Percentage of seniors, by age group, in Ontario, 2002/03–2008/09



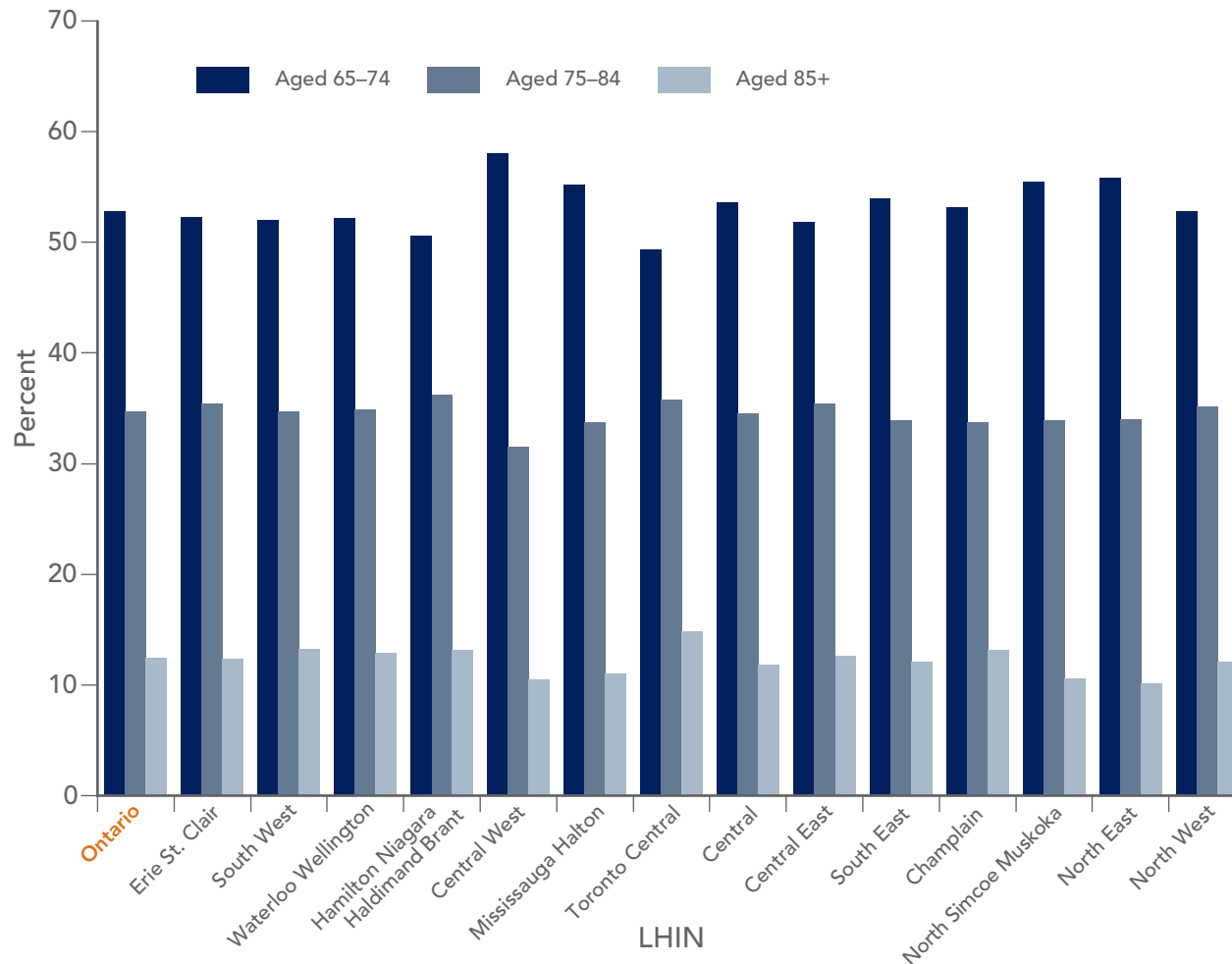
#### Key findings

- In 2008/09, 53% of Ontario seniors were aged 65–74, 35% were aged 75–84, and 12% were aged 85 and older.
- The relative distribution of Ontario seniors changed little between 2002/03 and 2008/09, although there was a slight increase (from 10% to 12%) in the proportion of seniors aged 85 and older.

Data source: Registered Persons Database (MOHLTC)

## 2.3 Age

### b. Percentage of seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09



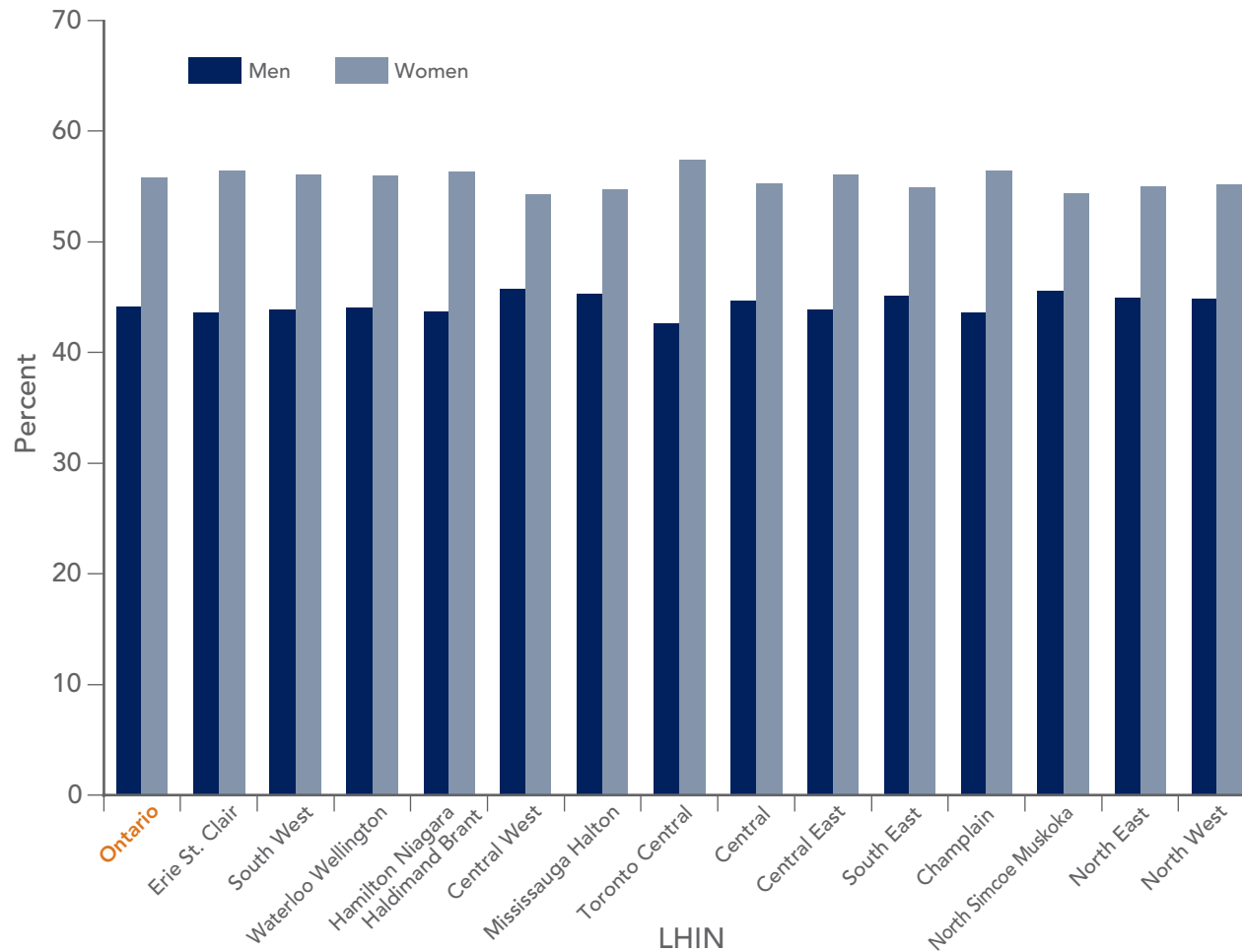
#### Key findings

- Within Local Health Integration Networks, the relative distribution of seniors was similar to the provincial pattern, with individuals aged 65–74 accounting for the largest proportion of Ontario seniors.
- Among the adult population, the percentage of adults aged 85 and older was highest in the Toronto Central LHIN (15%) and lowest in the North East LHIN (10%).

Data source: Registered Persons Database (MOHLTC)

## 2.4 Sex

### Percentage of seniors, by sex, in Ontario and by Local Health Integration Network, 2008/09



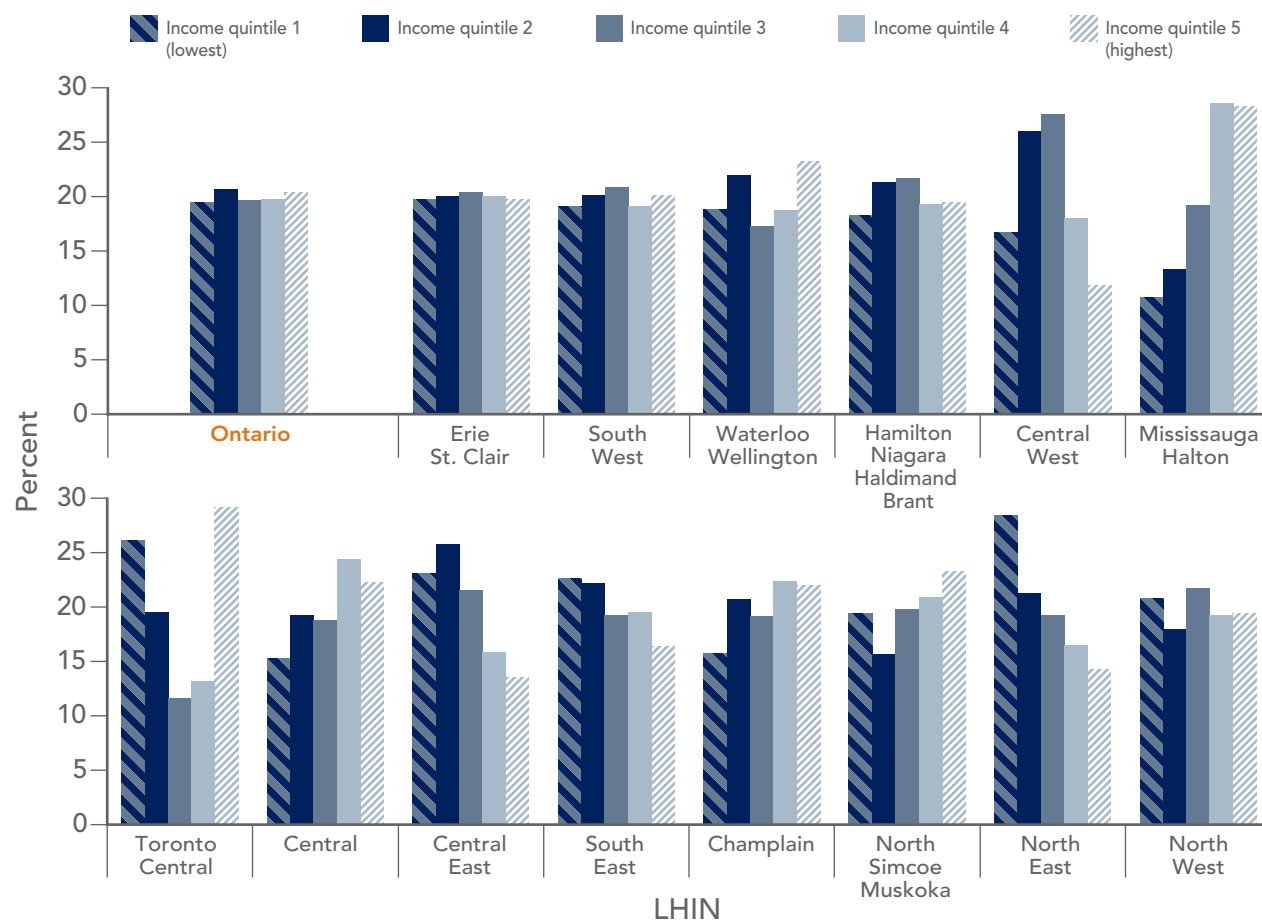
#### Key findings

- In 2008/09, 44% of Ontario seniors were male and 56% were female.
- The relative distribution of males to females did not change over time (data not shown).
- Within LHINs, the relative distribution of seniors by sex was similar to the provincial pattern.

Data source: Registered Persons Database (MOHLTC)

## 2.5 Neighbourhood Income

### Percentage of seniors, by neighbourhood income quintile, in Ontario and by Local Health Integration Network, 2008/09



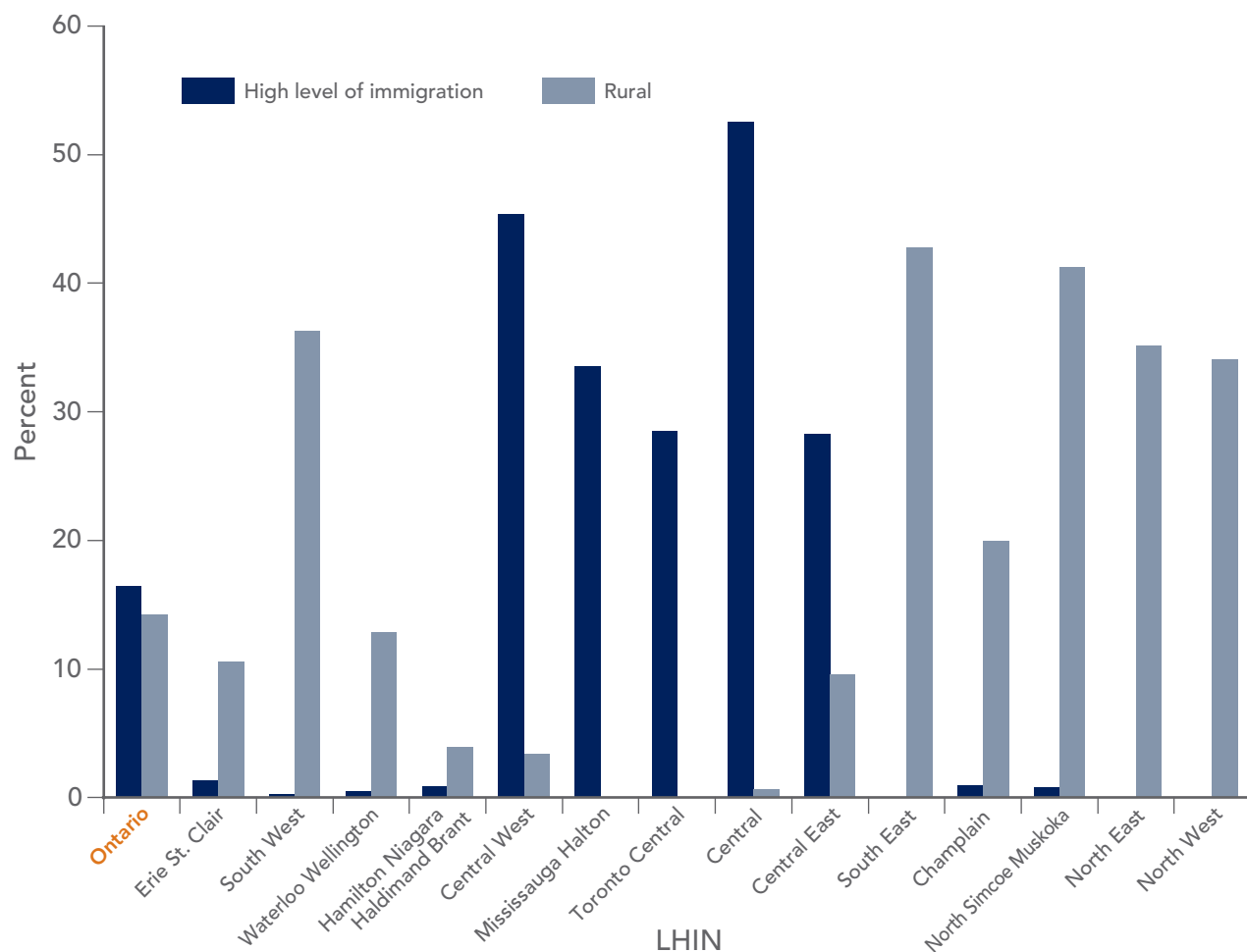
#### Key findings

- In 2008/09, the relative distribution of neighbourhood income by quintiles within Local Health Integration Networks (LHINs) differed from the provincial pattern.
- The Toronto Central LHIN and the North East LHIN had the largest percentages of Ontario seniors living in low-income neighbourhoods (26% and 28%, respectively).
- The Mississauga Halton LHIN and the Toronto Central LHIN had the largest proportion of Ontario seniors living in high-income neighbourhoods (28% and 29%, respectively).
- The Central West LHIN had the smallest percentage of Ontario seniors living in high-income neighbourhoods (12%).

Data sources: Postcensal Population Files (Statistics Canada), Registered Persons Database (MOHLTC)

## 2.6 Rural Location and Neighbourhood Immigration Level

Percentage of seniors in rural areas and in neighbourhoods with high levels of immigration, in Ontario and by Local Health Integration Network, 2008/09



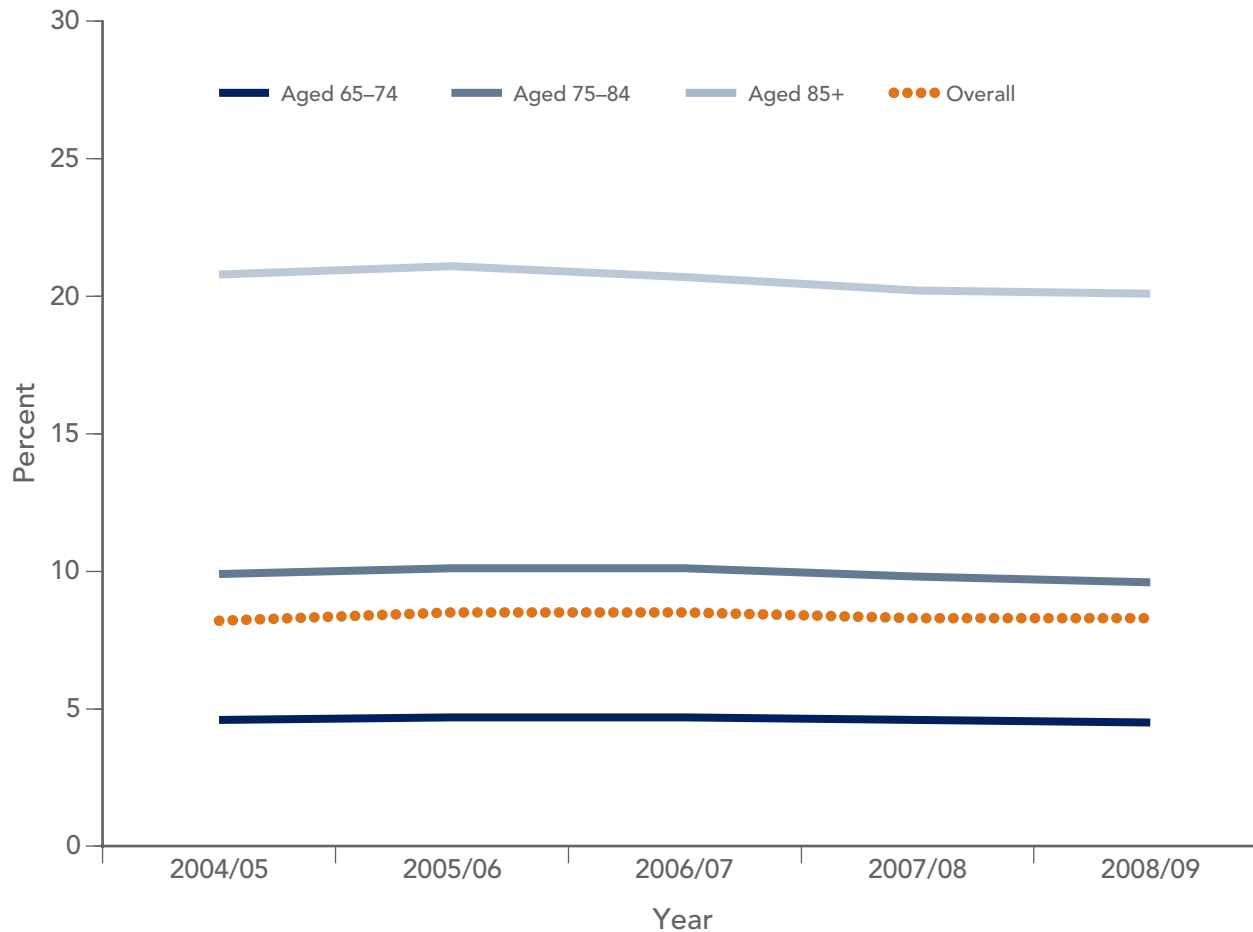
### Key findings

- In Ontario, the proportion of individuals aged 65 and older who were living in rural areas remained constant over time (data not shown) and was 14% in 2008/09.
- The proportion of individuals aged 65 and older who were living in neighbourhoods with high levels of immigration was also constant over time (data not shown) and was 16% in 2008/09.
- Across LHINs, there was large variation in the percentages of seniors living in rural areas and in neighbourhoods with high levels of immigration. The Central LHIN had the largest proportion of seniors (52%) living in areas with high levels of immigration. The South East LHIN had the greatest proportion of seniors (43%) living in rural areas.

Data sources: Postcensal Population Files (Statistics Canada), Registered Persons Database (MOHLTC)

## 2.7 Presence of Frailty

### a. Percentage of frail seniors, overall and by age group, in Ontario, 2004/05–2008/09



#### Key findings

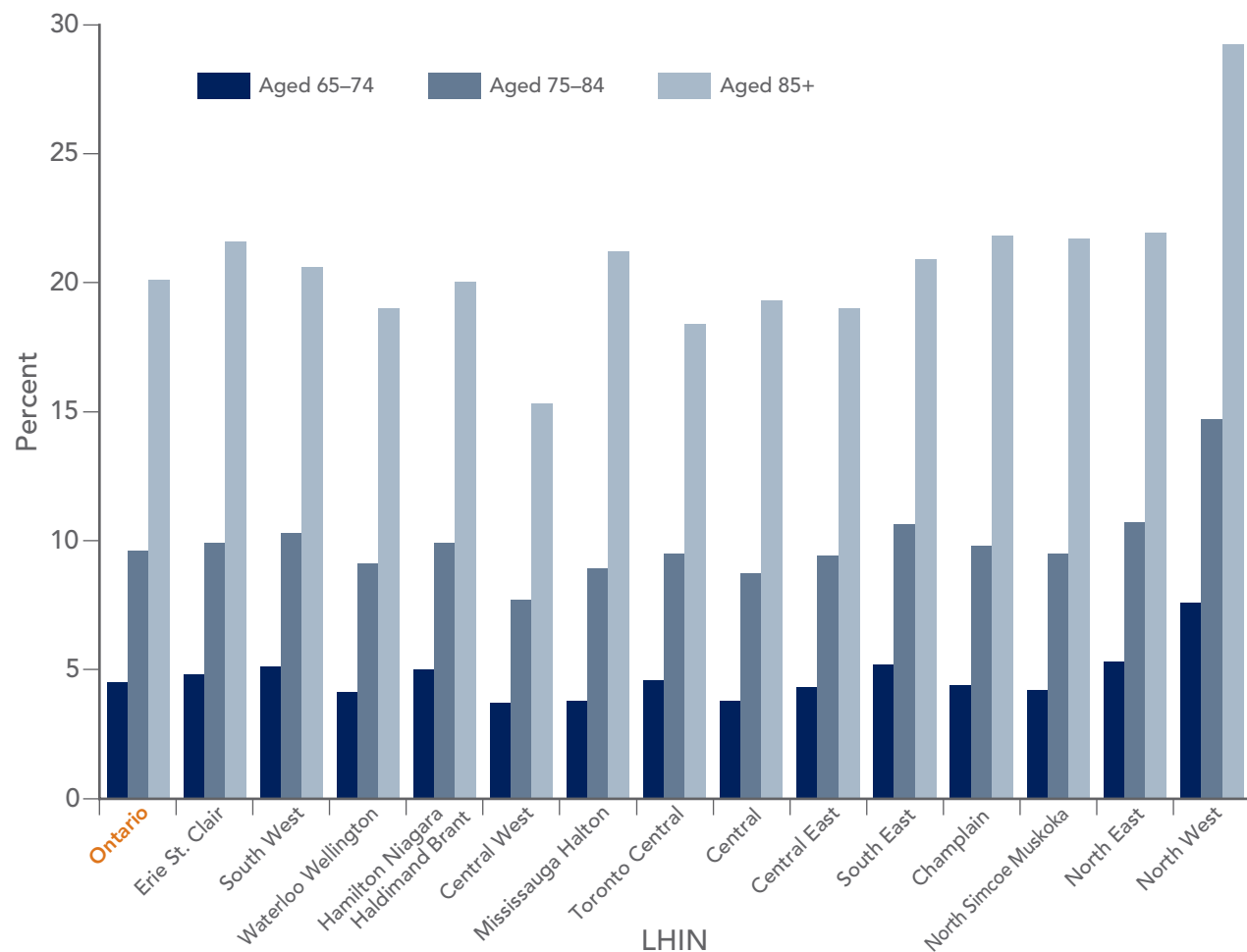
- In 2008/09, 8% of Ontario seniors were considered frail (based on previous health system contact; see technical note). The likelihood of frailty increased with age. Among all seniors, 20% of those aged 85 and older were frail, while only 4% of those aged 65-74 were considered frail.
- The relative distribution of frail Ontario seniors did not change over time.

**Data sources:** Registered Persons Database (MOHLTC), Ontario Health Insurance Plan Claims Database (MOHLTC), Discharge Abstract Database (CIHI), National Ambulatory Care Reporting System (CIHI)

**Technical note:** The frailty marker is based on clusters of diagnosis codes that indicate the presence of frail conditions and was derived using the Johns Hopkins University Adjusted Clinical Group (ACG) System.

## 2.7 Presence of Frailty

### b. Percentage of frail seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09



#### Key finding

- Within LHINs, the distribution of frail seniors across age groups was similar to the provincial pattern. The North West LHIN had the highest proportion of frail seniors in each age group: 8% of those aged 65-74, 15% of those aged 75-84, and 29% of those aged 85 and older were categorized as frail.

Data sources: Registered Persons Database (MOHLTC), Ontario Health Insurance Plan Claims Database (MOHLTC), Discharge Abstract Database (CIHI), National Ambulatory Care Reporting System (CIHI)

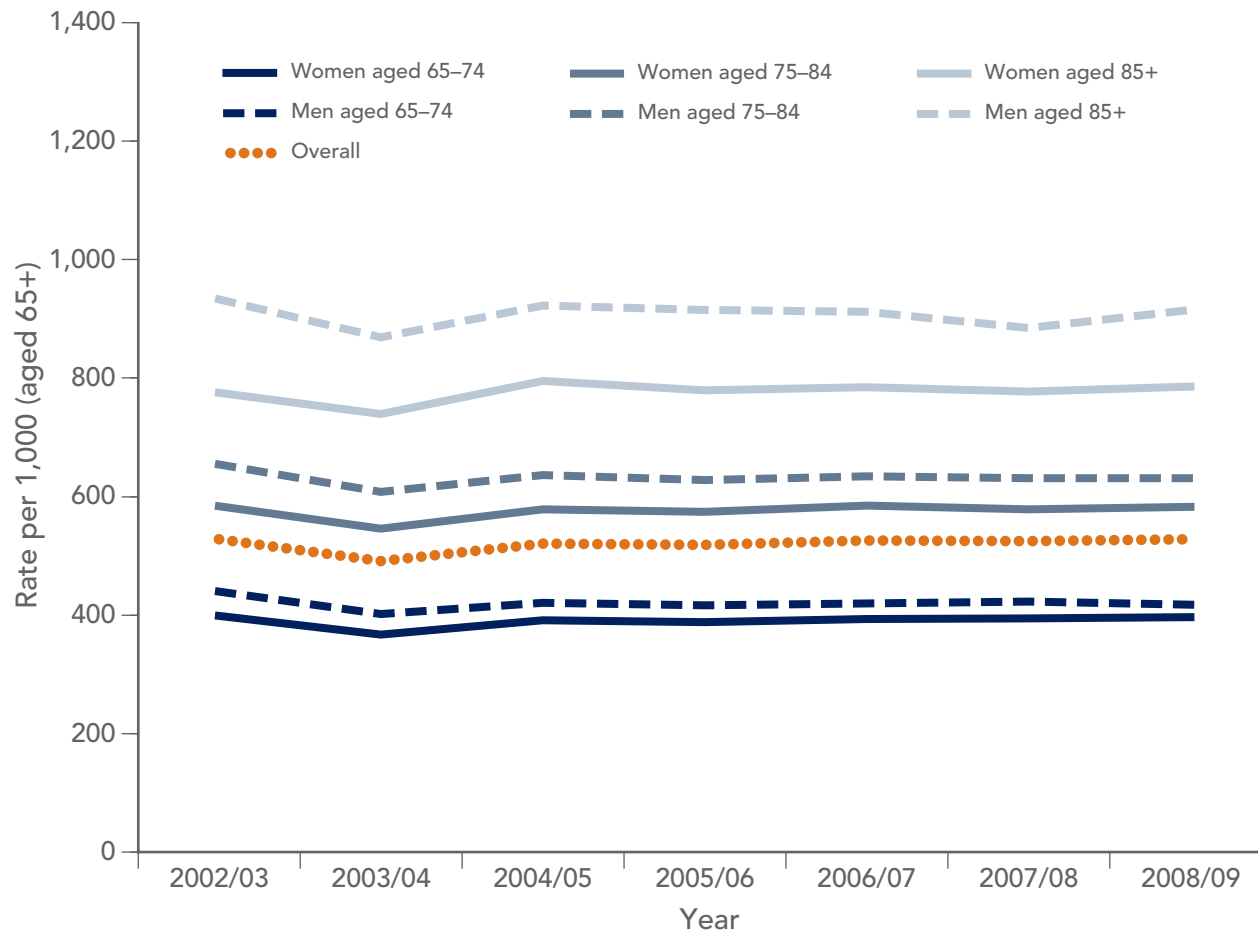
Technical note: The frailty marker is based on clusters of diagnosis codes that indicate the presence of frail conditions and was derived using the Johns Hopkins University Adjusted Clinical Group (ACG) System.

3

# EMERGENCY DEPARTMENT VISITS

## 3.1 Unscheduled Emergency Department Visits

### a. Rates of unscheduled emergency department visits for seniors, overall and by age group and sex, in Ontario, 2002/03–2008/09



Data sources: National Ambulatory Care Reporting System (CIHI), Registered Persons Database (MOHLTC)

Technical note: Potentially anomalous results seen in 2002/03 and 2003/04 could be a result of the Severe Acute Respiratory Syndrome (SARS) outbreak during which time emergency department volumes decreased, particularly in the Greater Toronto Area.

#### Why is this indicator important?

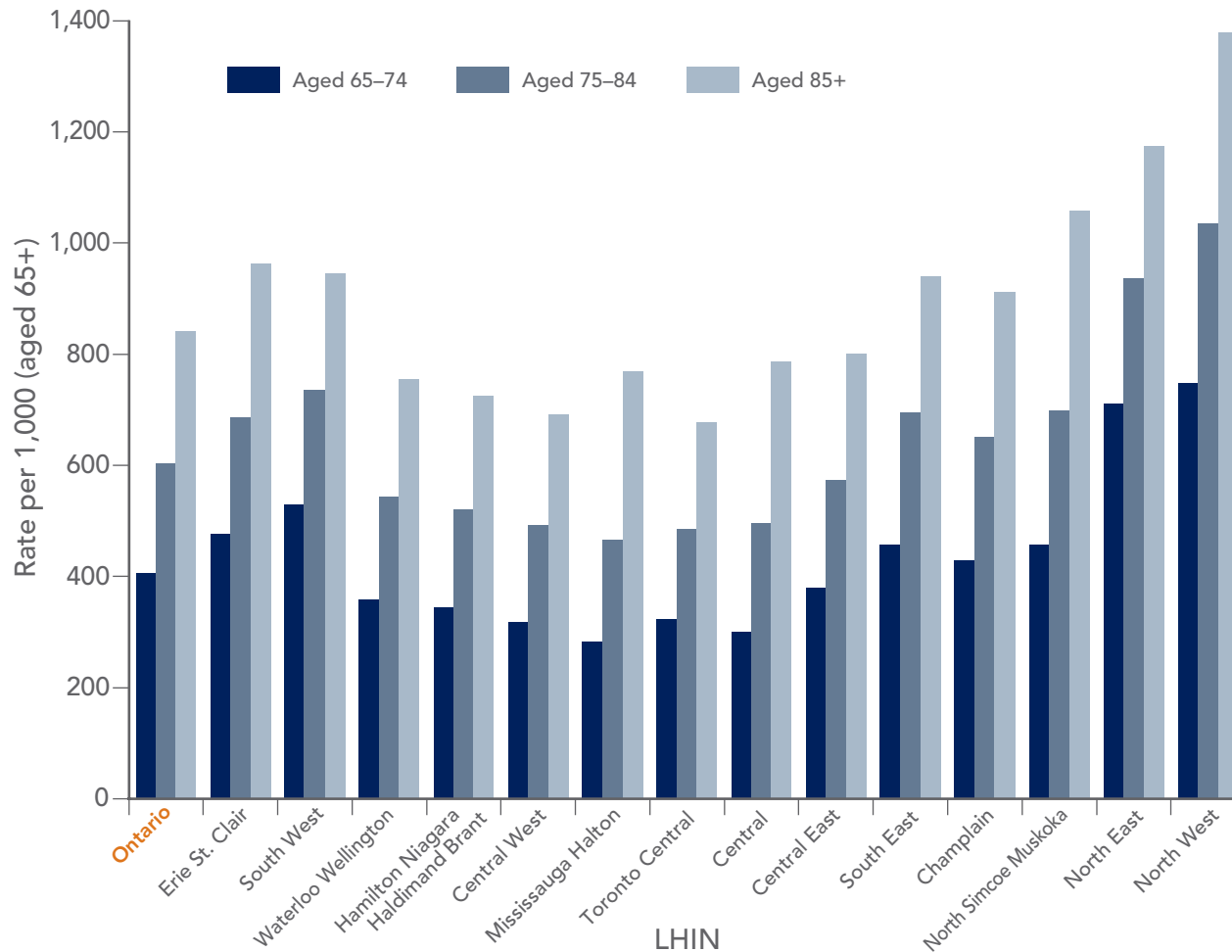
Unscheduled emergency department (ED) visits are visits that are not planned or arranged in advance. The rate of ED visits serves as an important indicator because it helps us to understand the extent to which other parts of the health system may not be meeting the needs of Ontario seniors (i.e., poor access to primary care physicians). There are at least two ways that gaps in the health system lead to ED visits by older adults. First, inadequate access to or use of health services to manage existing medical conditions and functional limitations can lead to complications that may require care in the ED. Second, limited access to appropriate alternative settings at the time of a medical problem may lead patients to use the ED even if they recognize that less intense care is likely required.

#### Key findings over time

- From 2002/03 to 2008/09, the rate of unscheduled ED visits by Ontario seniors was fairly stable at approximately 520 visits per 1,000 seniors in the population, with the exception of 2003/04 which was anomalous due to an outbreak of Severe Acute Respiratory Syndrome (SARS).
- The rate of unscheduled ED visits showed distinct patterns across both age group and sex. Regardless of sex, the rate of visits increased substantially with age. With each 10-year increase in age, the rate of unscheduled ED visits increased by over 40%. *(Continued on next page)*

## 3.1 Unscheduled Emergency Department Visits

### b. Rates of unscheduled emergency department visits by seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09



- Men consistently showed a higher rate of unscheduled ED visits than women, and the disparity increased across age groups. Among adults aged 65–74 (the youngest group), the difference between men and women was approximately 20 visits per 1,000 seniors; among those aged 85 and older (the oldest group), the difference widened to over 120 visits per 1,000 seniors.

#### Key findings across LHINs

- There were substantial differences in the rates of unscheduled ED visits across LHINs. These differences were consistent across all age groups.
- The highest rates of unscheduled ED visits were observed in the North Simcoe Muskoka, North East, and North West LHINs. In these three LHINs, there was more than one visit per adult over the age of 85.

#### Next steps

Future work will explore the differences between men and women, particularly those aspects that are most relevant to remaining at home. This will include looking at the reasons for ED visits (partially explored in the other ED indicators), triage levels, and visit outcomes such as hospitalization and repeat visits.

Data sources: National Ambulatory Care Reporting System (CIHI), Registered Persons Database (MOHLTC)

Technical note: Rates are sex-adjusted using the 2001 Ontario population aged 65–120 as the standard population.

## 3.2 Potentially Preventable Emergency Department Visits

### a. Rates of emergency department visits by seniors for potentially preventable conditions, overall and by age group, in Ontario, 2002/03–2008/09



Data sources: National Ambulatory Care Reporting System (CIHI), Registered Persons Database (MOHLTC)

Technical notes: Rates are sex-adjusted using the 2001 Ontario population aged 65–120 as the standard population.

Potentially anomalous results seen in 2002/03 and 2003/04 could be a result of the Severe Acute Respiratory Syndrome (SARS) outbreak during which time emergency department volumes decreased, particularly in the Greater Toronto Area.

#### Why is this indicator important?

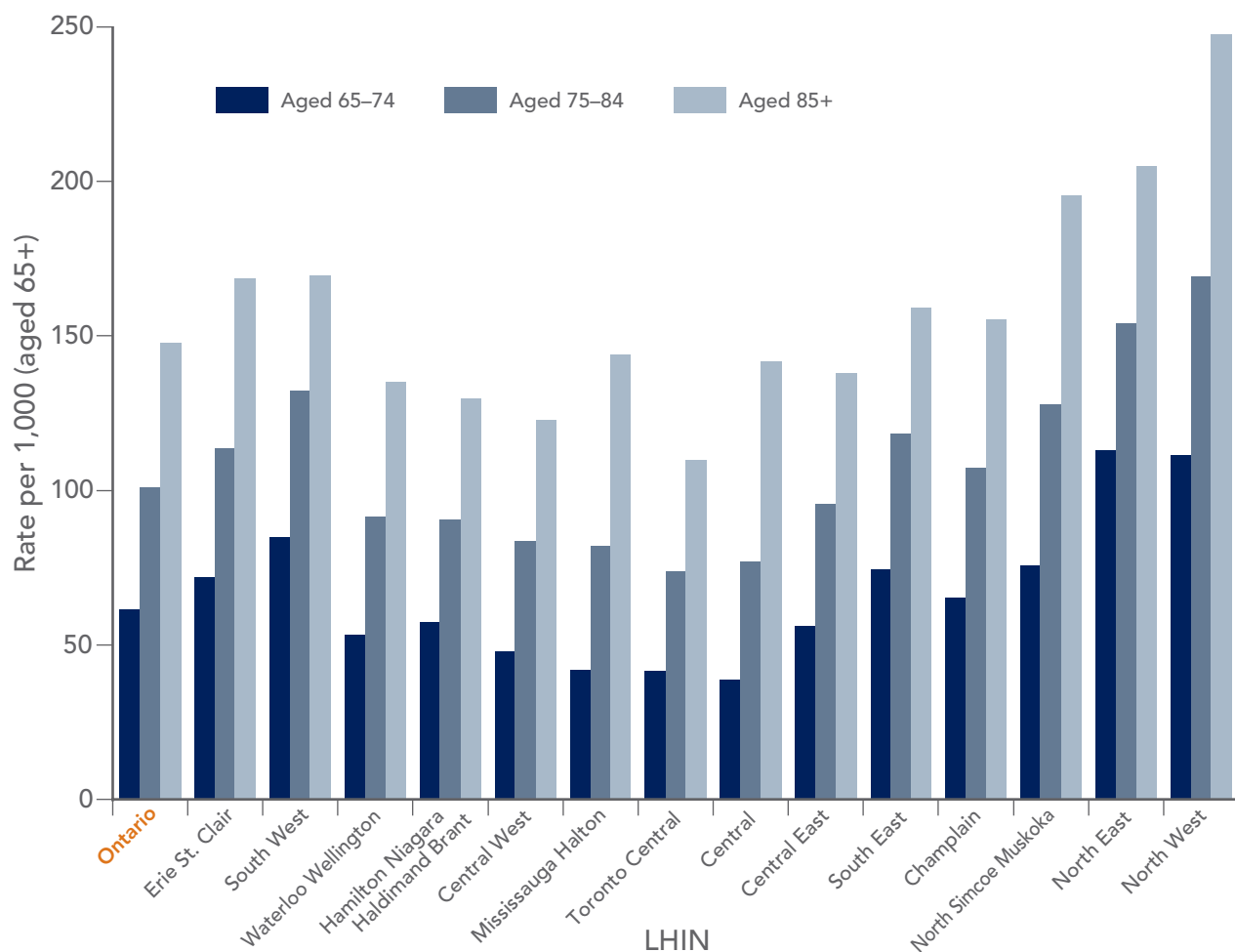
Potentially preventable emergency department (ED) visits describe visits for pre-existing conditions that are known to be responsive to primary care, such as diabetes and chronic obstructive pulmonary disease. When these conditions are not adequately managed, patients may experience worsening symptoms and/or serious complications that result in a visit to the ED. This indicator helps us to understand the extent to which people with these pre-existing conditions may not be receiving enough care to prevent the ED visit. This is a measure of early and ongoing primary care to manage these conditions; patients may still be quite sick when they arrive at the ED.

#### Key findings over time

- Overall, for every 1,000 older adults in the population in 2008/09, there were 83 visits to the ED for potentially preventable conditions.
- There was a slightly increasing trend in the number of ED visits for potentially preventable conditions.
- There was a clear association between older age and the rate of ED visits for potentially preventable conditions. For every year studied, the occurrence of ED visits for potentially preventable visits was approximately double among adults aged 85 and over compared to adults aged 65–74.

## 3.2 Potentially Preventable Emergency Department Visits

### b. Rates of emergency department visits by seniors for potentially preventable conditions, by age group, in Ontario and by Local Health Integration Network, 2008/09



#### Key findings across LHINs

- Rates of ED visits for potentially preventable conditions varied substantially among LHINs.
- Northern and remote LHINs had the highest rates of ED visits for potentially preventable conditions. LHINs in large urban areas had relatively lower rates.
- In all LHINs, rates of ED visits for potentially preventable conditions increased with age. Compared to adults aged 65-74, adults aged 85 and older consistently showed a near doubling in the rate of ED visits for potentially preventable conditions.

#### Next steps

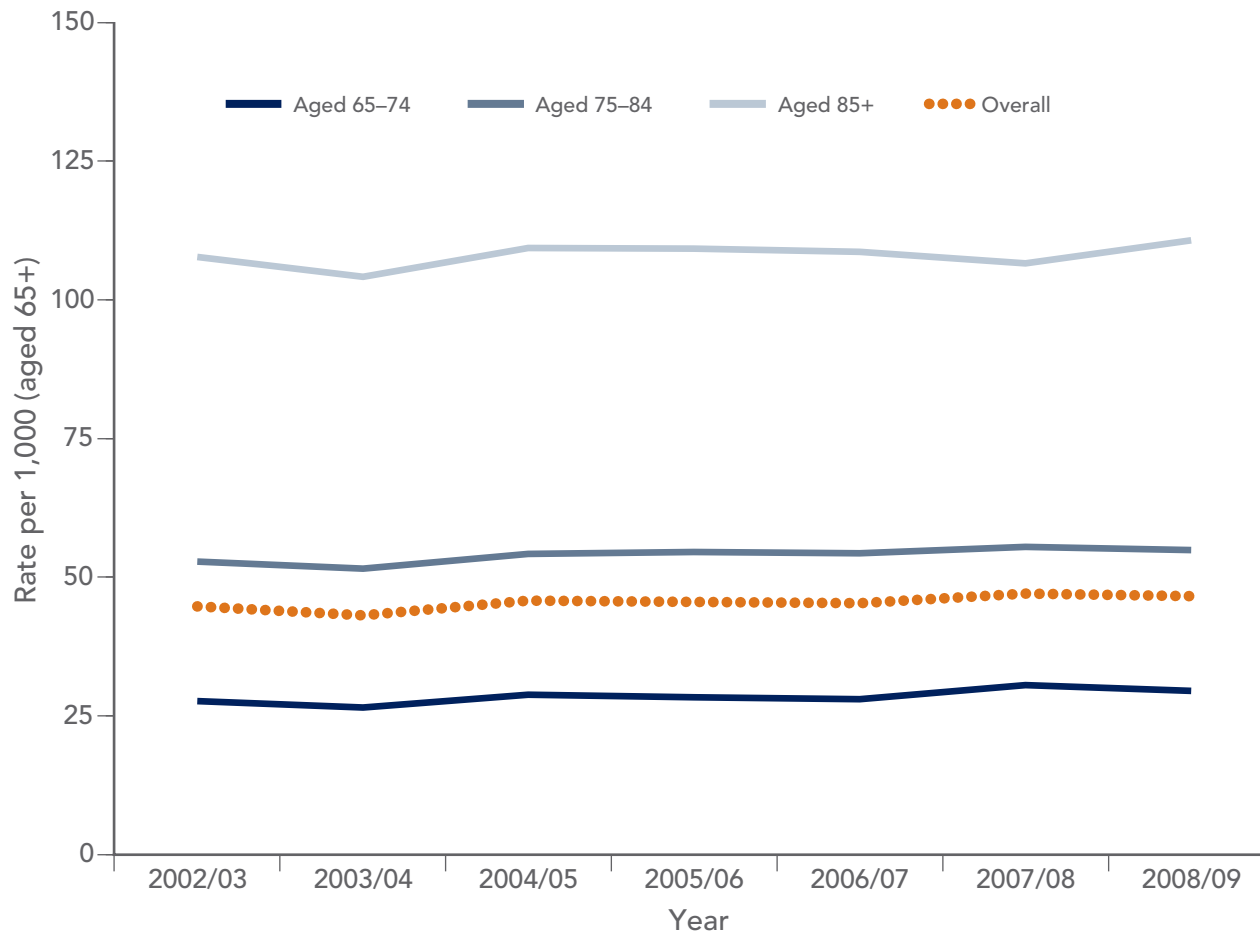
Future work will examine the occurrence of ED visits for specific, potentially preventable conditions that may also affect an older adult's ability to live at home; such diagnoses include congestive heart failure and chronic obstructive pulmonary disease. Future work may also examine ED visits for potentially preventable conditions in relation to access to and use of a regular source of medical care and home care services.

Data sources: National Ambulatory Care Reporting System (CIHI), Registered Persons Database (MOHLTC)

Technical note: Rates are sex-adjusted using the 2001 Ontario population aged 65-120 as the standard population.

## 3.3 Emergency Department Visits for Fall-Related Injuries

a. Rates of emergency department visits by seniors for fall-related injuries, overall and by age group, in Ontario, 2002/03–2008/09



Data sources: National Ambulatory Care Reporting System (CIHI), Registered Persons Database (MOHLTC)

Technical notes: Rates are sex-adjusted using the 2001 Ontario population aged 65–120 as the standard population.

Potentially anomalous results seen in 2002/03 and 2003/04 could be a result of the Severe Acute Respiratory Syndrome (SARS) outbreak during which time emergency department volumes decreased, particularly in the Greater Toronto Area.

### Why is this indicator important?

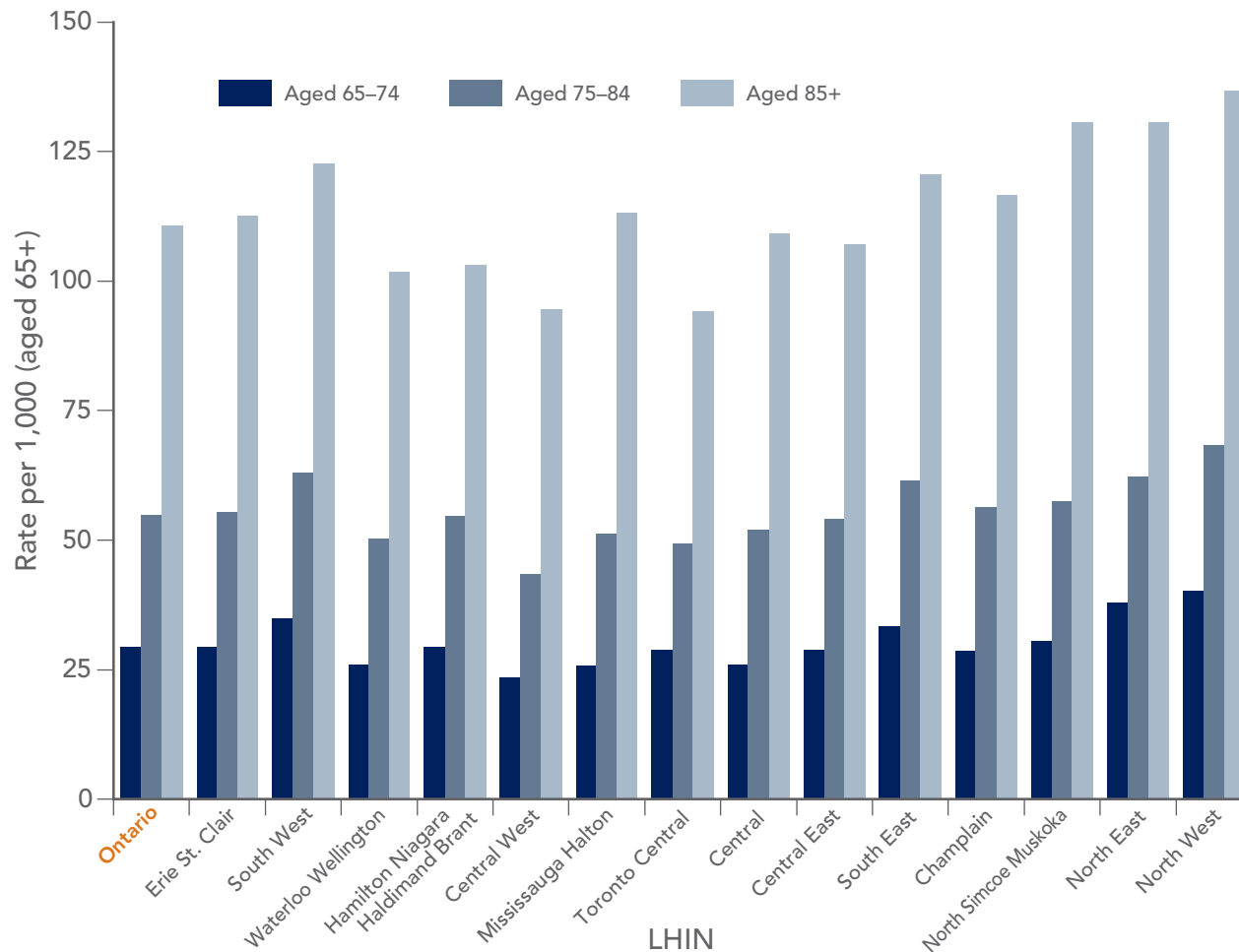
Falls are an important safety issue among older adults and are among the top reasons why older adults visit the emergency department (ED). Falls can result in serious injuries, such as fractures, that may lead to hospitalization, long-term care admission, and even death. Risk factors for falls and fall-related injuries include health conditions such as osteoporosis, medications that cause dizziness, decreased strength with age, and environmental hazards. Many of these risk factors can be modified or eliminated so that the risk of falls is reduced.

### Key findings over time

- Overall, there were approximately 47 ED visits for fall-related injuries for every 1,000 Ontario seniors in the population, but there were large differences between age groups.
- Among those aged 65–74, there were approximately 30 ED visits for fall-related injuries per 1,000 Ontario seniors; among those aged 85 and older, there were approximately 111 ED visits for fall-related injuries per 1,000 Ontario seniors. The rate of ED visits for fall-related injuries among those aged 85 and older was more than double the rate of those aged 75–84.
- There did not appear to be any trend across the years studied.

## 3.3 Emergency Department Visits for Fall-Related Injuries

b. Rates of emergency department visits by seniors for fall-related injuries, by age group, in Ontario and by Local Health Integration Network, 2008/09



### Key findings across LHINs

- Within each LHIN, there was a noticeable gradation in the number of ED visits for fall-related injuries across age groups. Those aged 85 and older had nearly double the number of ED visits for fall-related injuries as did those between the ages of 75 and 84.
- For the two younger age groups (65–74 years and 75–84 years), there was a small but noticeable variation across LHINs in the rate of ED visits for fall-related injuries. However, among the oldest group (those aged 85 and older), there was a more noticeable variation between LHINs, with rates ranging from 94–137 ED visits for fall-related injuries per 1,000 Ontario seniors.

### Next steps

Future work may examine the severity of fall-related injuries and subsequent use of hospital and long-term care services.

Data sources: National Ambulatory Care Reporting System (CIHI), Registered Persons Database (MOHLTC)

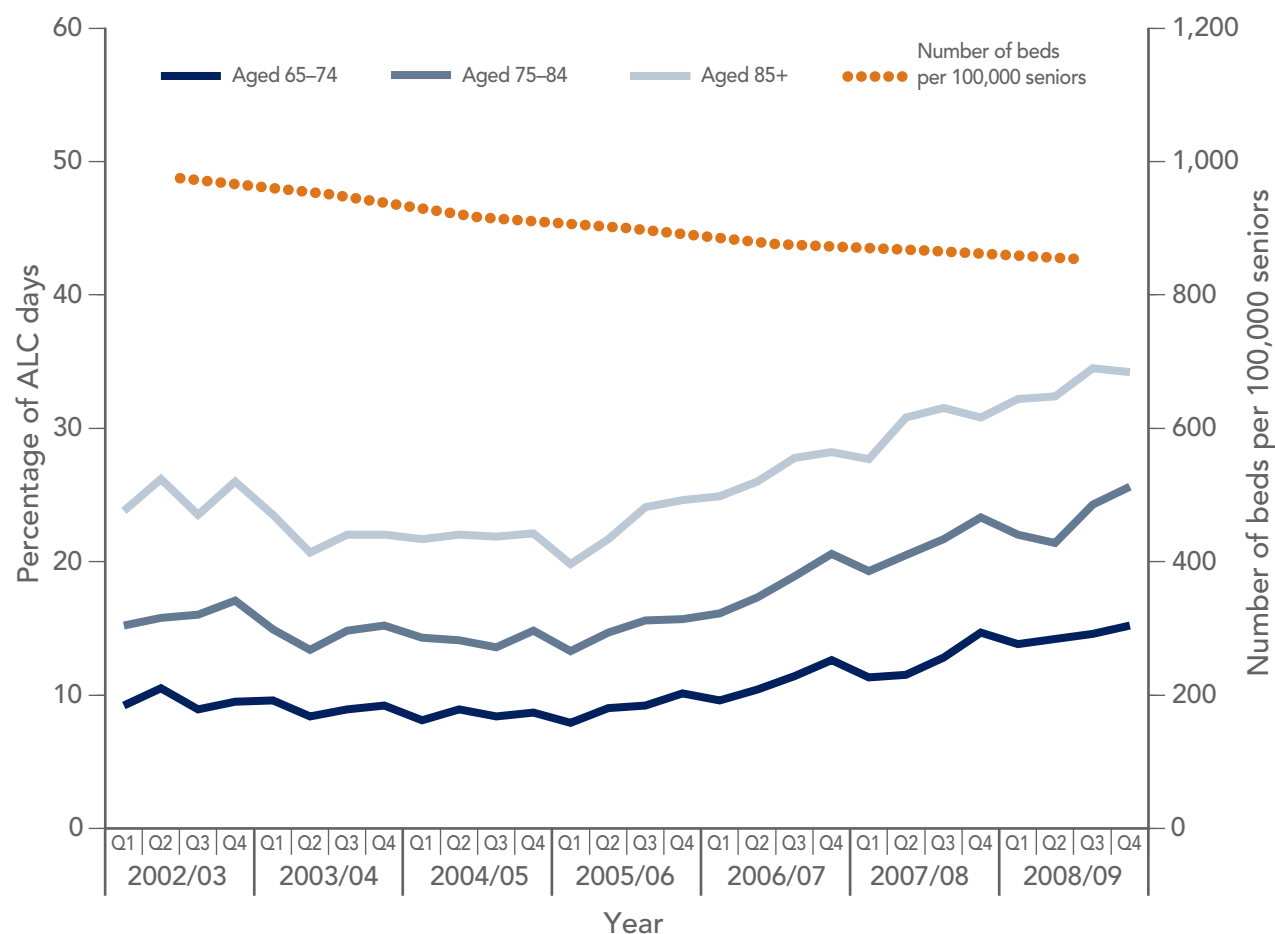
Technical note: Rates are sex-adjusted using the 2001 Ontario population aged 65–120 as the standard population.

4

ALTERNATE  
LEVEL OF CARE

## 4.1 Inpatient Days Accounted for by Alternate Level of Care

a. Percentage of inpatient days accounted for by Alternate Level of Care among seniors, by age group, and number of hospital beds per 100,000 seniors, in Ontario, 2002/03–2008/09



Why is this indicator important?

Individuals who occupy acute care hospital beds but no longer require acute care services are commonly described as Alternate Level of Care (ALC) patients. The care needs of these individuals can often be met in a more appropriate setting (such as in the community with adequate home care or in a long-term care home), but they remain in hospital due to unavailable services, support and/or beds. This indicator helps us to understand the percentage of all inpatient bed-days that are occupied by ALC patients.

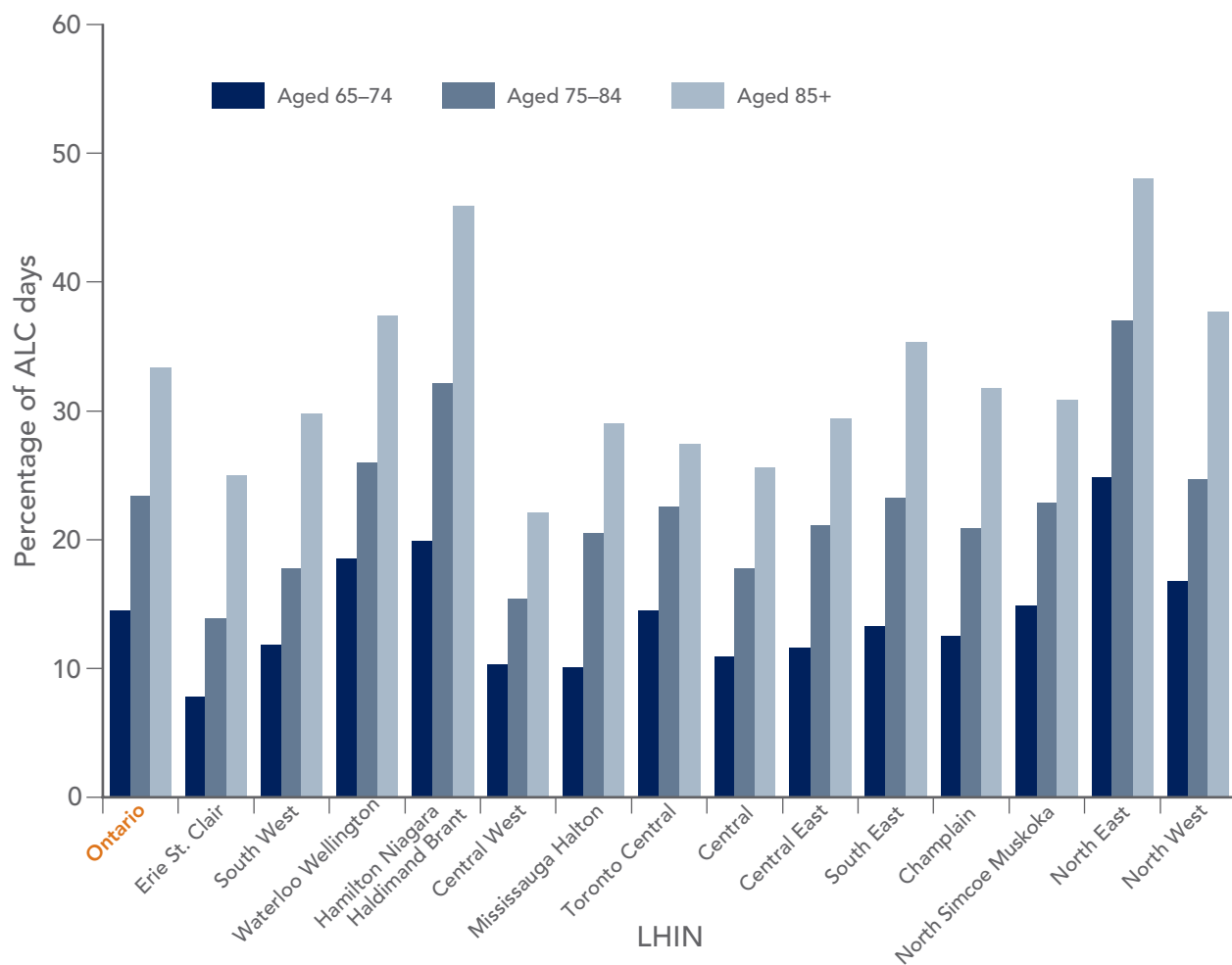
Key findings over time

- Overall, among Ontario seniors, the percentage of inpatient days accounted for by ALC patients was 23% in 2008/09. This percentage was highest among those aged 85 and older (33%) and lowest among those aged 65–74 (14%).
- The percentage of ALC days increased over time for all age groups: by 52% for those aged 65–74, by 46% for those aged 75–84, and by 34% for those aged 85 and older.
- The ratio of acute care beds (medical and surgical) per 100,000 Ontario seniors decreased during this time period.

Data sources: Discharge Abstract Database (CIHI), Registered Persons Database (MOHLTC), Acute Beds Database (MOHLTC)

## 4.1 Inpatient Days Accounted for by Alternate Level of Care

### b. Percentage of inpatient days accounted for by Alternate Level of Care among seniors, by age group, in Ontario and by Local Health Integration Network, 2008/09



#### Key findings across LHINs

- The percentage of inpatient days accounted for by Alternate Level of Care (ALC) patients varied by more than two-fold across the LHINs for all age groups: from 8–25% for those aged 65–74, from 14–37% for those aged 75–84, and from 22–48% for those aged 85 and older.
- Across the LHINs, the percentage of ALC days was consistently highest among those aged 85 and older.

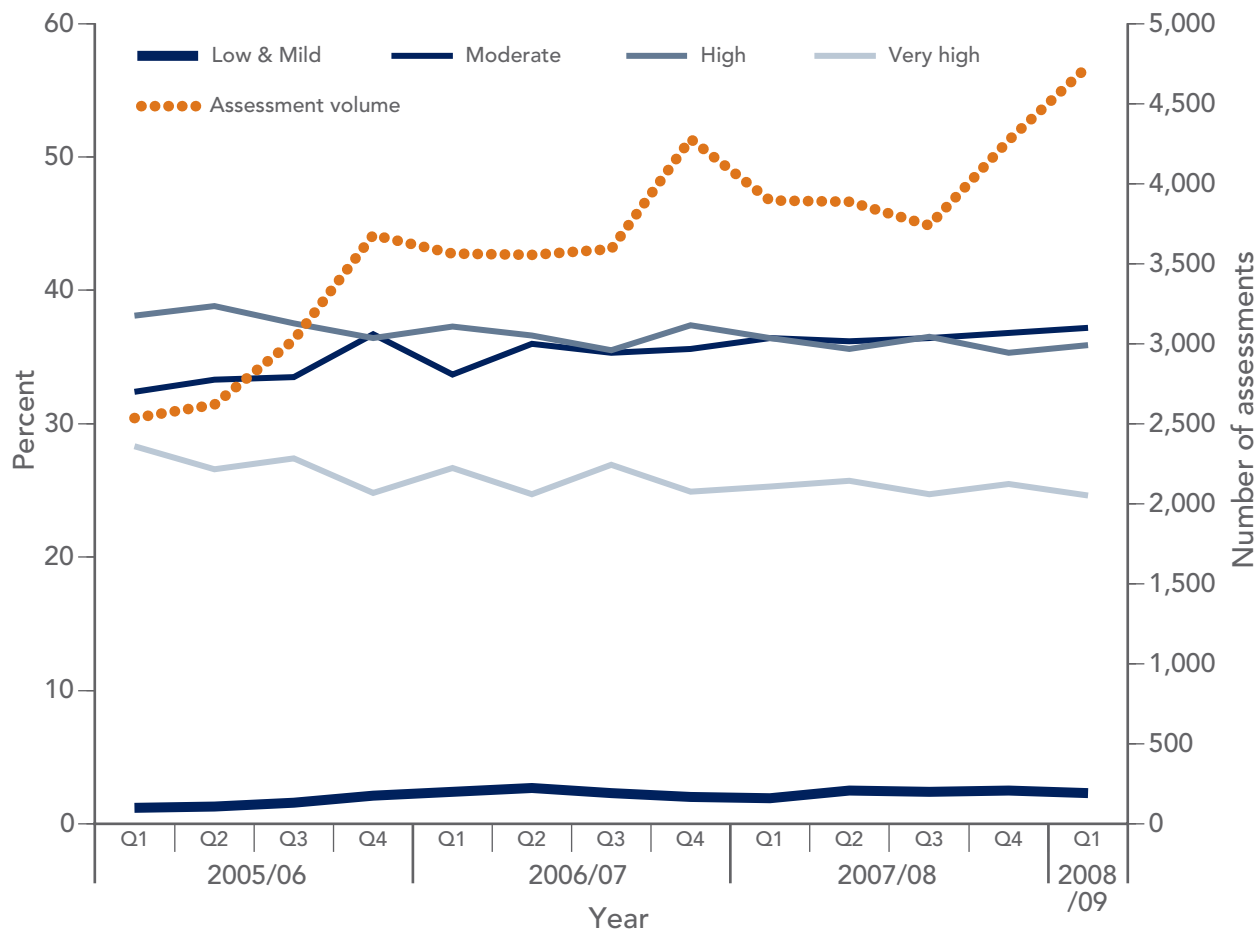
#### Next steps

These exhibits demonstrate that a large percentage of inpatient days among Ontario seniors are attributable to ALC but do not explain why these individuals remained in acute care hospital beds. Future work needs to characterize this relationship further by linking information across sectors, with a particular emphasis on examining the role of long-term care (both interim and permanent placement) and home care services in supporting ALC patients.

Data sources: Discharge Abstract Database (CIHI), Registered Persons Database (MOHLTC), Acute Beds Database (MOHLTC)

## 4.2 Measuring Need Among ALC Patients Waiting for LTC Placement

a. Distribution of MAPLe priority levels for seniors designated Alternate Level of Care and awaiting long-term care placement, and the number of assessments conducted, in Ontario, 2005/06–2008/09



Why is this indicator important?

Evidence-informed decisions regarding the need for long-term care (LTC) placement is vital for the well-being of persons in hospitals and the sustainability of the health care system. Appropriate targeting strategies should be used to allocate the limited supply of long-term care beds and maximize the potential for older adults to remain in the community.

Key findings over time

- The number of Alternate Level of Care (ALC) patients waiting for LTC placement in Ontario (represented by unique assessments) increased substantially, almost doubling between 2005/06 and 2008/09.
- Priority levels remained relatively stable, although the proportion of moderate-priority ALC patients waiting for LTC increased by more than 5%.
- Low- and mild-priority ALC patients waiting for LTC placement were rare.

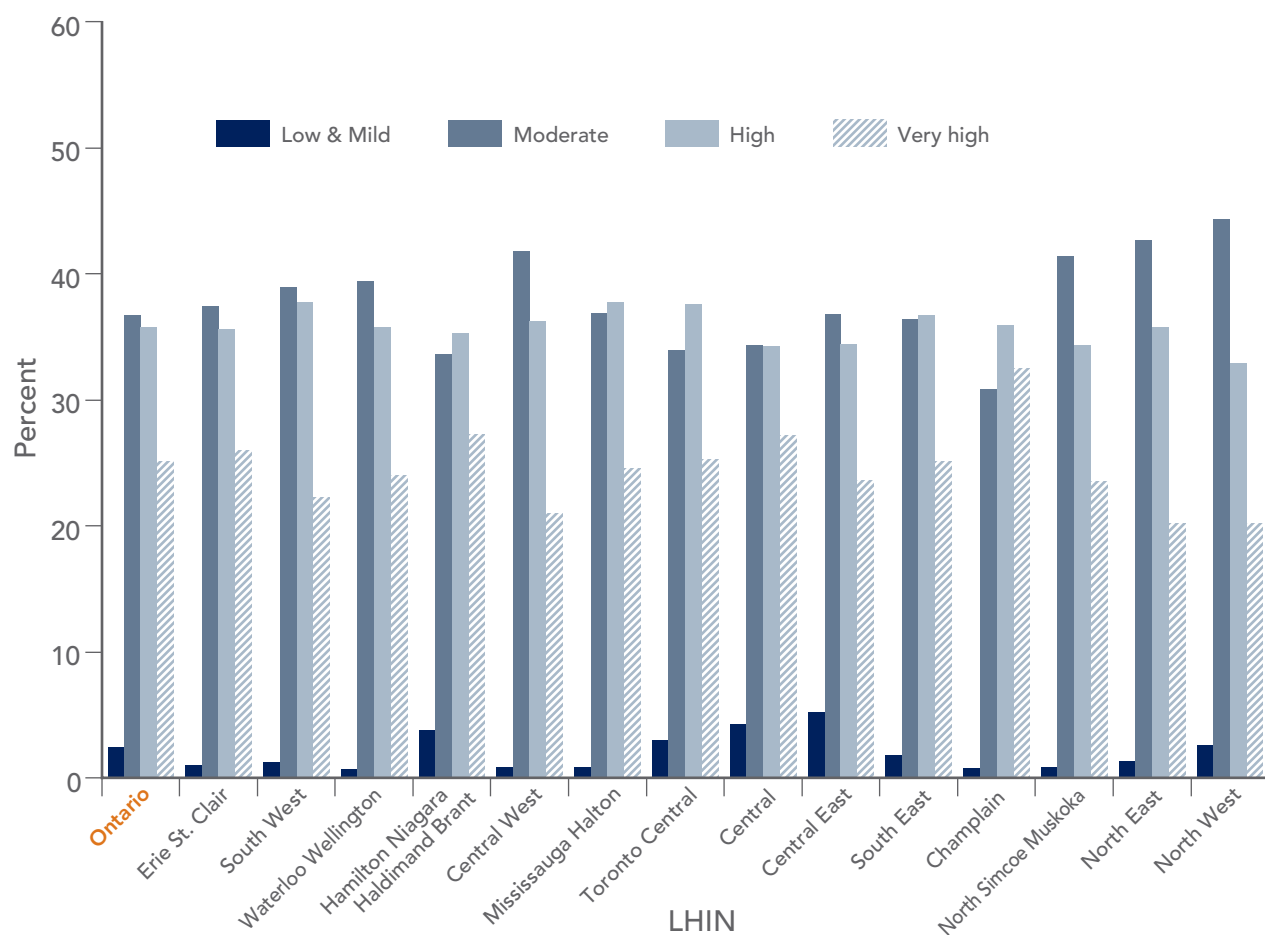
Data source: Ontario RAI-HC Database (hospital version)

Technical note: The priority level for access to community and facility care is based on the Method for Assigning Priority Levels (MAPLe), which is used to inform the allocation of home care resources and prioritization of clients needing community or facility care (Hirdes et al., *BMC Med.*, 2008, 6:9). Hospital RAI-HC assessments are completed in acute and complex hospitals for ALC patients applying to long-term care.

Prepared by: University of Waterloo

## 4.2 Measuring Need Among ALC Patients Waiting for LTC Placement

### b. Distribution of MAPLe priority levels for seniors designated Alternate Level of Care and awaiting long-term care placement, in Ontario and by Local Health Integration Network, 2007/08



#### Key findings across LHINs

- Overall, considerable differences in priority levels were observed across the LHINs.
- High- and very-high priority LTC placement applications represented approximately 36% and 25%, respectively, of ALC patients waiting for placement. Persons designated ALC and of moderate priority represented approximately 35% of the population. Persons of mild or low priority were rare.
- The rural LHINs tended to have a greater proportion of moderate-priority ALC patients waiting for LTC placement. This may reflect the difficulty that rural regions experience in providing cost-effective, community-based alternatives to LTC for their more geographically disparate populations.

#### Next steps

Future work will include investigating factors that predict the need for LTC placement and influence LTC wait times for ALC patients in Ontario.

Data source: Ontario RAI-HC Database (hospital version)

Technical note: The priority level for access to community and facility care is based on the Method for Assigning Priority Levels (MAPLe), which is used to inform the allocation of home care resources and prioritization of clients needing community or facility care (Hirdes et al., *BMC Med.*, 2008, 6:9). Hospital RAI-HC assessments are completed in acute and complex hospitals for ALC patients applying to long-term care.

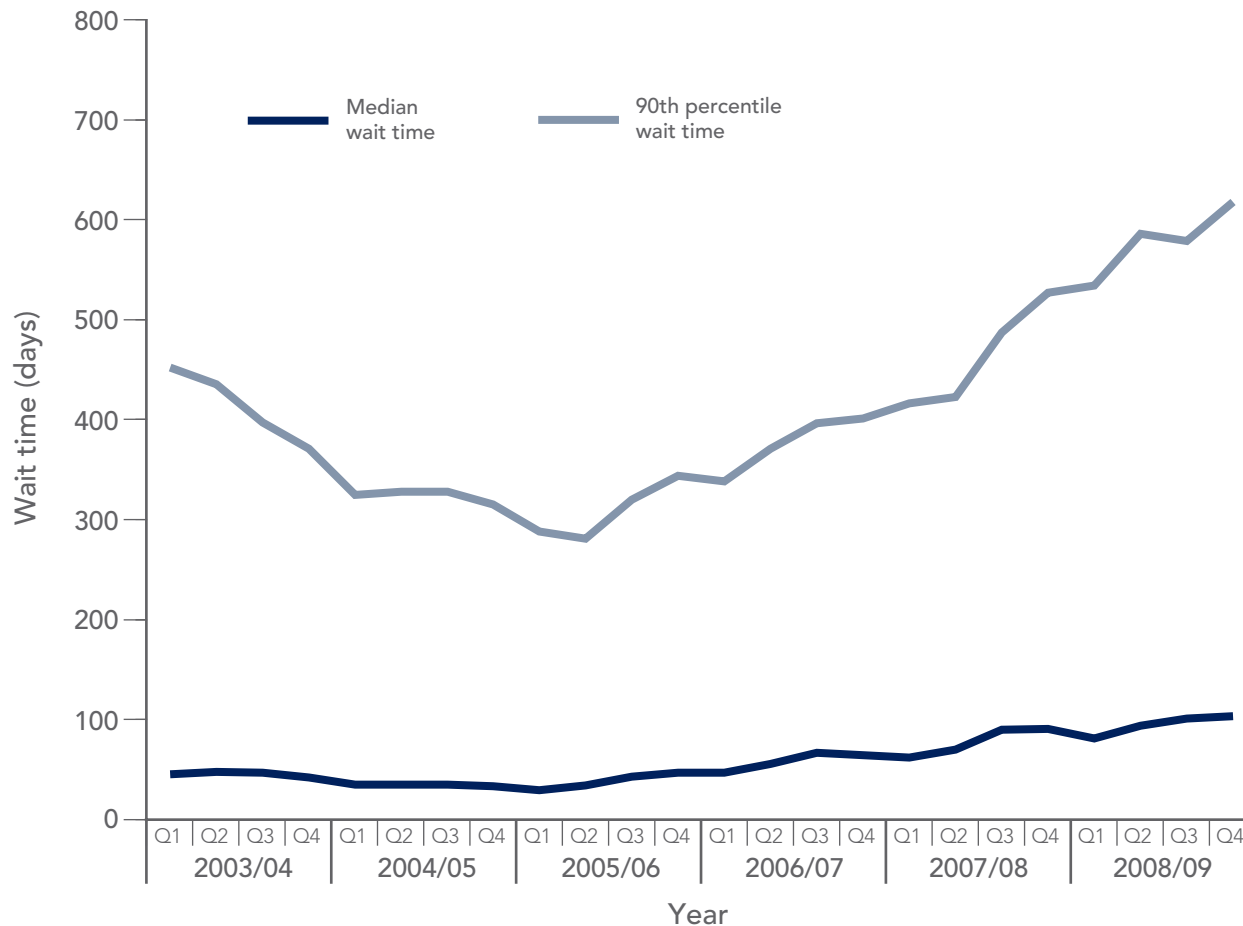
Prepared by: University of Waterloo

5

# LONG-TERM CARE PLACEMENT PROCESS

# 5.1 Wait Time to Long-Term Care Placement

## a. Median and 90th percentile wait times to long-term care placement for seniors, in Ontario, 2002/03–2007/08



### Why is this indicator important?

Long-term care (LTC) homes (including nursing homes, charitable homes for the aged and municipal homes for the aged) provide care for people who are not able to live independently in their own homes and who require 24-hour nursing or personal care, support and/or supervision. In Ontario, the LTC home admission process is centrally managed through regional waiting lists. This indicator helps us to understand how much time people spend waiting to be placed in LTC. If individuals with high levels of need spend long periods of time waiting, this could introduce pressure into other parts of the health system, including unnecessary use of hospital beds and increased burden on family members and caregivers in the community.

### Key findings over time

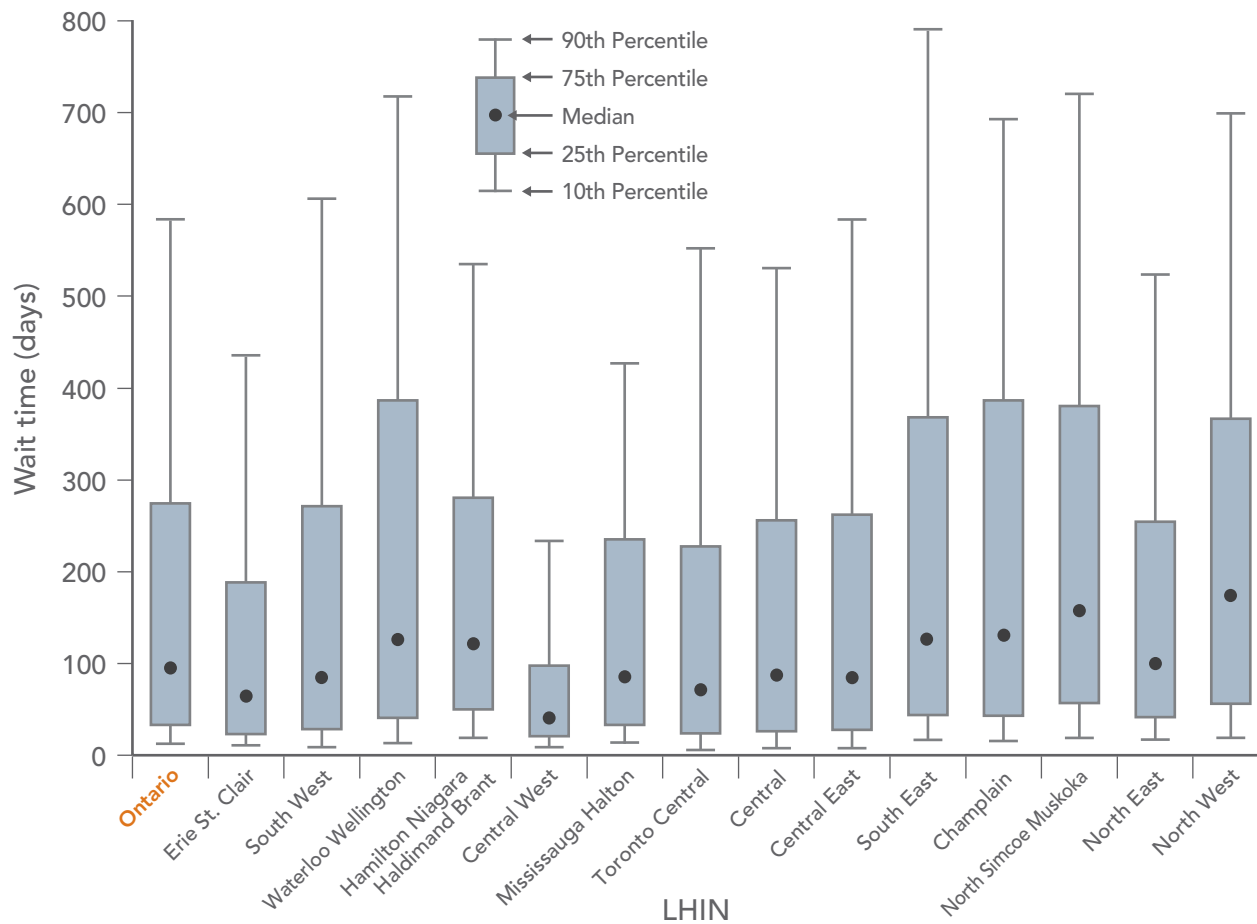
- Overall, examining all priority levels, Ontario seniors waited a median of 103 days for LTC placement in the fourth quarter of 2008/09. By 618 days, nine out of 10 individuals (the 90th percentile) were placed in LTC.
- Over the study period, time to placement increased for both the median wait time (from 45 days to 103 days, a 129% increase) and the 90th percentile wait time (from 452 days to 618 days, a 37% increase).
- The annual number of LTC beds available increased early in the time period examined and then remained relatively constant (data not shown).

Data sources: Client Profile Database (Ontario Association of Community Care Access Centres), Occupancy Monitoring Database (MOHLTC)

Technical note: Clients waiting to transfer between long-term care homes were excluded from these analyses.

# 5.1 Wait Time to Long-Term Care Placement

## b. Distribution of wait times for long-term care placement for seniors, in Ontario and by Local Health Integration Network, 2008/09



### Key findings across LHINs

- The median time to LTC placement varied by over four-fold across the LHINs, ranging from 39 days to 173 days.
- The distribution of wait times also varied within each LHIN and can be examined by comparing the number of days between the 25th and 75th percentiles (the height of the rectangles).

### Next steps

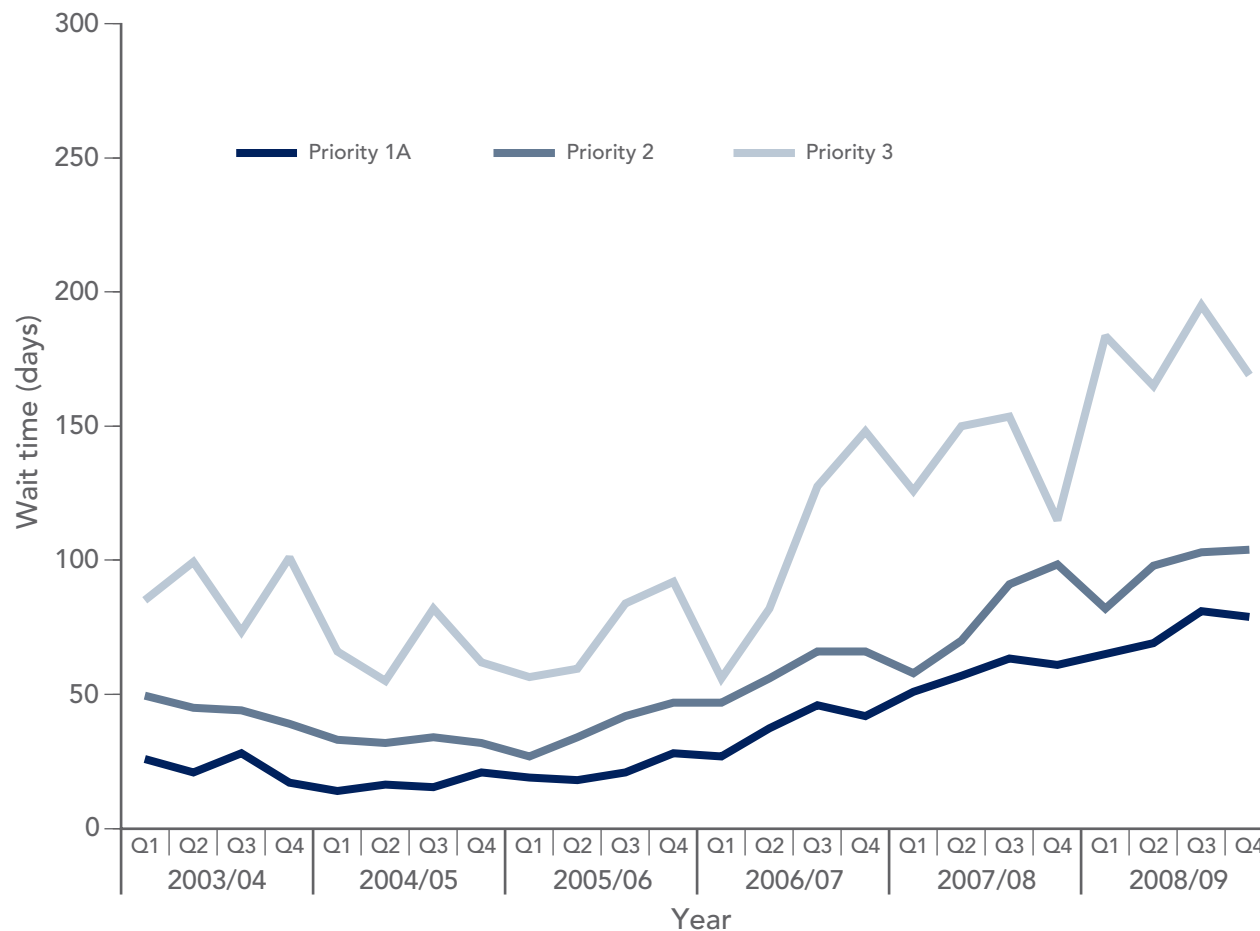
These exhibits reflect the waiting list for LTC at specific points in time, but the process of applying and waiting for LTC is complex given that the needs and circumstances of individuals (and their caregivers) can change rapidly. Future work needs to further characterize the relationship between these trends and the factors that influence wait times, including individual needs, LTC bed supply, patterns of acute care service use (emergency departments and Alternate Level of Care beds) and levels of home and community services provided to these individuals.

Data source: Client Profile Database (Ontario Association of Community Care Access Centres)

Technical note: Clients waiting to transfer between long-term care homes were excluded from these analyses.

## 5.2 Wait Time to Long-Term Care Placement by Priority Category

### a. Median wait time to long-term care placement for seniors, by placement priority, in Ontario, 2003/04–2008/09



Data source: Client Profile Database (Ontario Association of Community Care Access Centres)

**Technical note:** Prioritization categories are defined by Community Care Access Centres as follows: 1A denotes crisis applicants, 2 denotes clients with identified need, and 3 denotes clients with low or minimal need. Clients waiting to transfer between LTC homes were excluded from these analyses, as were individuals prioritized for placement in facilities operated by ethno-cultural/religious groups, and individuals waiting for spousal reunification. The North West LHIN had no individuals designated as Priority 3.

#### Why is this indicator important?

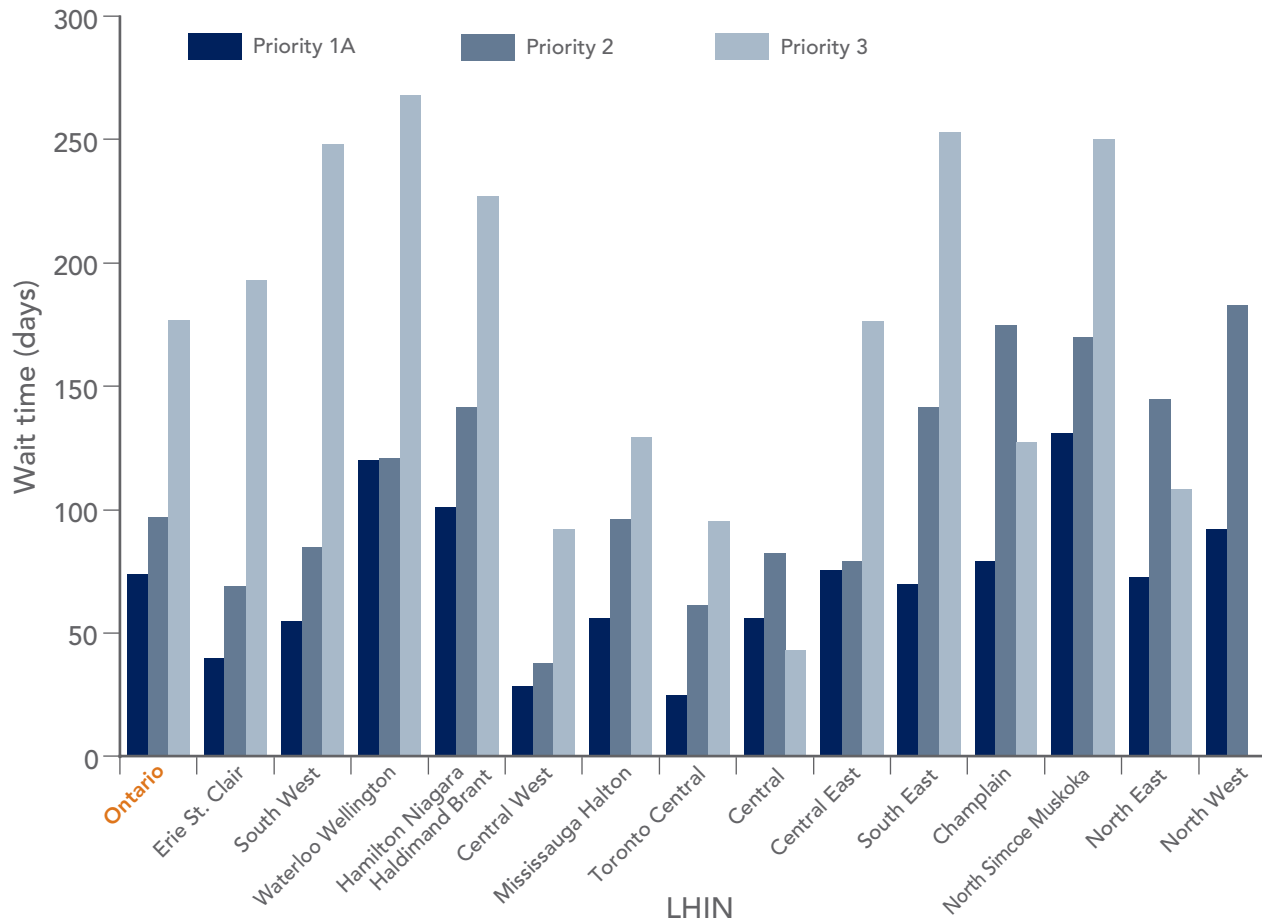
Long-term care (LTC) homes (nursing homes, charitable homes for the aged and municipal homes for the aged) provide care for people who are not able to live independently in their own homes and who require 24-hour nursing or personal care, support and/or supervision. In Ontario, the LTC home admission process is centrally managed through regional waiting lists. Individuals eligible for LTC are prioritized based on health condition and living circumstances and must be placed in the highest possible priority category. This indicator helps us to understand the relationship between wait time and priority level.

#### Key findings over time

- In the fourth quarter of 2008/09, crisis applicants (categorized as Priority 1A) waited the least amount of time for LTC placement (a median of 79 days). Applicants with high need (Priority 2) waited a median time of 104 days for placement. The remaining applicants (Priority 3) waited a median time of 169 days.
- The median wait time to LTC placement increased over time for all priority categories, including a 203% increase for Priority 1A (from 26 days to 79 days), a 110% increase for Priority 2 (from 50 days to 104 days), and a 98% increase for Priority 3 (from 85 days to 169 days).

## 5.2 Wait Time to Long-Term Care Placement by Priority Category

b. Median wait time to long-term care placement for seniors, by placement priority, in Ontario and by Local Health Integration Network, 2008/09



### Key findings across LHINs

- For all priority categories, the median wait time to LTC placement varied substantially across LHINs. There was a more than five-fold variation for crisis applicants (from 25 days to 131 days), close to a five-fold variation for those with strong need (from 38 days to 183 days), and a more than six-fold variation for the remaining individuals (from 43 days to 268 days).
- Across LHINs, the median wait time to LTC placement for crisis applicants was consistently lower than for the other two categories.

### Next steps

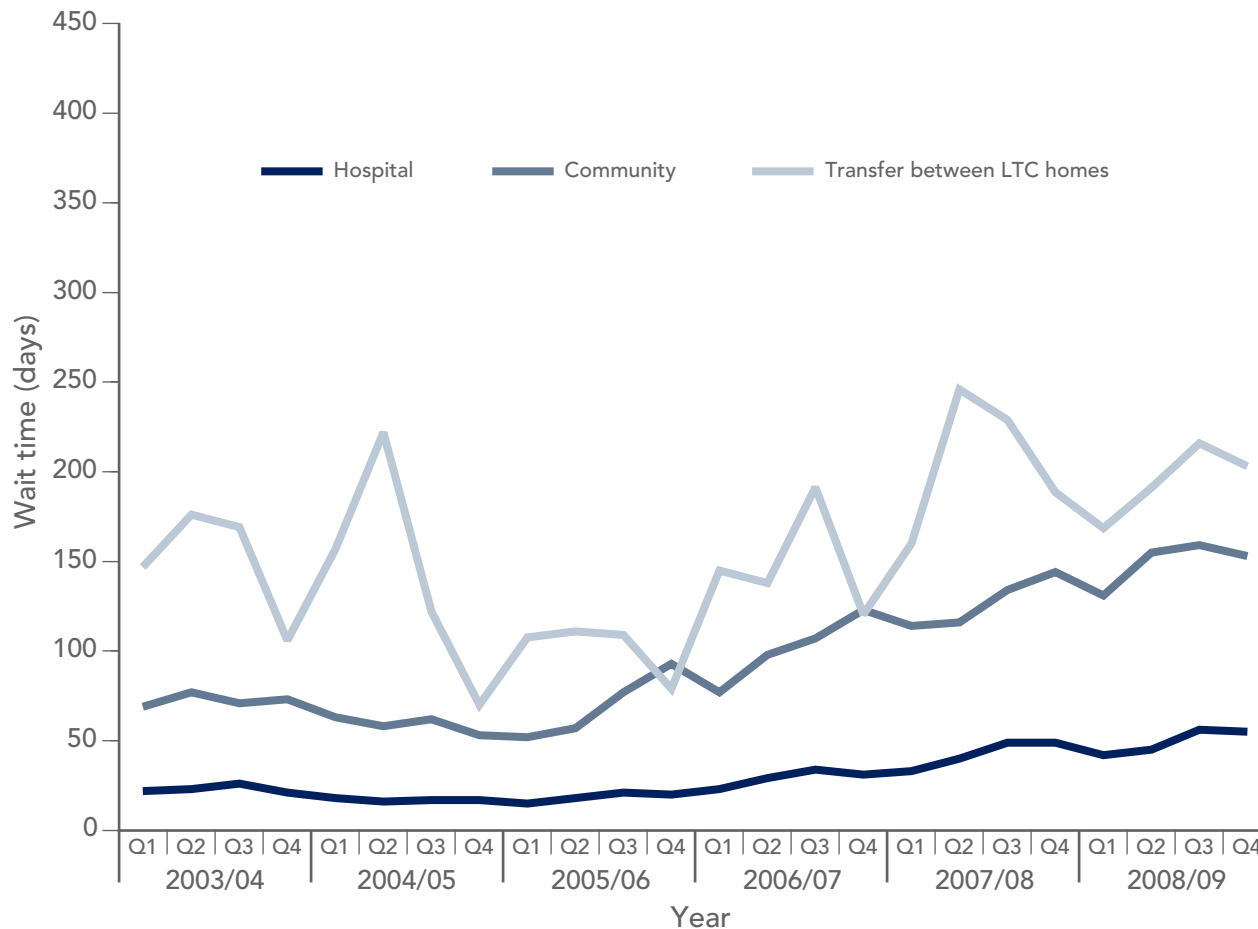
These exhibits reflect the priority level of individuals at the time of LTC placement. However, the needs and circumstances of individuals can change rapidly during the wait process causing prioritization to change. Future work needs to examine whether and how priority levels change for individuals during their wait and how the use of other health services during this time might impact placement times.

Data source: Client Profile Database (Ontario Association of Community Care Access Centres)

Technical note: Prioritization categories are defined by Community Care Access Centres as follows: 1A denotes crisis applicants, 2 denotes clients with identified need, and 3 denotes clients with low or minimal need. Clients waiting to transfer between LTC homes were excluded from these analyses, as were individuals prioritized for placement in facilities operated by ethno-cultural/religious groups, and individuals waiting for spousal reunification. The North West LHIN had no individuals designated as Priority 3.

## 5.3 Wait Time to Long-Term Care Placement by Location at Placement

a. Median wait time to long-term care placement for seniors, by location at placement, in Ontario, 2003/04–2008/09



Data source: Client Profile Database (Ontario Association of Community Care Access Centres)

### Why is this indicator important?

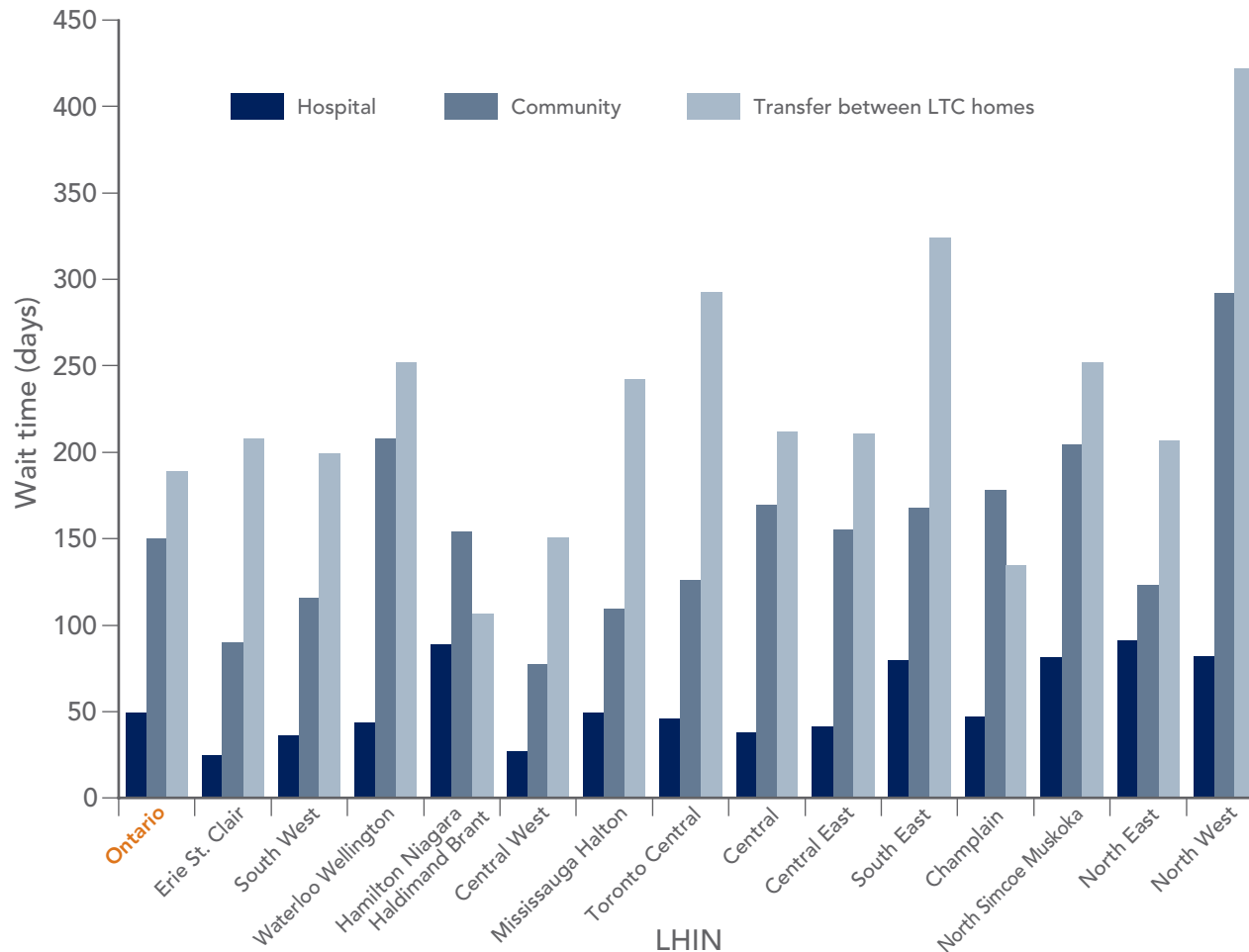
Long-term care (LTC) homes (including nursing homes, charitable homes for the aged and municipal homes for the aged) provide care for people who are not able to live independently in their own homes and who require 24-hour nursing or personal care, support and/or supervision. In Ontario, the LTC home admission process is centrally managed through regional waiting lists. Individuals eligible for LTC can be admitted directly from the community or from hospital. In addition, individuals can be transferred between LTC facilities. Each of these settings places different demands on caregivers and other health system services. This indicator helps us to understand the relationship between wait time and location at admission.

### Key findings over time

- Overall, individuals admitted from hospital waited the shortest amount of time for LTC placement—a median of 55 days in the last quarter of 2008/09. Those admitted from the community waited a median of 153 days to placement, and individuals transferring between LTC homes waited a median of 203 days.
- During the study period, the median time to LTC placement increased for all admission locations, including a 150% increase for individuals in hospital (from 22 days to 55 days), a 122% increase for individuals in the community (from 69 days to 153 days), and a 38% increase for transfers between LTC homes (from 147 days to 203 days).

## 5.3 Wait Time to Long-Term Care Placement by Location at Placement

b. Median wait time to long-term care placement for seniors, by location at placement, in Ontario and by Local Health Integration Network, 2008/09



### Key findings across LHINs

- The median wait time to LTC placement varied substantially across LHINs for all admission locations. There was an over three-fold variation for applicants from hospital (from 25 days to 91 days) and from the community (from 78 days to 292 days), and an almost four-fold variation for individuals transferring between LTC homes (from 107 days to 422 days).
- Across LHINs, the median wait time to LTC placement for applicants in hospital was consistently lower than the median wait time for those in the community or in LTC.

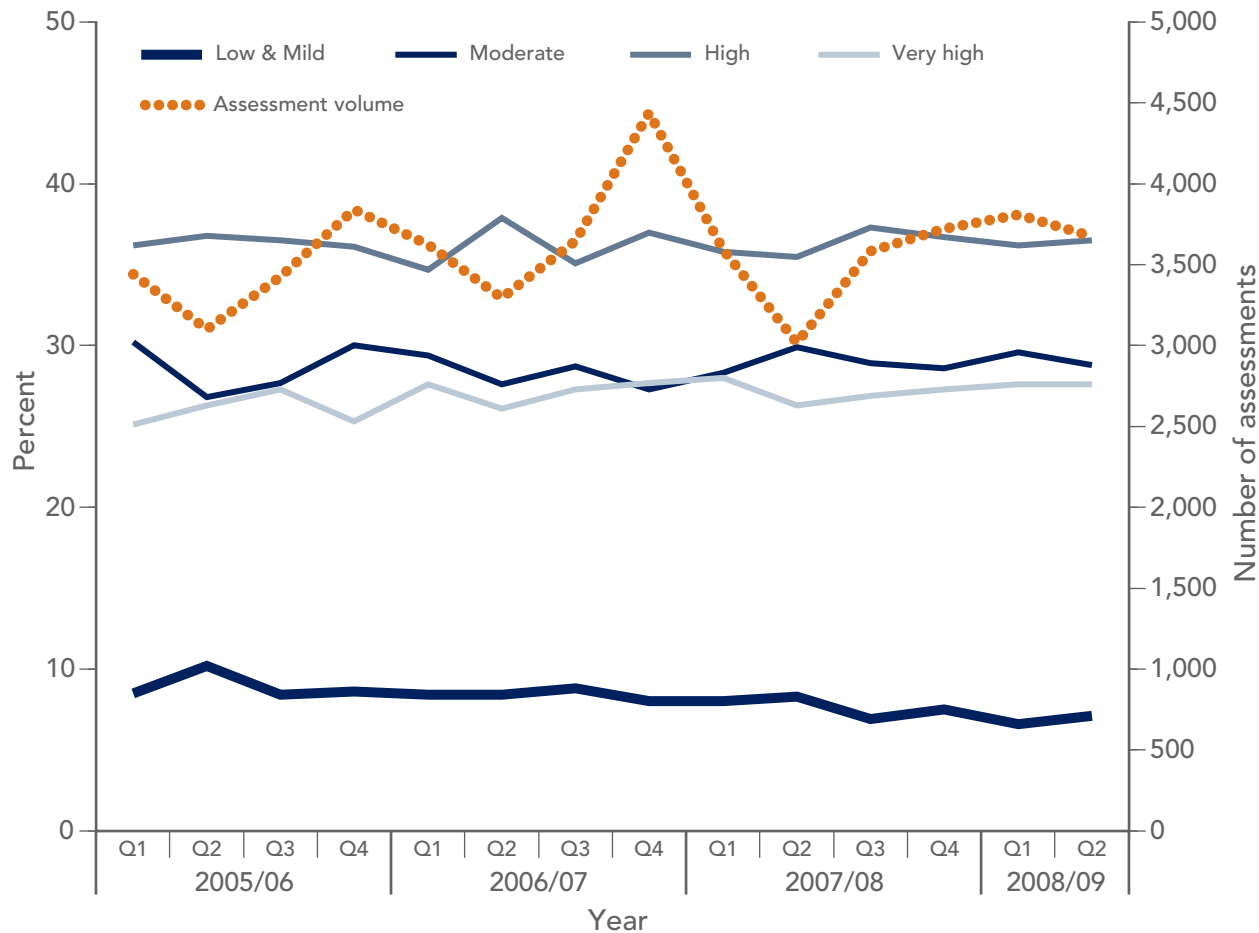
### Next steps

These exhibits reflect the location of applicants at the time of LTC placement. However, the needs and circumstances of individuals can change rapidly during the wait process, and they do not necessarily apply from these locations. Future work needs to examine whether and how the care setting changes for individuals during their wait and how the use of other health services during this time might impact placement times.

Data source: Client Profile Database (Ontario Association of Community Care Access Centres)

## 5.4 Measuring Need Among Newly Placed Applicants to Long-Term Care

a. Distribution of MAPLe priority levels prior to long-term care placement for seniors, and number of assessments conducted, in Ontario, 2005/06–2008/09



Why is this indicator important?

Long-term care beds are a scarce resource; it is important to understand the characteristics of individuals admitted to these beds so that community and facility-based resources are used wisely. Ideally, most individuals who are placed should be drawn from the highest categories of need.

Key findings over time

- The number of individuals placed per quarter showed minor fluctuations but overall was consistent over time.
- The proportions of individuals in the different priority levels did not change significantly over time.
- Most clients (over 60%) were of high or very high priority.

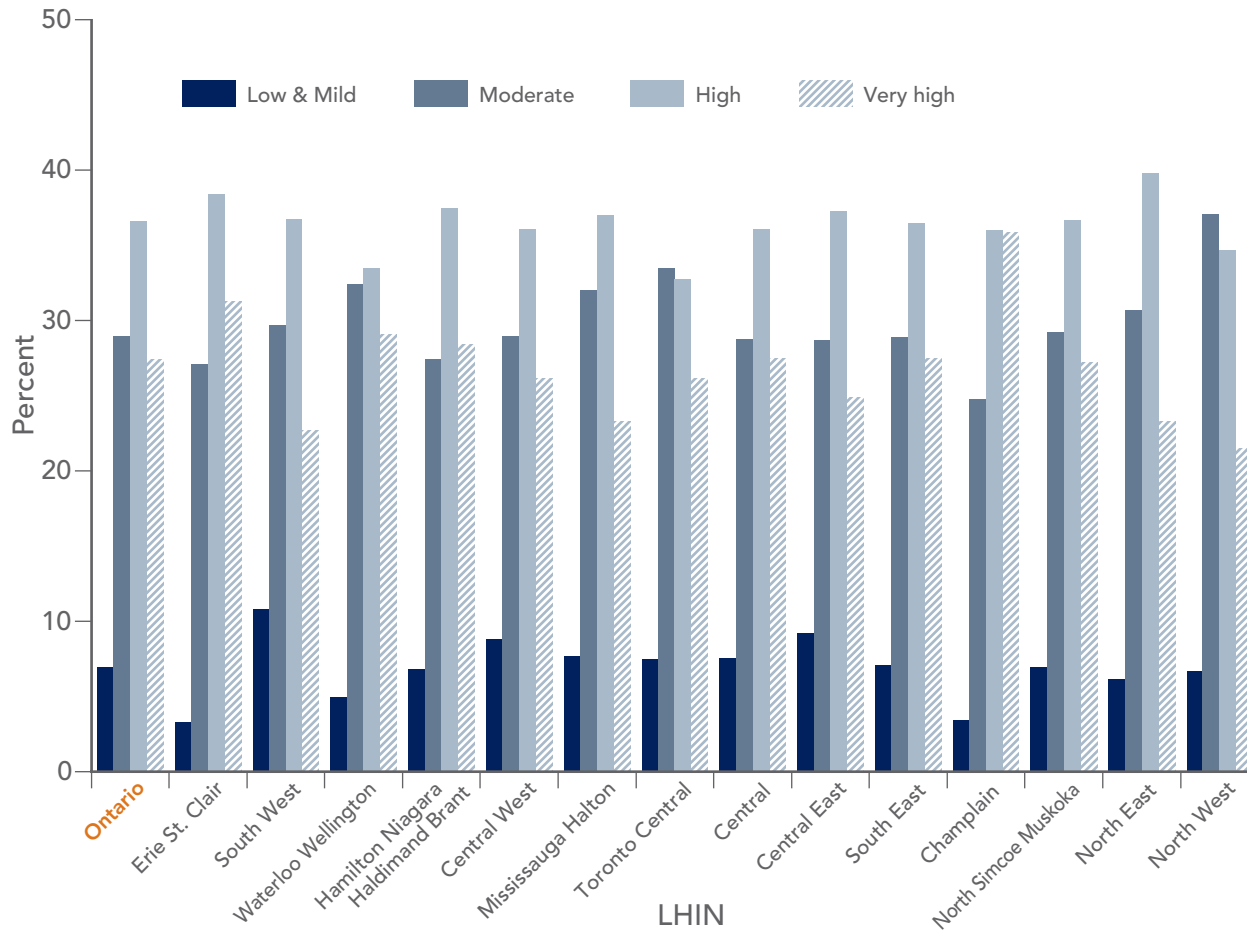
Data sources: Ontario RAI-HC Database, Home Care Database (Waterloo)

Technical note: Priority level is based on the Method for Assigning Priority Levels (MAPLe) (Hirdes et al., *BMC Med.*, 2008, 6:9) and is calculated from items in a placed individual's most recent RAI-HC assessment, which is required to apply for long-term care in Ontario.

Prepared by: University of Waterloo

# 5.4 Measuring Need Among Newly Placed Applicants to Long-Term Care

## b. Distribution of MAPLe priority levels prior to long-term care placement for seniors, in Ontario and by Local Health Integration Network, 2007/08



### Key findings across LHINs

- Some differences in priority-level distribution were observed among the LHINs.
- The proportion of applicants placed on LTC with high or very high priority levels ranged from 56–72% across LHINs.
- There was less variation in the proportion of low-priority placement across LHINs (3–9%).

### Next steps

These exhibits reflect the need levels of individuals at the time of long-term care (LTC) placement. Future work needs to examine whether these needs change during the waiting process and how they relate to the needs of individuals after placement. Use of the Minimum Data Set 2.0 (MDS 2.0) assessment in LTC homes will support continued and comparable measurement within the LTC setting.

Data sources: Ontario RAI-HC Database, Home Care Database (Waterloo)

Technical note: Priority level is based on the Method for Assigning Priority Levels (MAPLe) (Hirdes et al., *BMC Med.*, 2008, 6:9) and is calculated from items in a placed individual's most recent RAI-HC assessment, which is required to apply for long-term care in Ontario.

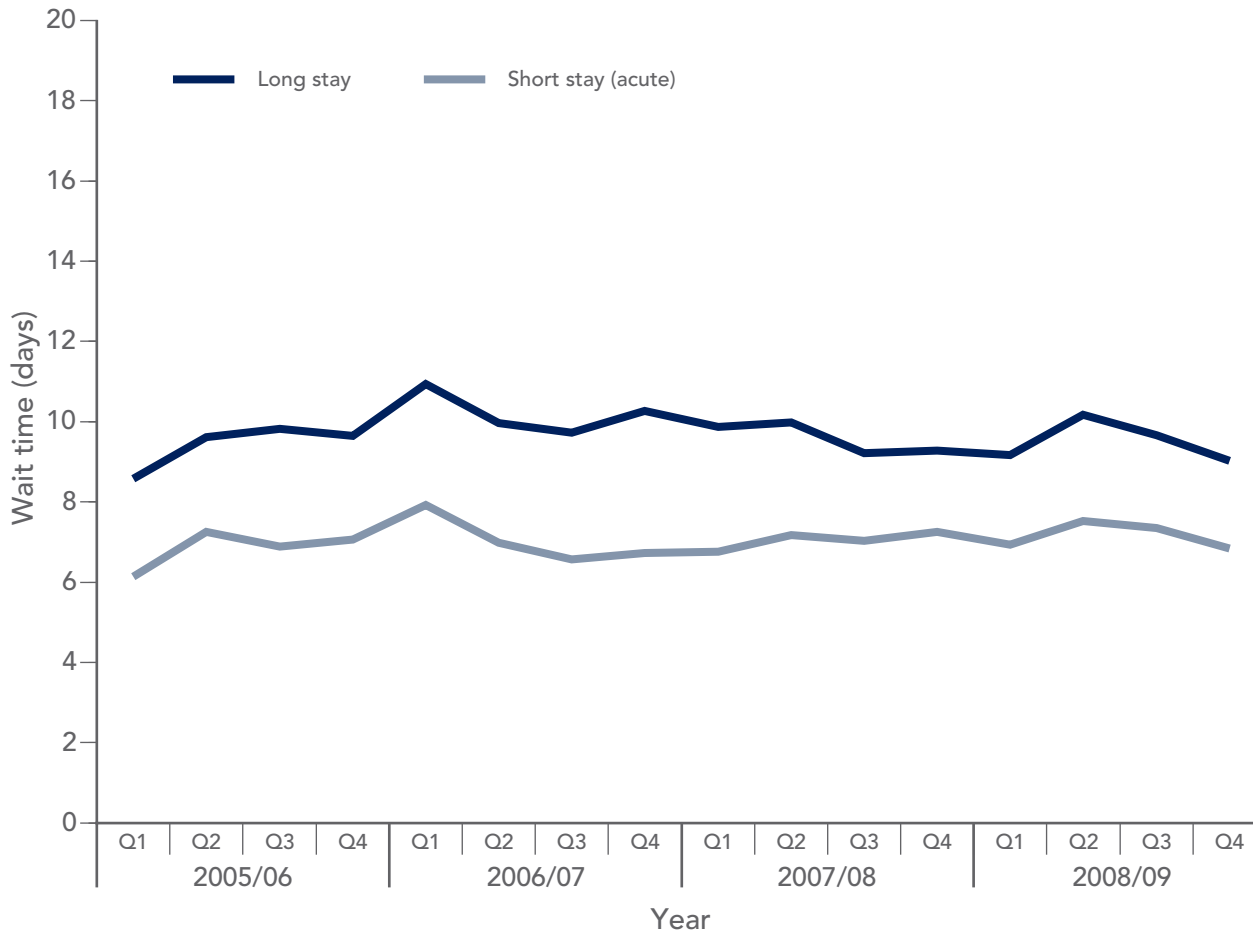
Prepared by: University of Waterloo

6

# HOME CARE SERVICES

## 6.1 Time from Application to First Service

### a. Average wait time from home care application to first service for seniors, in Ontario, 2005/06–2008/09



Data source: Home Care Database (ICES)

**Technical note:** Average wait time was defined as the time in days from application to service for clients who received a home care visit within 60 days of their application. This included 99% of short-stay/acute clients and 95% of long-stay clients. Short-stay/acute clients were those who were expected to be on service for less than 60 days; long-stay clients were expected to receive services for a longer period of time. The service code applied on the first visit was used to determine whether the client was a short- or long-stay client. Results were censored after 30 days.

#### Why is this indicator important?

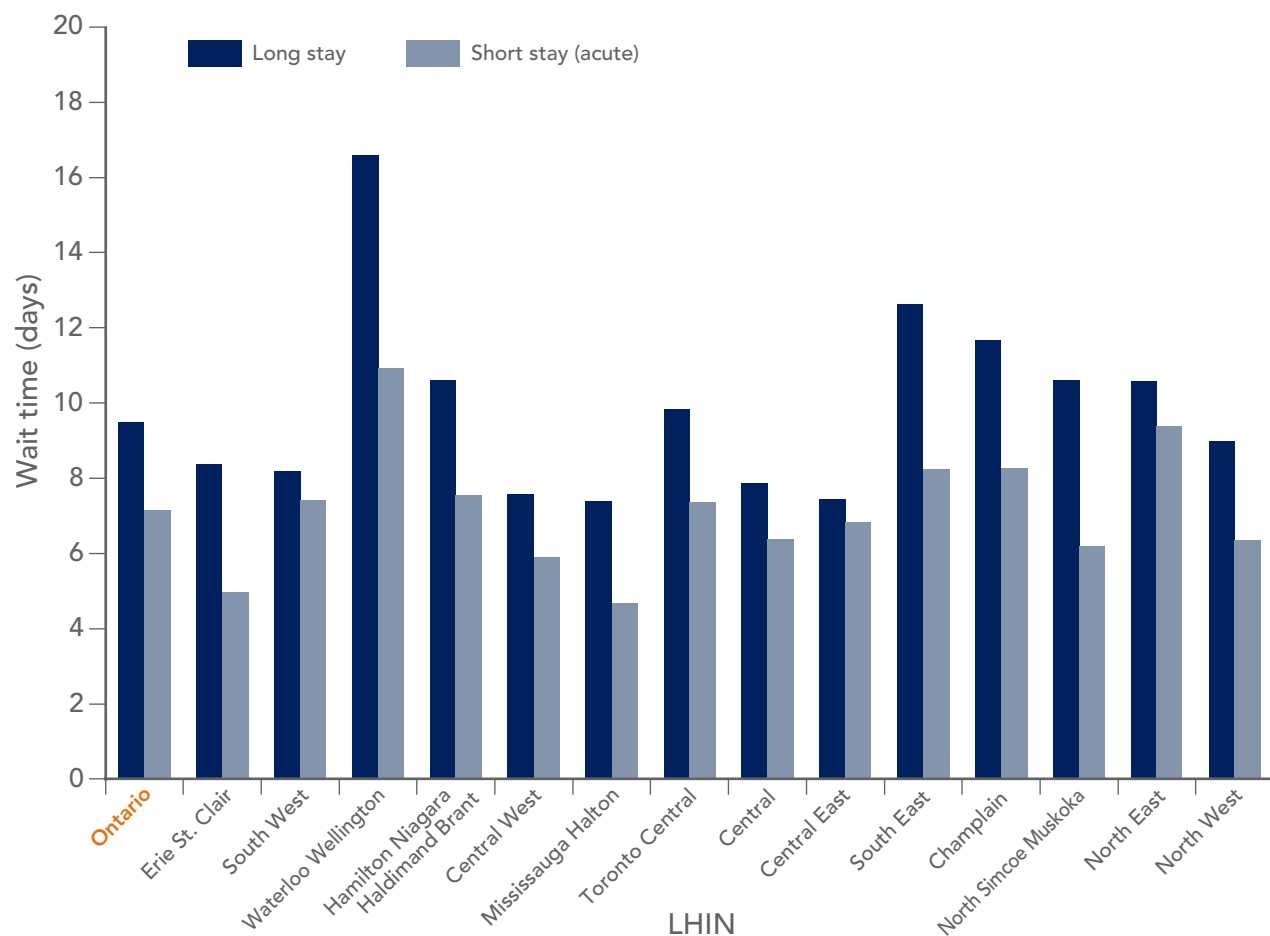
Home care services provided to older adults are an important factor in enabling them to remain in the community for as long as possible. For individuals who are eligible for in-home services, timely service is a key area of performance that may affect health outcomes and client satisfaction. This is relevant both for short-stay 'acute' clients who are expected to require less than 60 days of service and for long-stay clients who are expected to require service over longer periods.

#### Key findings over time

- In spite of some fluctuation, the average time from home care application to first service remained constant for both short- and long-stay clients from the first quarter of 2005/06 to the last quarter of 2008/09, where the average wait time was seven days for short-stay clients and nine days for long-stay clients.
- The average time between application and first service for short-stay applicants was consistently about 25% less than for long-stay applicants.

## 6.1 Time from Application to First Service

### b. Average wait time from home care application to first service for seniors, in Ontario and by Local Health Integration Network, 2008/09



Data source: Home Care Database (ICES)

Technical note: Average wait time was defined as the time in days from application to service for clients who received a home care visit within 60 days of their application. This included 99% of short-stay/acute clients and 95% of long-stay clients. Short-stay/acute clients were those who were expected to be on service for less than 60 days; long-stay clients were expected to receive services for a longer period of time. The service code applied on the first visit was used to determine whether the client was a short- or long-stay client. Results were censored after 30 days.

#### Key findings across LHINs

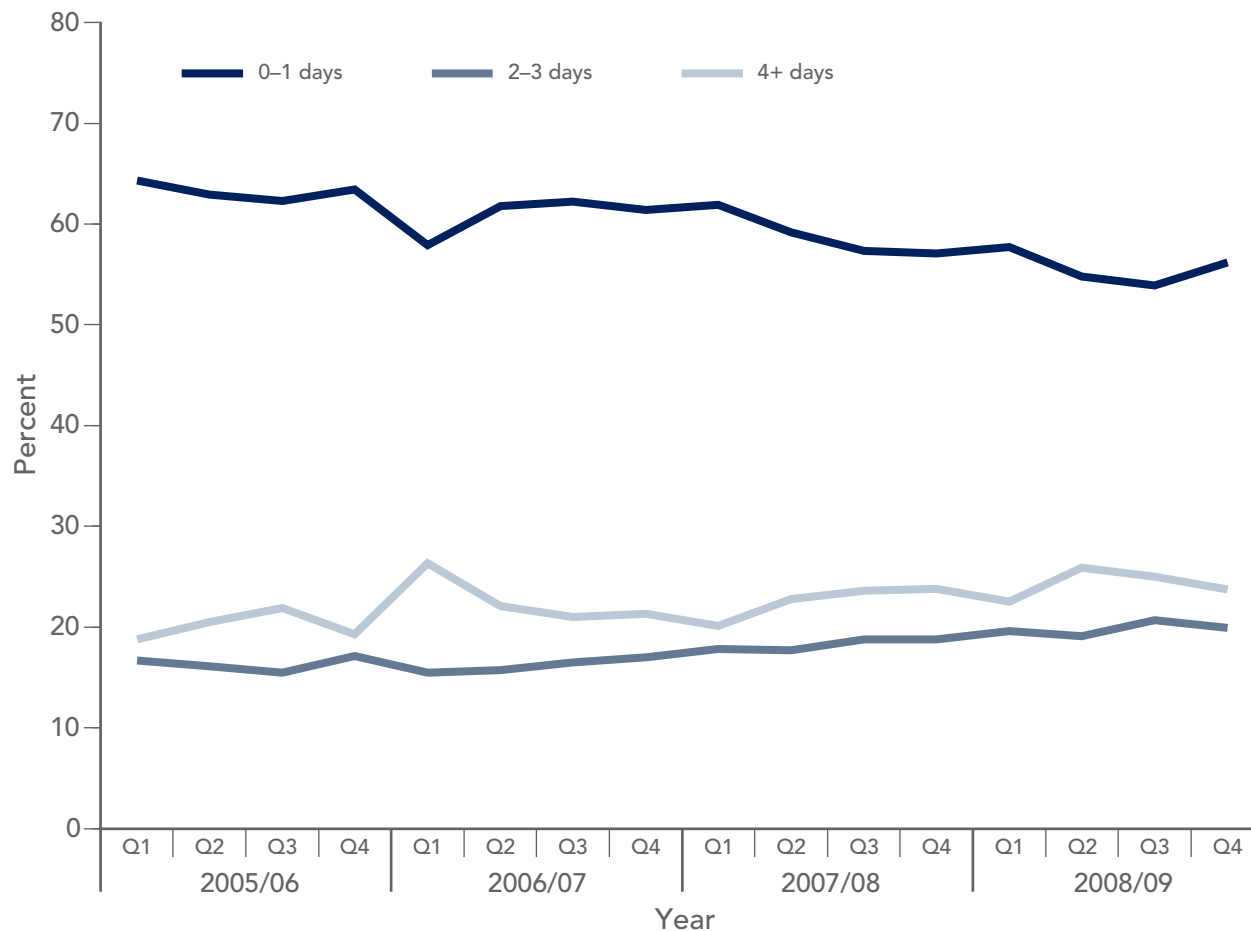
Across LHINs there was a more than two-fold variation between the shortest and longest wait times for both long-stay applicants (from 7.4 days to 16.8 days) and short-stay applicants (from 4.7 days to 10.9 days).

#### Next steps

Longer wait times may be associated with a lower supply of services, or with a greater demand for services that may itself be due to a lower supply of other long-term care services. Future work may focus on identifying models of service delivery that lead to shorter wait times and on understanding changes and differences in the type of care needed by home care applicants over time and across the province.

## 6.2 Time from Hospital Discharge to First Service

a. Percentage of seniors newly receiving home nursing service following hospital discharge, by time to first nursing service visit, in Ontario, 2005/06–2008/09



Why is this indicator important?

Home care services provided to older adults are an important factor in enabling individuals to remain in the community. For individuals who are eligible for in-home services, timely service following hospital discharge is a key area for performance that may affect health outcomes and prevent readmissions.

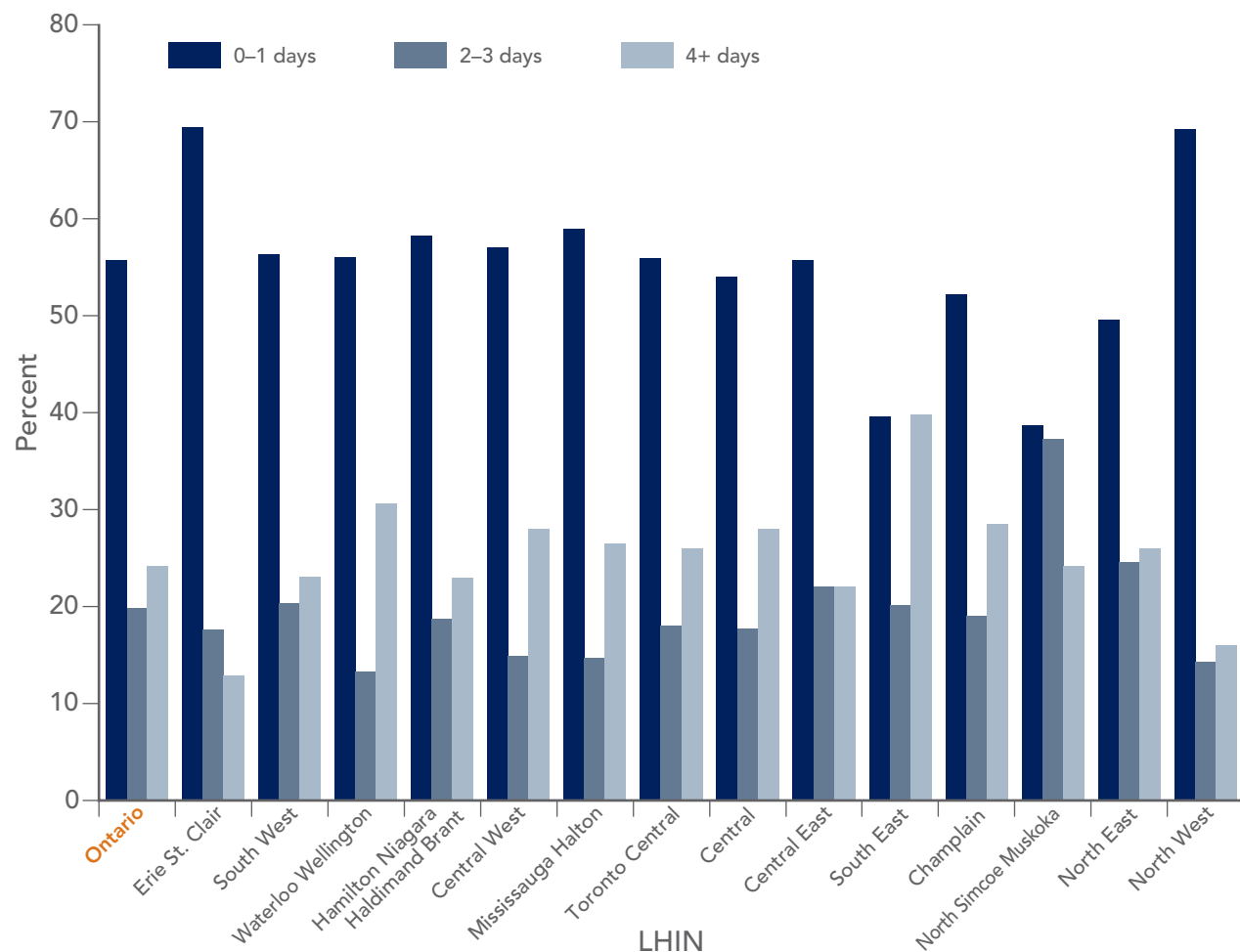
Key findings over time

- Among individuals referred to home care from hospital, 70% received nursing services (data not shown).
- In spite of some fluctuation, the average time from hospital discharge to first nursing service home care visit remained constant between 2005/06 and 2008/09.
- In the last quarter of 2008/09, 56% of nursing home care clients received their first service within one day compared to 20% and 24% who received their first service in 2–3 days and 4 or more days, respectively.

Data source: Home Care Database (ICES)

## 6.2 Time from Hospital Discharge to First Service

b. Percentage of seniors newly receiving home nursing service following hospital discharge, by time to first nursing service visit, in Ontario and by Local Health Integration Network, 2008/09



### Key findings across LHINs

- There was a nearly two-fold variation in the percentage of home care clients newly referred from hospital who received their first nursing services visit within one day of being discharged from hospital.
- Approximately 69% of home care clients in the Erie St. Clair and North West LHINs received their first nursing service visit within one day of discharge from hospital.
- The smallest percentages of home care clients receiving nursing service visits within one day of discharge were found in the North Simcoe Muskoka and South East LHINs with 39% and 40%, respectively.

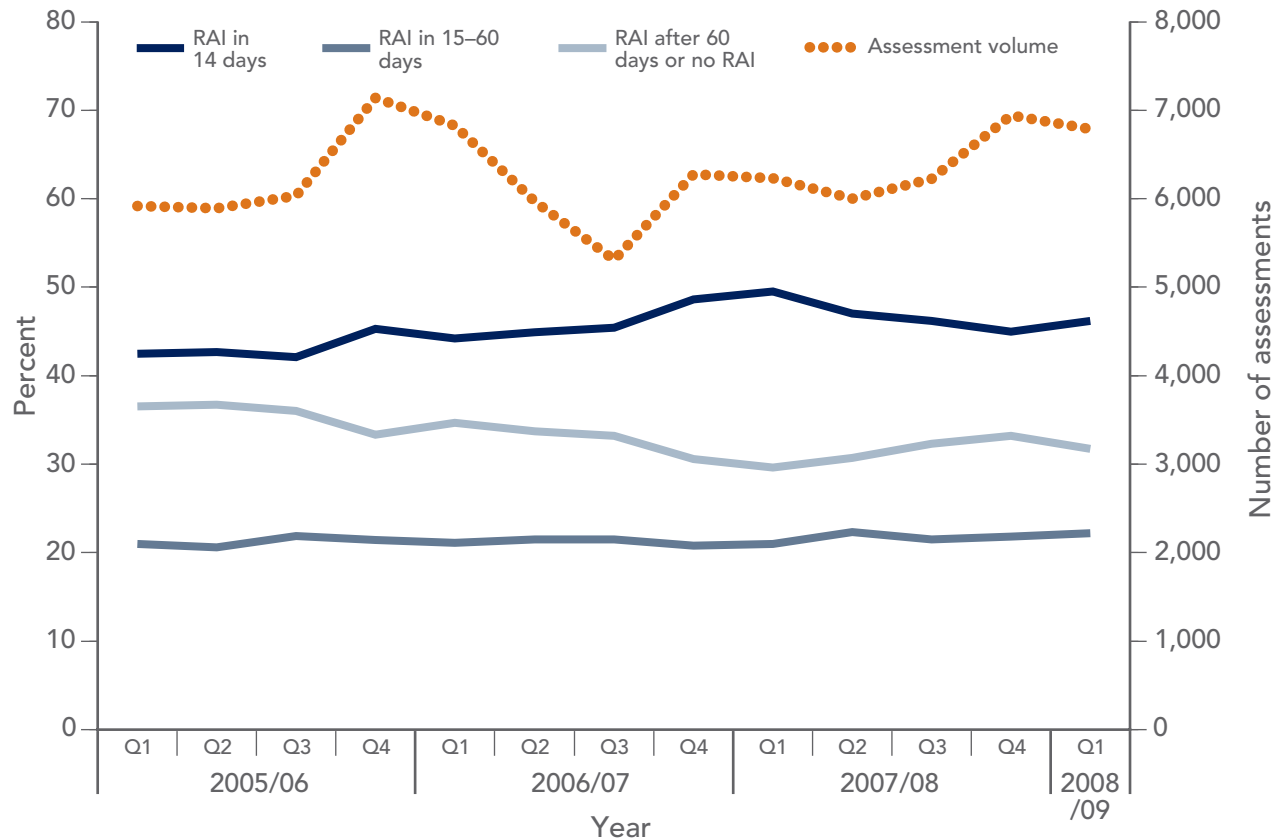
### Next steps

Future work may focus on identifying models of nursing service delivery that lead to shorter wait times and on understanding changes and differences in the types of care needed by home care applicants over time and across the province.

Data source: Home Care Database (ICES)

## 6.3 Time to Client Assessments

a. Distribution of wait time in days to home care assessment among seniors designated for initial assessment, and number of assessments conducted, in Ontario, 2005/06–2008/09



Why is this indicator important?

It is important to understand the often-complicated care needs of long-stay home care clients. A comprehensive and standardized in-home assessment (using the Resident Assessment Instrument for Home Care, or RAI-HC) by a home care case manager can ensure that care planning is in place to address the needs of frail older persons.

Key findings over time

- Provincially, some small trends were observed, with the percentage of cases with a late RAI-HC assessment or no assessment falling from 36% to 32% between 2005/06 and 2008/09.
- The proportion of seniors with assessments done within 14 days following hospital discharge decreased slightly for the most recent four quarters measured, dropping from 49% to 45%.

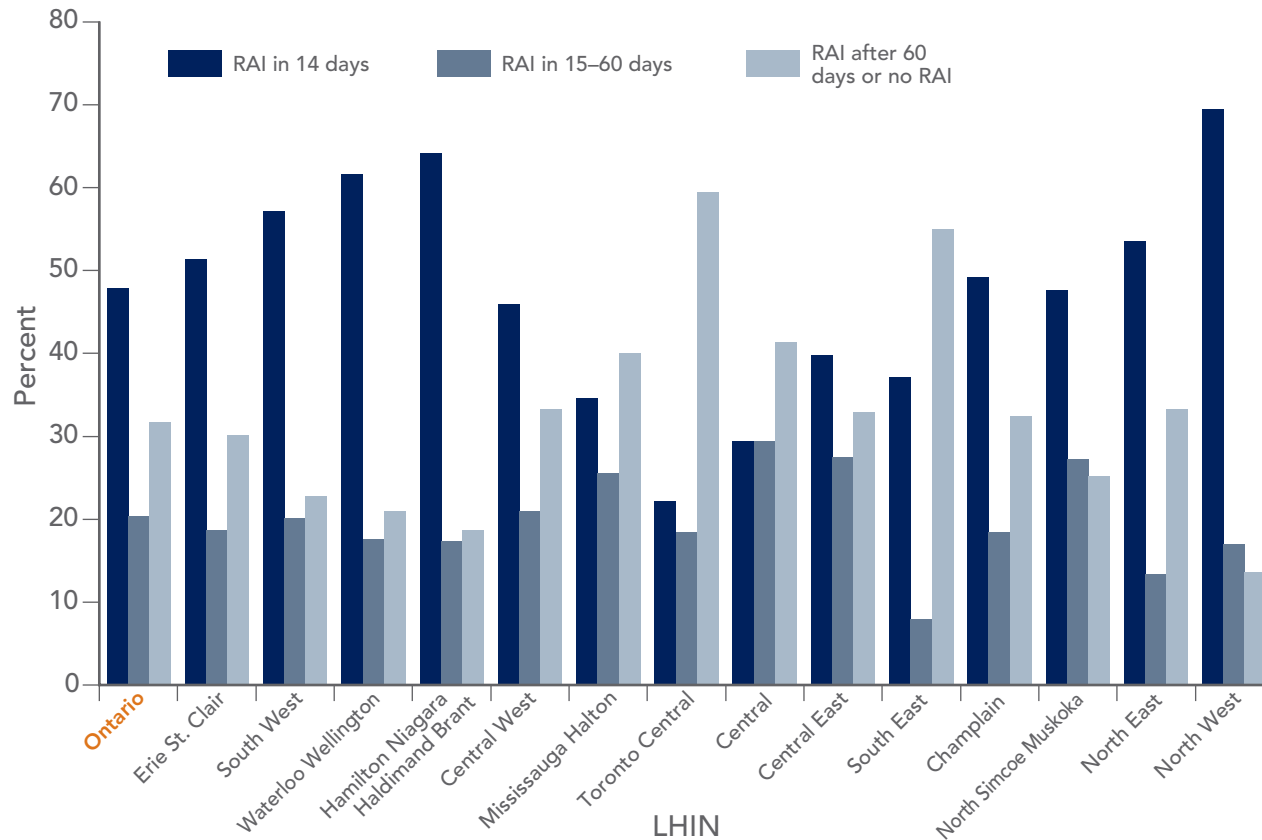
Data sources: Ontario RAI-HC Database, Home Care Database (Waterloo)

**Technical note:** Cases included all individuals who were admitted to a Community Care Access Centre as service recipient code 93 (maintenance) or 94 (long-term supportive), had a stay on service of at least 60 days, and received either personal support service or at least two other types of service. This excluded cases that may have been long stay but were not complicated enough to merit an assessment. This indicator may have over-estimated proportions of individuals with no RAI-HC assessment due to identifier entry error, estimated at approximately 5% of cases.

Prepared by: University of Waterloo

## 6.3 Time to Client Assessments

### b. Distribution of wait time in days to home care assessment among seniors designated for initial assessment, in Ontario and by Local Health Integration Network, 2007/08



#### Key findings across LHINs

- Very large differences in wait times to initial RAI-HC assessment were observed across the LHINs.
- The proportion of cases receiving an RAI-HC assessment within 14 days ranged from 22% in the Toronto Central LHIN to 69% in the North West LHIN.
- The proportion of cases receiving a very late RAI-HC assessment or no assessment ranged from 14% in the North West LHIN to 59% in the Toronto Central LHIN.

#### Next steps

Future work will focus on understanding differences in services and outcomes among those clients who are assessed in a timely manner and those who are not.

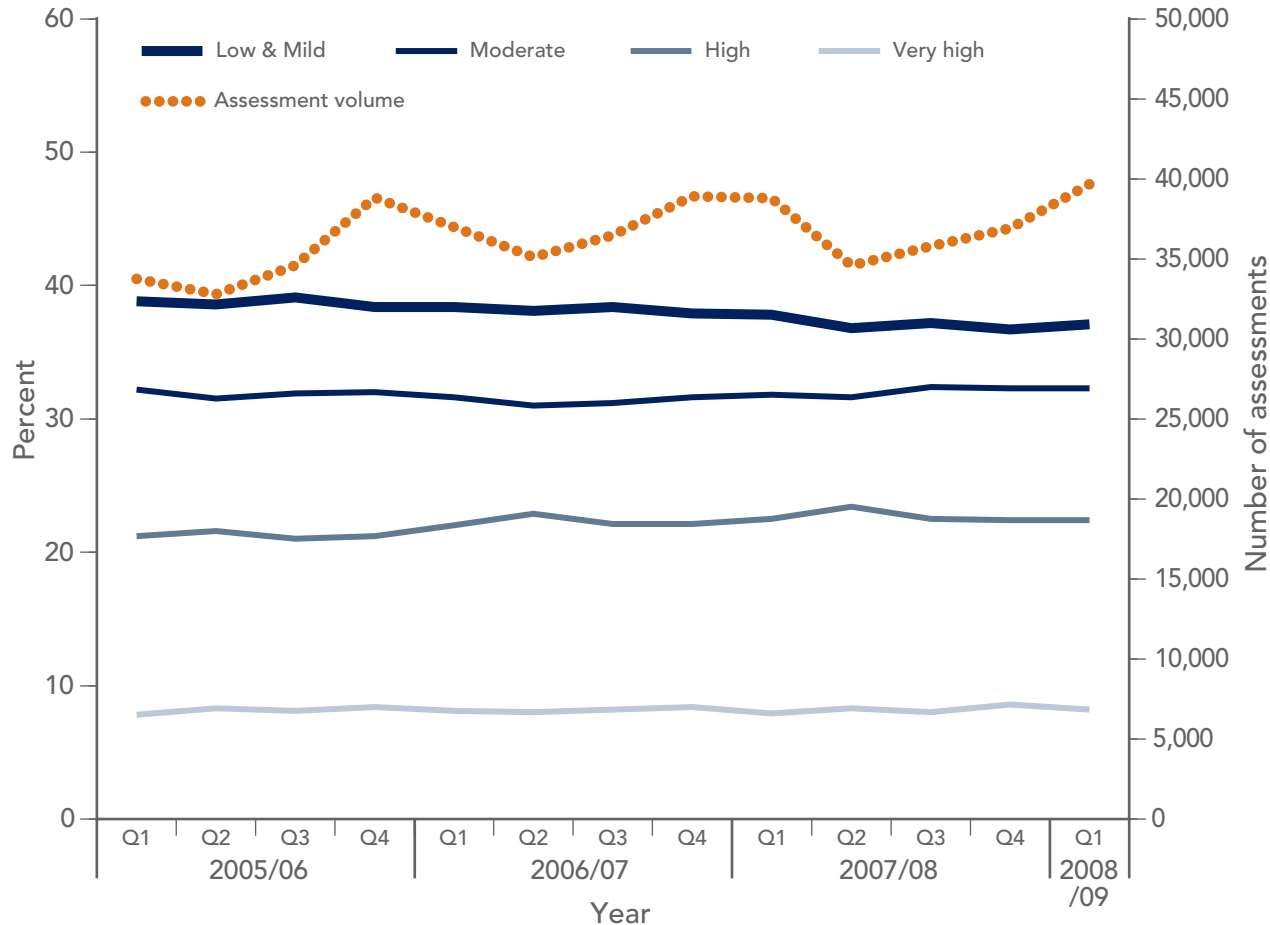
Data sources: Ontario RAI-HC Database, Home Care Database (Waterloo)

**Technical note:** Cases included all individuals who were admitted to a Community Care Access Centre as service recipient code 93 (maintenance) or 94 (long-term supportive), had a stay on service of at least 60 days, and received either personal support service or at least two other types of service. This excluded cases that may have been long stay but were not complicated enough to merit an assessment. This indicator may have over-estimated proportions of individuals with no RAI-HC assessment due to identifier entry error, estimated at approximately 5% of cases.

Prepared by: University of Waterloo

## 6.4 Need Among Home Care Clients

a. Distribution of MAPLe priority levels for seniors assessed and receiving home care services, and number of assessments conducted, in Ontario 2005/06–2008/09



Why is this indicator important?

Community Care Access Centres (CCACs) manage services for a variety of older individuals with longer-term needs. Some clients require more resources and attention to live safely in their homes and are at greater risk of being placed in long-term care (LTC). The Method for Assigning Priority Levels (MAPLe) assignment gives each assessed individual a relative level of priority regarding the risk of being placed in LTC.

Key findings over time

- Provincially, the average proportion of home care clients at each risk level for LTC placement remained very stable over time.
- In the first quarter of 2008/09, 37% of those receiving home care were assessed as low or mild priority, 32% were moderate, 22% were high, and 8% were very high.
- In the future, a desirable trend might be to have more clients in the high and very high levels, suggesting that the home care system is managing to keep more individuals aging in the community.

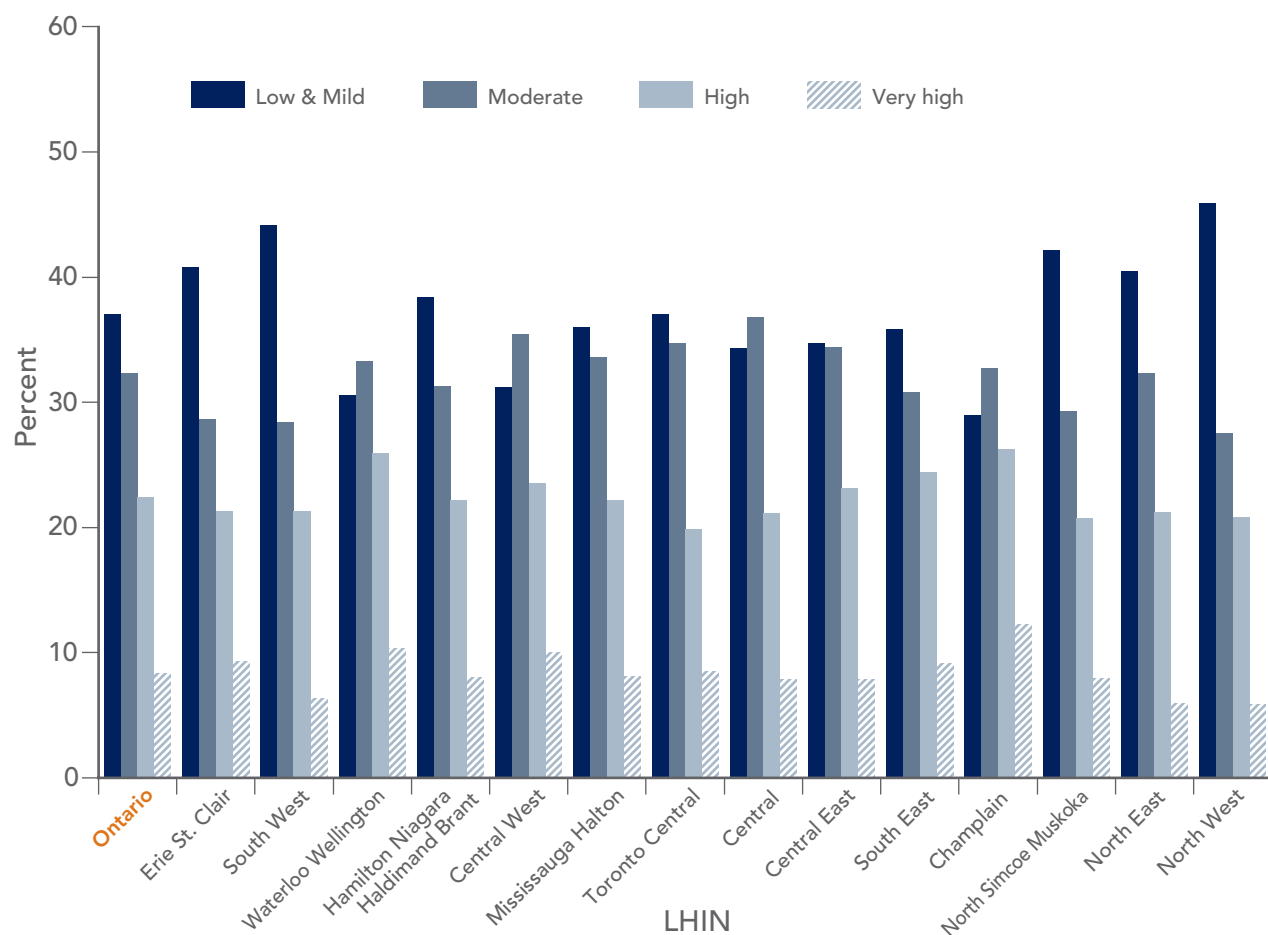
Data sources: Ontario RAI-HC Database, Home Care Database (Waterloo)

Technical note: Priority level is based on the Method for Assigning Priority Levels (MAPLe) (Hirdes et al., *BMC Med.*, 2008, 6:9). The numbers include only community-assessed clients who were receiving services at or just after the time of assessment. Assessments were assigned to the quarter in which they were done; clients receiving services in that quarter who were not assessed in that quarter were omitted.

Prepared by: University of Waterloo

## 6.4 Need Among Home Care Clients

### b. Distribution of MAPLe priority levels for seniors assessed and receiving home care services, in Ontario and by Local Health Integration Network, 2007/08



#### Key findings across LHINs

- Some variation in the distribution of MAPLe priority levels was evident among LHINs.
- A two-fold difference in the percentage of CCAC clients with high MAPLe scores was observed between the North West LHIN (6%) and the Champlain LHIN (12%).
- The percentage of CCAC clients with low or mild MAPLe scores ranged from 29% in the Champlain LHIN to 46% in the North West LHIN.

#### Next steps

Future work will focus on refining this indicator for non-assessment bias. The proportion of clients who were not assessed (see section 6.3) varied by CCAC or over time, as CCACs chose to devote limited case-manager time to only the most complicated cases.

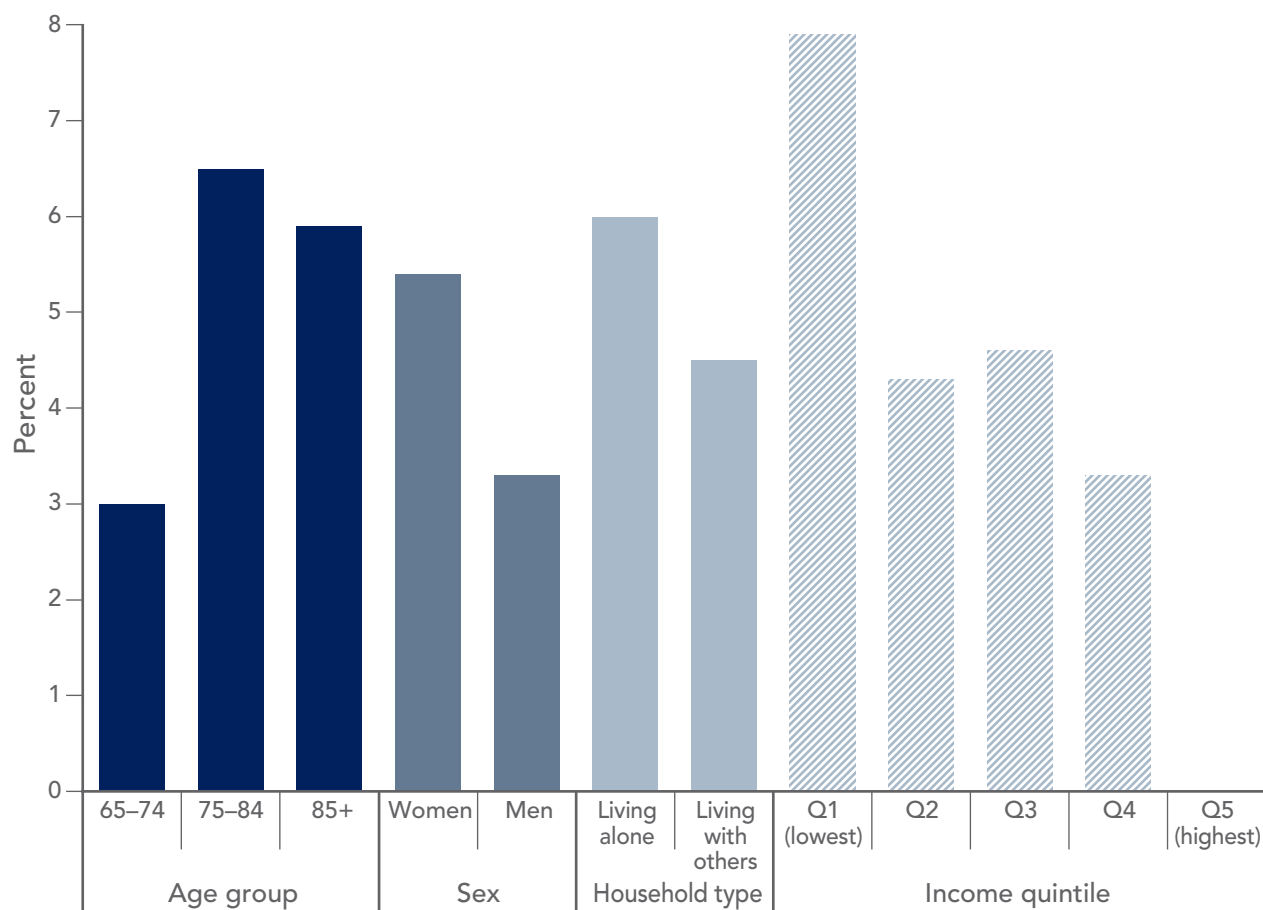
Data sources: Ontario RAI-HC Database, Home Care Database (Waterloo)

**Technical note:** Priority level is based on the Method for Assigning Priority Levels (MAPLe) (Hirdes et al., *BMC Med.*, 2008, 6:9). The numbers include only community-assessed clients who were receiving services at or just after the time of assessment. Assessments were assigned to the quarter in which they were done; clients receiving services in that quarter who were not assessed in that quarter were omitted.

Prepared by: University of Waterloo

## 6.5 Self-Perceived Unmet Home Care Need

Percentage of seniors reporting unmet home care needs, by age group, sex, household type and neighbourhood income quintile, in Ontario 2008



Data source: Canadian Community Health Survey (Statistics Canada)

Technical note: Rates were age-adjusted using the 2001 Ontario population aged 65–120 as the standard population. No LHIN-specific results were available due to small sample sizes.

### Why is this indicator important?

Ontario's Community Care Access Centres provide a variety of home care services to assist seniors in living independently. However, not all seniors who believe they need services receive them. Identifying those with unmet home care need can assist providers with service planning and identifying target populations.

### Key findings

- Three percent of seniors aged 65–74 reported self-perceived unmet home care needs. Seniors aged 75 and older were nearly twice as likely to report unmet home care needs as those aged 65–74.
- Five percent of senior women reported an unmet need for home care services, compared to 3% of senior men.
- In 2008, 6% of seniors living alone reported having unmet home care needs compared to 4% of seniors living with others.
- Across neighbourhood-income quintiles, there was a gradient of decreasing age- and sex-adjusted rates of unmet home care need from the highest income quintile to the lowest, with 8% of seniors in the lowest income quintile reporting unmet home care needs.

### Next steps

- Future work will include identifying types of services needed by those with unmet need, as well as establishing possible reasons for not receiving services.

7

NEXT STEPS

# Next Steps

This Chartbook represents an important first step towards an examining population-based patterns in health system use by Ontario seniors. By documenting baseline trends, essential information is provided against which to compare progress in caring for seniors in future years, and to assess future investments in this area in improving the sustainability of the health system as a whole. ICES and its collaborators will continue to measure and report on patterns of health-system use at the provincial level in key areas related to Ontario seniors. To enable this, we will be undertaking a number of important initiatives, including:

## **Expanding the linked, population-based data resource**

The exhibits presented in the Chartbook are those that could be readily identified with existing provincial data holdings—notably, the community support service sector is not included. In the future there will be an opportunity to build on the existing population-based resources at ICES by adding other relevant databases and collecting new information. For example, the Resident Assessment Instrument–Home Care can provide information on levels of need among long-stay home care clients and those awaiting placement in long-term care; the Occupancy Monitoring System for long-term care homes can provide data on changes in the long-term care bed supply across regions; and Management Information System data for community health service providers can provide province-wide statistics on the volume and types of services provided by these agencies over time. This will result in a more comprehensive view of the health system and will provide a critical foundation for future health services planning, policy development and system performance evaluation.

## **Enriching the analytical work**

Future research will focus on identifying and following key cohorts of Ontario residents who will benefit from expanded services for older adults. Presented as ICES health care atlases, these reports will offer more in-depth analyses on groups such as frail older women, high-cost/high-need seniors, those with chronic diseases such as dementia, and those awaiting placement in long-term care homes. Through the linked data available at ICES, these atlases can examine the complete continuum of care for individuals as they move across the health system and can assess service use, access to care and health outcomes in these important populations over time.

## **Engaging the broader research community and planners**

ICES and its collaborators will actively seek engagement with the broader research community (both those who conduct research and those who use it) as future provincial-level analyses proceed. The transition of Ontario seniors across community and institutional settings poses challenges not only for those providing care, but also for those conducting research and a collaborative approach is required. As well, the alignment of the health system performance metrics used in our research with metrics used by other groups that report on the health system is critical in order to produce transparent and consistent results. The aging population will continue to challenge the Ontario health care system in the years ahead, but its ongoing evaluation is a positive step forward. The Chartbook is a product of that direction, designed to provide Ontarians with an impartial visual representation of the current state of the health system.



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