

Transforming the Ontario Health Care System Planning for the needs of Older People Living with Complex Health Conditions

Data Tables



April 30, 2019

Background

- Without a specific focus on their needs, older people living with dementia, frailty and/or mental health & addictions issues experience fragmented, insufficient care, challenges navigating the system, the need to use institutional care, and their caregivers become overburdened and exhausted. This can contribute significantly to hallway medicine and increased health care costs.
- All Ontario Health Teams will provide care to older people living with dementia, frailty and/or mental health & addictions issues.

General

- People living with dementia are at risk for emergency room use, hospital admission and longer hospital stays¹.
- Dementia contributes to 1/3 of all alternate level of care (ALC) designations in Canada².
- Frail people are at the highest risk of hospitalization³
- Older people may live with multiple interacting comorbidities, such as dementia, frailty and/or mental health and addictions issues, and other chronic or acute problems.
- Ontarians over the age 65 make up 80% of the people currently designated as ALC (CCO, 2019)
- Frail older individuals make up a significant cohort within the 5% of Ontarians that spend over 60% of the health budget.

1. <https://www.cihi.ca/en/dementia-in-canada/dementia-across-the-health-system/dementia-in-hospitals>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4164681/>
3. <https://www.ncbi.nlm.nih.gov/pubmed/29874399>

KEY ATTRIBUTES OF THE CENTRAL EAST LHIN - INCLUDING 65+ POPULATION

(Highlighted additions to LHIN planning information provided by Seniors Care Network)

Attribute	Scarborough North	Scarborough South	Durham West	Durham North East	Northumberland County	Peterborough City and County	Haliburton County and City of Kawartha Lakes	Central East LHIN	Ontario
Area in Km ²	42	138	445	2,079	1,682	3,848	7,160	15,394	908,699
Area as % of Central East LHIN Total	0.3%	0.9%	2.9%	13.5%	10.9%	25.0%	46.5%	100.0%	N/A
Population (2016)	190,342	447,806	351,899	319,940	75,411	141,357	94,592	1,621,347	13,982,984
Population as % of Central East LHIN Total	11.7%	27.6%	21.7%	19.7%	4.7%	8.7%	5.8%	100.0%	N/A
Population 65+ (2016)¹	36,095	65,940	43,105	49,695	18,810	31,545	25,000	270,190	2,250,810
Population 65+ as % of Sub Region Total	19%	15%	12%	16%	25%	22%	26%	17%	16%
Density per Km ²	4,532	3,245	791	154	45	37	13	105	14.8
% Large Urban	100.0%	100.0%	97.1%	60.0%	0.0%	0.0%	0.0%	51.0%	68.1%
% Medium/Small Population Centre	0.0%	0.0%	0.4%	20.1%	42.9%	64.7%	29.9%	22.6%	14.7%
% Rural or Small Communities Adjacent to Urban Areas	0.0%	0.0%	2.6%	14.0%	8.3%	25.2%	50.8%	14.4%	8.4%
% Rural and Small Town	0.0%	0.0%	0.0%	5.9%	48.8%	10.0%	19.3%	12.0%	8.8%
% of Population Living Below Low-Income Measure	22.6%	20.6%	8.5%	11.0%	11.7%	15.2%	13.9%	15.0%	14.4%
% of population of Aboriginal identity	0.2%	1.0%	1.3%	2.7%	2.8%	4.6%	2.8%	1.8%	2.8%
% who report French as their mother tongue	0.9%	1.4%	1.9%	2.0%	1.5%	1.3%	1.3%	1.6%	4.3%
% of Population Who are Immigrants	66.9%	53.2%	31.8%	14.5%	10.6%	8.4%	8.1%	33.7%	29.1%

¹ Source: Health Analytics Branch (2018 March) LHIN and sub-region Census profile - 2016 Census, Final

People Age 65+ in the Central East LHIN

- In 2016, there were 270,190 people over age 65 in the Central East region. This was approximately 12% of the total population over 65 in Ontario
- By 2029, if the proportion of the total population 65+ in Ontario living in Central East region remains constant, there will be 441,495 people over 65 in the region²

	Central East LHIN ¹		
	2006	2011	2016
Total population	1,432,705	1,498,650	1,550,575
Population age 65+	196,430	224,400	270,180
% population age 65+	13.7%	15.0%	17.4%
Population age 75+	92,240	105,740	119,320
% population age 75+	6.4%	7.1%	7.7%
Change between 2006 and 2016 in...			
Total population			8.2%
Population age 65+			37.5%
Population age 75+			29.4%

1. Source: Health Analytics Branch (2018 March) LHIN and sub-region Census profile - 2016 Census, Final

2. Source: projections from MOF data tables

Frailty in the Central East LHIN

- In 2012/13, using an application of the Clinical Frailty Scale (Rockwood et al. 2005), to Canadian data in the Central East LHIN there were an estimated 53,214 people over age 65+ considered to be frail (RSGS, 2013).
- In 2016, using a refined validated index (Hoover et al., 2013), this estimate grew to 66,908.
- These values do not include people whose health status is vulnerable or who are at risk for frailty.

Frailty Among Older Adults in the Central East LHIN

Estimated Population of 65+ Living with Frailty (2016)

Attribute	Scarborough North	Scarborough South	Durham West	Durham North East	Northumberland County	Peterborough City and County	Haliburton County and City of Kawartha Lakes	Central East LHIN	Ontario
Population 65+ (2016)¹	36,095	65,940	43,105	49,695	18,810	31,545	25,000	270,190	2,250,810
Population 65-74 (2016)¹	18,005	35,975	25,730	28,080	10,855	17,570	14,640	150,855	1,266,155
Prevalence of Frailty Age 65-74 (Proxy²) = 0.16	2,881	5,756	4,117	4,493	1,737	2,811	2,342	24,137	202,585
Population 75-84 (2016)¹	12,245	20,430	12,355	15,165	5,580	9,410	7,345	82,530	683,635
Prevalence of Frailty Age 75-84 (Proxy²) = 0.286	3,502	5,843	3,534	4,337	1,596	2,691	2,101	23,604	195,520
Population 85+ (2016)¹	5,885	9,510	5,030	6,430	2,365	4,565	3,005	36,790	300,425
Prevalence of Frailty Age 85+ (Proxy²) = 0.521	3,066	4,955	2,621	3,350	1,232	2,378	1,566	19,168	156,521
Total Estimated Population Over Age 65+ Living with Frailty (2016)	9,449	16,554	10,271	12,180	4,565	7,881	6,009	66,908	554,626

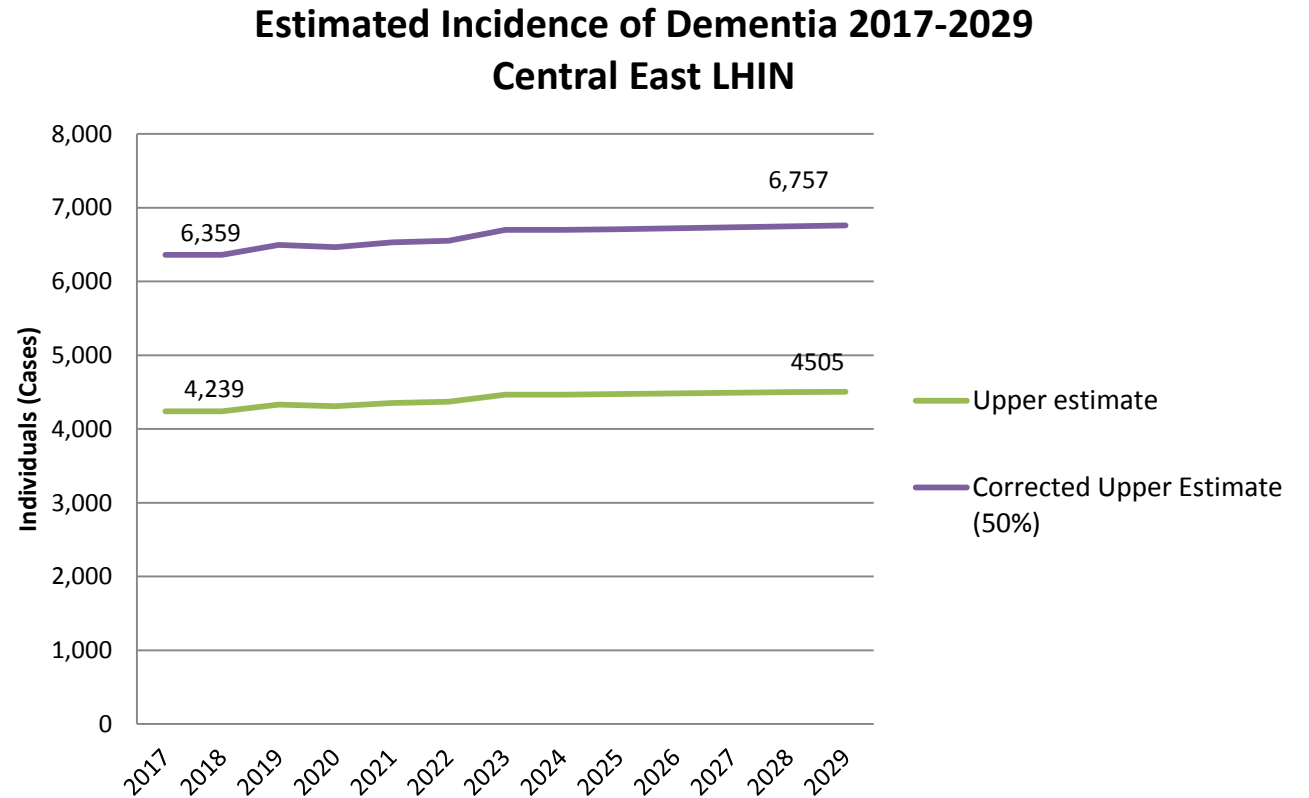
¹ Source: Health Analytics Branch (2018 March) LHIN and sub-region Census profile - 2016 Census, Final

² Hoover, M., Rotermann, M., Sanmartin, C., and Bernier, J. (2013). Validation of an index to estimate the prevalence of frailty. Retrieved from <https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2013009/article/11864-eng.pdf?st=OvvKzg6>

Note - as per Statistics Canada "to ensure the confidentiality of responses collected for the 2016 Census, a random rounding process is used to alter the values reported in individual cells. As a result, when these data are summed or grouped, the total values may not match the sum of the individual values, since the total and subtotals are independently rounded."

Incidence of Dementia – Corrected Upper Estimate

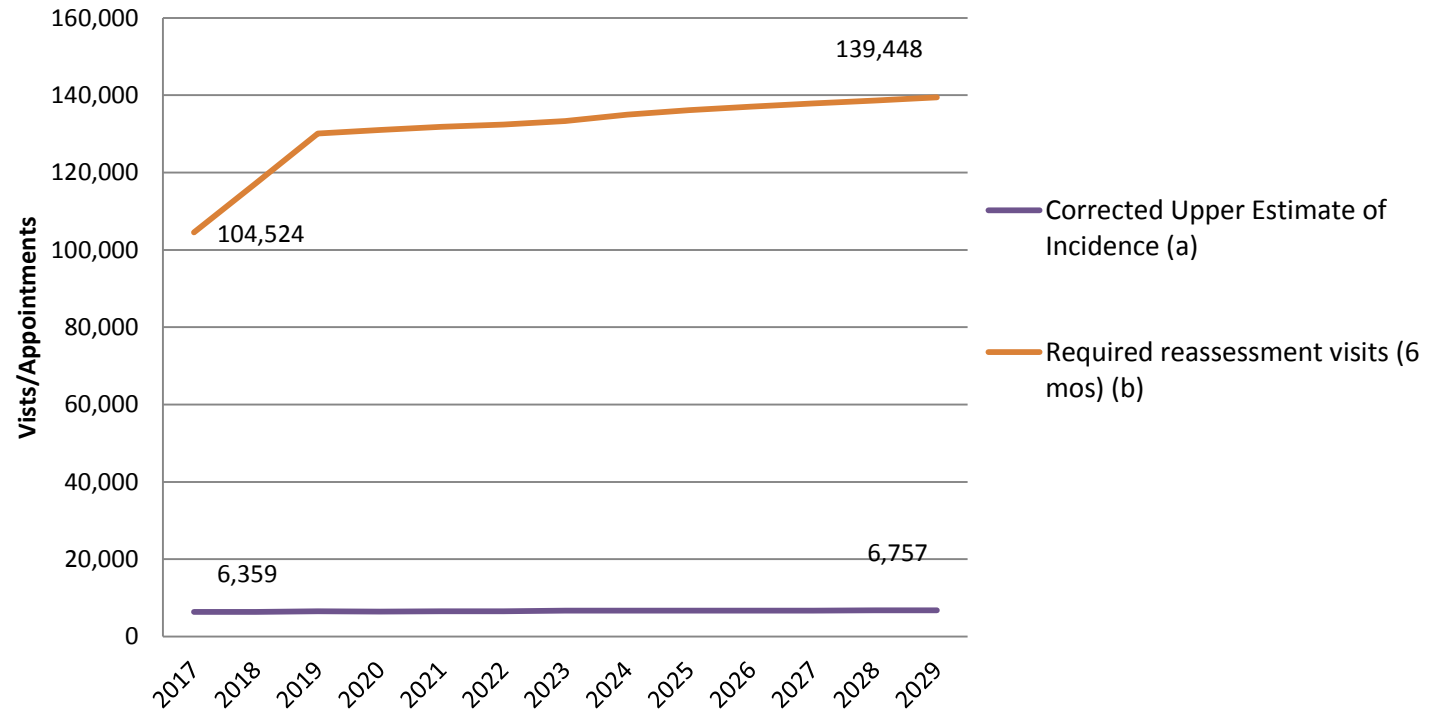
- As per HQO, all people with suspected dementia (new cases) should receive a comprehensive assessment and a diagnosis
- Annually, new cases can be inferred from incidence rate
- Incidence rate is assumed to under-predict new cases by 50%¹
- Therefore required availability of diagnostic capacity is assumed to equal estimated incidence rate x **1.5** (corrected upper estimate)



Reassessment Visits for People Living with Dementia

- As per HQO, A person living with dementia should receive a comprehensive assessment every 6 to 12 months, or sooner according to clinical need.
- Our estimates suggest a period of catch up is required (which is supported by the current service picture and wait times) and then demand for reassessment/intervention visits will level out at approximately 139,500 per year.

Estimated Requirements for 6 Month Reassessment Appointments (2017-2029)



Other Considerations

- As of October 2018 there were 7080 individuals on the Long Term Care waitlist in all priority categories. It is our understanding this waitlist has since increased¹.
- In 2017/18, the Central East LHIN report there were 91,965 Alternate Level of Care (ALC) days across Central East LHIN hospitals, of which 15,838 were attributed to discharges related to individuals with dementia². Assuming 80% of all ALC days were attributed to people over age 65, we assume this total to be 73,572 ALC days. At an average acute care cost of \$842/day³ this translates to nearly \$62 million.
- In 2017/18 community and social service organizations, specialized geriatric services and home care agencies provided the bulk of health and social services to older people living with dementia, frailty and mental health and addictions issues.
- Much of the work of CSS organizations, specialized geriatric services and home care agencies is described in the Dementia Capacity Planning Current State Report (shown)

