Société Alzheimer Society
ONTARIO

Projected Ontario budget savings from reduced long-term care utilisation due to a disease-modifying Alzheimer's treatment

This is a summary of a study commissioned by the Alzheimer Society of Ontario and published in September 2022. For the full report, please email policy@alzon.ca. The study was conducted by Hankyung Jun PhD, Zehao Shi, and Soeren Mattke MD, DSc, and was subject to a double blind peer review prior to publication.

Abstract

A hypothetical future treatment for Alzheimer's disease and/or other forms of dementia could result in cost savings for the Government of Ontario through reduced long-term care utilisation. The magnitude of these potential cost savings is currently unknown: the study predicts such savings from 2023 to 2043, finding that the introduction of an approved treatment alone would result in $6.1 billion in cost savings over this time period. Improved diagnostic capacity and triage at the primary care level could increase these cumulative savings to $8.9 billion, and the removal of all diagnostic capacity constraints could see savings increase to $9.9 billion. The study concludes that access to a disease-modifying treatment for Alzheimer's disease could create cost savings for the Government of Ontario through avoided LTC time, with savings increased through improved diagnostic capacity.

Introduction

The June, 2021 approval in the United States of that country's first-ever treatment for Alzheimer's disease has generated hope among families affected by dementia both in the US and around the world. It has also spurred debate about the value and affordability of such treatments: one recent study found that a disease-modifying treatment in the United States alone would accrue a societal value worth 2.62 trillion USD over 20 years, largely due to quality-adjusted life years (QALY) and reduced long-term care (LTC) costs—accounting for 63% and 20% of value, respectively.

In Ontario, where government shoulders a greater percentage of LTC costs than is the case in most US states, taxpayers may see even greater value: of the $6.2 billion spent on LTC in 2020/21, $4.6 billion came from government with the remainder in resident co-payments. With 81% of LTC residents in Ontario living with some form of cognitive impairment, a disease-modifying therapy for Alzheimer's disease may allow for more years spent at home and, consequently, a lower LTC cost burden placed on government.

Against this background, the objective of the study is to simulate possible cost savings in LTC home utilisation arising from a disease-modifying therapy for Alzheimer's disease.

Findings

Average wait times for a diagnosis would peak in 2029 with the assumed introduction of a disease-modifying treatment in 2023, and remain high thereafter (Figure 1). Most of this increased wait time is attributed to lack of specialist capacity, while the introduction of a blood-based biomarker would also slightly reduce wait times.

Figure 1: Projected wait times for a diagnosis of Alzheimer's disease 2023-2043.

Without a disease-modifying treatment, the study found that Ontario will spend a cumulative $27.8 billion in long-term care costs for people living with dementia alone between 2023-2043. The introduction of a treatment, with no accompanying increase in diagnostic and/or triage capacity, would lower this cost to $21.7 billion—a 22% cumulative reduction over the same time period, with annual cost savings peaking at $588 million in 2042. Figure 2 demonstrates annual cost savings and avoided person years of LTC with the introduction of a treatment.

Were Ontario to invest in emerging technologies to expedite screening and diagnosis, cost savings would increase as wait times are reduced and, consequently, more Ontarians become able to access the disease-modifying treatment. The addition of a blood-based biomarker to existing cognitive assessments would increase cumulative savings by 45% to $8.9 billion over 20 years. This scenario would also see peak savings achieved faster: the province would save $752 million on avoided LTC costs annually by 2038, four years sooner and 28% greater than through the introduction of a treatment alone.

Elimination of all constraints on access to a treatment would see cost savings increase by 62% from the base scenario, to $9.9 billion.

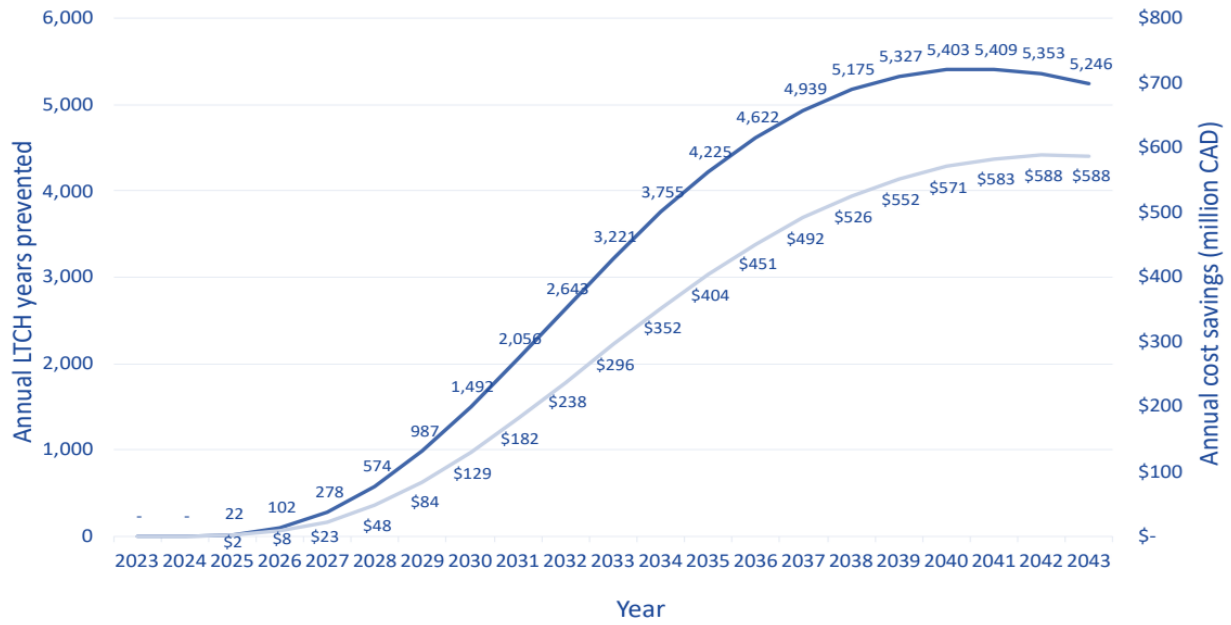

Figure 2: Annual cost savings and avoided person years of LTC with the introduction of a disease-modifying treatment and no accompanying increase in diagnostic or triage capacity.

Conclusion

A treatment for Alzheimer's disease is coming. Ontario isn't ready. Recent research has found that Canada already has the longest wait times in the G7 for a diagnosis of dementia; this unacceptable reality will only worsen with the future introduction of a treatment, with wait times peaking at over seven years in Ontario if no additional diagnostic and/or triage capacity is added. The Government of Ontario could save up to $9.9 billion by making investments in this additional capacity today, before a treatment is approved.

For access to the full study, please email policy@alzon.ca.