

# ALTERING THE FORECAST ON THE TSUNAMI OF DEMENTIA

A FRAMEWORK FOR PREVENTION, SYMPTOM DECELERATION AND REVERSAL

WHITE PAPER - SHORT VERSION

### INTRODUCTION

The unrelenting growth in the number of persons living with dementia has been likened to a tsunami that is impacting every aspect of life everywhere in the world.

Pre-pandemic estimates indicated that there were 50 million people living with dementia worldwide in 2020, and that this estimate would more than triple to 152 million by 2050. The cost of dementia care was estimated to be USD1 trillion in 2020, representing 1.2% of global GDP, rising to an estimated USD2 trillion by 2030.

In Canada, more than half a million persons live with dementia and it is predicted that this number will rise to nearly 1 million by 2033. The cost of dementia care was estimated at \$12 billion in 2020 and is projected to be \$16.6 billion by 2031. Total out-of-pocket costs paid by Canadian caregivers of people with dementia were estimated at \$1.4 billion in 2016 and are projected to rise to \$2.4 billion in 2031.

We have all witnessed the havoc that COVID-19 has wreaked in our elderly care facilities and hospitals. The COVID-19 pandemic has severely impacted and isolated vulnerable seniors and persons living with dementia. It is reasonable to expect an upward revision of the estimates.

There is a race against time to minimize the growth trends in order to achieve a more sustainable level of care and cost. This can be accomplished if the number of new diagnoses is reduced and therapies that alleviate and eliminate symptoms are made available to patients. There are currently promising signs of progress in dementia research in **prevention**, **symptom deceleration** and **reversal**. Increasing investments in research and services in these areas provides reasonable **hope for dementia** growth trends to be reversed.

Based on available data, the position taken in this White Paper\* is that the current trends in growth of the number of people affected by dementia presents an unsustainable trajectory, but that this trajectory can be bent downward if appropriate prevention strategies are widely implemented. The White Paper proposes a framework to bend the curve downward that is based on insights derived from research, and recommends prevention strategies and the delivery of services within the healthcare system.

Hope for Dementia advocates that the *prevention of dementia* must become a national healthcare priority. This can be advanced via the presentation of a petition calling for the adoption of the framework that will require concerted, collaborative public and private sector planning, support and action.

<sup>\*</sup>The long version of this White Paper is available on request: info@hopefordementia.org

# A FRAMEWORK TO BEND THE CURVE

This White Paper\* proposes a framework to bend the curve downward that is based on insights derived from research, which supports recommendations for prevention strategies and service delivery within the healthcare system. By focusing on disease prevention and health protection strategies, countries can aim to reduce the growth in the number of persons diagnosed with dementia and therefore better align their healthcare resources with predicted care requirements in the future.

The framework integrates strategies for the prevention, deceleration, and reversal of symptoms throughout three levels of public health disease prevention practises and proposes services that should be delivered cost effectively within the healthcare system.



#### Primary prevention: improving the overall health of the population

Improving the overall health of the population can be achieved through primary **prevention strategies** that aim to reduce the number of preventable diagnoses through education, regular proactive screening, risk mitigation and management in the general population.

**Service delivery:** integrate **cognitive screening** questionnaires in annual medical exams and in public education programs, supported by mandatory public health reminders sent to persons over 50 years of age every two years.



### Secondary prevention: improving individual health

Secondary prevention strategies target at-risk groups and involve **symptom deceleration** measures such as nutrition modification, assessment and stimulation activities to delay cognitive decline as well as preserve the health of persons diagnosed with mild cognitive impairment.

**Service delivery:** Effectively coordinate the work of healthcare providers and social services to provide and deploy on-going cognitive assessments and cognitive stimulation services accessible to persons in at-risk groups in community, primary and secondary healthcare settings.



#### **Tertiary prevention: Improving treatment and recovery**

Tertiary strategies for dementia involve applying drug therapies proven to drive **symptom reversal.** 

**Service delivery:** Proactively recruit persons with mild cognitive impairment and diagnosed with early-stage dementia to participate in research and clinical trials on symptom reversal.

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### A FRAMEWORK TO BEND THE CURVE REDUCE THE GROWTH IN DIAGNOSES AND IN THE NUMBER OF PERSONS LIVING WITH DEMENTIA

RESEARCH FINDINGS	INSIGHTS	PREVENTION STRATEGIES	SERVICE DELIVERY
<ul> <li>56% of Canadians are concerned about being affected by Alzheimer's disease &amp; 46% of Canadians say they would be embarrassed to admit that they have dementia. xxvi</li> <li>1 in 4 people think there is nothing we can do to prevent dementia, and</li> <li>Almost 62% of healthcare practitioners worldwide incorrectly think that dementia is part of normal ageing. xxvii</li> </ul>	Awareness, education, and prevention programs may not have been effective in changing understanding and perceptions about dementia	Primary prevention: reduction of preventable diagnoses  • Make dementia prevention a national health priority  • Petition governments to make biennial cognitive screening reminders mandatory for persons over 50 years old	Health promotion & disease prevention  Biennial cognitive screening in routine medical check-ups  Public education programs with strong calls to action
• In high income countries, only 20-50% of dementia cases are recognised and documented in primary care, with much higher percentages estimated in lowand middle-income countries. Alzheimer's Disease International estimates that worldwide, approximately three quarters of people with dementia have not received a diagnosis. **xviii**	Many persons living with dementia, particularly in the early stage of the disease, have no access to treatment, care, and organized support	Secondary prevention: deceleration of risks and symptoms  • Prioritize early detection and ongoing cognitive assessment among at-risk groups.	Health promotion and protection     Deploy on-going cognitive assessment services proven to promote, prevent and decelerate cognitive decline, specifically targeting at-risk groups     Formalize partnerships between the healthcare and social services sectors to ensure optimal coordination of services and effective monitoring of persons at risk and proactive treatment in the early stages of dementia
An article published in the Journal of Biomedical Science in January 2020 indicated that current trends show increased targeting of neuroprotection and antineuroinflammation in phase 1 and phase 2 trials, respectively, and a decline in anti-amyloid drug therapy research since 2019. xix	<ul> <li>There is an increasing shift in pharma research away from amyloid-clearing/cure drug therapies, towards prevention and protection therapies</li> <li>This is greater openness to clinical trials based on alternative hypotheses and therapies on the causes and potential cures for</li> </ul>	<ul> <li>Tertiary prevention: reversal</li> <li>Focus research on symptom reversal as a potential pathway to finding a cure for dementia</li> </ul>	<ul> <li>Disease protection</li> <li>Establish a dedicated public/private sector fund for promising research and clinical trials on symptom deceleration and reversal therapies</li> <li>Private sector and non-government organizations match the government's financial allocations in the National Dementia Strategy</li> </ul>

13 ALTERING THE FORECAST ON THE TSUNAMI OF DEMENTIA

dementia

in the National Dementia Strategy

## CONCLUSIONS

### The growth curve must be bent downward

**Hope for Dementia** takes the position that it is possible, and it is in the best interest of the society and the government, to reduce the current trends towards the predicted tripling of the number of new diagnoses and in the number of persons living with dementia within the next thirty years.

This position is supported by research-based evidence of promising signs of progress in **prevention**, **symptom deceleration** and **reversal**. The framework presented, if supported by public and private funding, provides a pathway to bend the curve downward.

### Petition to make dementia prevention a national health priority

**Hope for Dementia** advocates that the prevention of dementia should become a national health priority, with regular screening and risk mitigation as integral components of primary healthcare. This can be done through the presentation of a petition to the Federal and provincial governments and territorial authorities. The petition will call for the adoption of the framework that integrates prevention strategies and service delivery and for implementation in the immediate or in the short-term.

### Implementation requires concerted, collaborative public & private sector action

The worsening strain on healthcare resources and the economy makes concerted collaborative action imperative. Policymakers, researchers, healthcare professionals, advocates, and the private sector must all be involved in advocacy and in action through funding, research, and testing.

Resources from all these sources must be pooled to support promising research in dementia prevention, including novel and innovative approaches. Serious consideration should be given for the private sector and non-government organizations to match the government's financial allocations in the National Dementia Strategy, specifically in promising research into **prevention and symptom deceleration and reversal**. The aspirational objective of the National Dementia Strategy to make annual investments in dementia research in Canada exceed one percent of dementia care costs could be increased through matching private sector contributions.

There is clearly much more work to be done to alter the forecast on the tsunami of dementia. Public awareness, proactive prevention, risk management and investment in research to decelerate and reverse symptoms offer potential solutions that provide "Hope for Dementia".

### **GET INVOLVED**

To learn more about Hope for Dementia and to be involved in advocating prevention of dementia to be a national priority, contact Hope for Dementia.

info@hopefordementia.org | www.hopefordementia.org

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