

Dementia and *The Path Forward*

April 6, 2023

In November 2022 Ontario's Ministry of Health released *The Path Forward*, a longer-term visionary document for Ontario Health Teams (OHTs). Among other new requirements, the document prescribes four chronic conditions for which OHTs will be expected to implement integrated care pathways:

1. Congestive heart failure (CHF);
2. Diabetes, with a focus on avoiding amputation;
3. Chronic obstructive pulmonary disease (COPD); and
4. Stroke.

This directive has caused concern among some OHTs that have, up to now, identified other priority populations in their local area. At least two dozen OHTs had chosen to focus on frail seniors, vulnerable seniors, seniors with multiple comorbidities, or a similar group as one of their year one target populations. At least three OHTs specifically highlighted people living with dementia as a year one priority. Either directly or indirectly, a significant number of approved OHTs have chosen to focus on local residents living with dementia as part of their initial priority populations—and these OHTs are now wondering if they will be instructed to switch focuses. Additional OHTs that have not chosen to prioritise vulnerable older adults in year one, including those living with dementia, but may wish to do so in future years are also left with uncertainty: are they free to identify their own local priorities based on local data, or must they limit their focus to populations prescribed by the Ministry?

This document seeks to do two things: first, to establish the strong relationships between all four identified chronic conditions and dementia; and second, to highlight the importance of dementia itself being identified as a priority for integrated care in future policy documents from the Ministry of Health.

The Alzheimer Society makes two recommendations. First, **that all OHTs incorporate dementia into their integrated care pathways for all four identified chronic care conditions** listed above, rather than abandoning the promising initial focus on dementia and/or vulnerable older adults in general. Second, **that the Ministry of Health prioritise dementia as a standalone chronic condition for urgent OHT attention** in future policy documents that build on *The Path Forward*.

CHF and Dementia

What’s good for the heart is good for the brain. There is a misconception that dementia is unavoidable, or worse that it is a natural consequence of ageing. In fact, modifiable risk factors account for approximately 40% of dementia diagnoses¹. Risk factors for developing dementia later in life overlap with risk factors for heart failure, including alcohol misuse, smoking, obesity, and inactivity. **Prevention and risk reduction efforts for CHF should also highlight the related benefits in reducing one’s risk of developing dementia.**

While CHF and dementia share several pre-symptomatic risk factors, multiple recent studies have shown that heart failure itself is a risk factor for developing dementia later in life². **Care pathways for CHF must acknowledge the heightened risk of dementia**, prioritising cognitive assessments for patients with heart failure.

Considering the strong associations between CHF and dementia, both with correlated risk factors and the causative link from heart failure to dementia, international best practice is to integrate risk reduction, screening, treatment, and case management efforts³. In developing care pathways for CHF, **OHTs must also focus on modifiable risk factors for dementia, and otherwise incorporate dementia into all aspects of a CHF pathway.**

Diabetes and Dementia

As with CHF, several risk factors for diabetes are shared with dementia. These include obesity, heart disease, impaired blood vessels, circulation problems, high cholesterol, and high blood pressure⁴. Again as with CHF, diabetes itself, particularly type two diabetes, contributes to heightened likelihood of developing dementia later in life: in the United States, increased prevalence of type two diabetes closely mirrors rising rates of dementia diagnoses⁵ and a diagnosis of diabetes is among the 12 risk factors that collectively account for roughly 40% of dementia cases⁶. A recent meta-analysis of data from the United States found that diabetes roughly doubles the likelihood of a future diagnosis of dementia, however this risk can be lowered through intensive modification of other risk factors⁷.

¹ Alzheimer Society of Canada. “Navigating the Path Forward for Dementia in Canada”, 2022.

² Qiu et al. “Heart Failure and Risk of Dementia and Alzheimer [sic] Disease”, 2006. Li et al. “Associations between heart failure and risk of dementia”, 2020.

³ Doehner, W. “Dementia and the heart failure patient”, 2019.

⁴ Alzheimer Society of Canada. “Diabetes and Dementia”.

⁵ Cholerton et al. “Type 2 Diabetes, Cognition, and Dementia in Older Adults: Toward a Precision Health Approach”, 2016.

⁶ “Navigating the Path Forward for Dementia in Canada”.

⁷ Pal et al. “Mild cognitive impairment and progression to dementia in people with diabetes, prediabetes and metabolic syndrome: a systematic review and meta-analysis”, 2018.

When introducing care pathways for diabetes, **OHTs should emphasise the heightened risk of developing dementia** and for patients already diagnosed with diabetes exhibiting signs of mild cognitive impairment, care pathways **must aggressively target modifiable risk factors for dementia** to reduce the likelihood or severity of cognitive decline in this high-risk group.

COPD and Dementia

There is a strong link between COPD and an eventual diagnosis of dementia⁸. The risk is greatest for those patients who develop COPD earlier in life, indicating that risk factors leading to COPD (smoking, lack of exercise, obesity) if left unchanged following a COPD diagnosis can continue to do damage, culminating in a diagnosis of dementia. This cumulative “double damage” effect should be emphasised in care pathways for COPD patients: **living well with COPD decreases dementia risk** while continuing with behaviours that contributed to a COPD diagnosis increases the likelihood of developing dementia.

Stroke and Dementia

More so than for any of the other three identified conditions already discussed, stroke and dementia are intertwined. **It is vital that stroke care plans implemented by OHTs incorporate the greatly increased prevalence of dementia among patients who have suffered a stroke.** This includes targeting modifiable risk factors among this population and regular cognitive assessments.

Having a stroke more than doubles one’s risk of developing dementia, starting at any age⁹. Risk factors for stroke are nearly identical to the leading modifiable risk factors for dementia: obesity, physical inactivity, high cholesterol, high blood pressure, traumatic brain injuries, and diabetes. This final shared risk factor highlights the interconnectivity of the four identified chronic conditions in *The Path Forward*: they all share risk factors, and the common link between all is heightened risk of developing dementia. This shared link is omitted in *The Path Forward*.

The Path Forward and Dementia

The Path Forward document dances around dementia, identifying four chronic conditions closely associated with the disease—without ever mentioning dementia by name, or highlighting the strong relationships between dementia and CHF, COPD, diabetes, and stroke.

This is a missed opportunity. By not explicitly acknowledging the connections between these four chronic conditions and dementia, the resulting integrated care pathways will be

⁸ Wang et al. “Risk of dementia or cognitive impairment in COPD patients: A meta-analysis of cohort studies”, 2022.

⁹ Heart and Stroke Foundation of Canada. “Stroke and dementia”.

incomplete—to the detriment of patient outcomes. For example delirium is a severe, potentially fatal complication that can either preempt or follow a diagnosis of dementia—and where other comorbidities exist, such as CHF, the risks associated with delirium increase significantly¹⁰. By recognising the interconnectivity of dementia and the four conditions identified in *The Path Forward*, the associated risks for patient outcomes—such as delirium—can be appropriately addressed in care pathways.

Crucially, *The Path Forward* includes no direction for OHTs on how to prepare for the eventual transition of patient needs from, for example, stroke care to dementia care. As has been shown there is a link between all four chronic conditions identified as priorities by the Ministry of Health. By overlooking the eventual dementia care needs of patients living with all four of these chronic conditions, *The Path Forward* risks further segmenting the health care system. An OHT may succeed in radically improving stroke care, with patient interactions greatly improved—only for that same patient to subsequently develop dementia (as many stroke victims will) and find, instead of world-class stroke care, disjointed, under-resourced dementia supports.

This is a condition-centric, rather than patient-centric approach, contrary to the stated purpose of OHTs. A high percentage of CHF, COPD, diabetes, and stroke patients will eventually need dementia care, **and OHTs should therefore be encouraged to view dementia care as an extension of the four identified chronic care pathways**. The notion of an integrated clinical care pathway as laid out in *The Path Forward* implies continuity and ease of access for patients. To achieve this goal for the four identified chronic conditions, **each care pathway must include a transition to dementia supports**.

The Alzheimer Society recognises that *The Path Forward* marks a specific point in time for OHTs, and that the model will continue to evolve to meet the health care needs of Ontarians. Indeed the document itself looks ahead to future priorities, speculating that mental health and addictions may be a forthcoming target for its own integrated care pathway. This responds to a need clearly identified by the numerous OHTs that have chosen to prioritise mental health and addictions as a focus population—just as a comparable number have selected older adults with complex care needs, often including dementia.

Dementia is both a natural extension of the four priority populations identified in *The Path Forward*, and an independent priority of its own identified by multiple OHTs. With the number of Ontarians living with dementia expected to triple within the next 30 years—and older adults living with dementia already accounting for half of all alternate level of care (ALC) beds in Canada's hospitals¹¹—there is pressing urgency to prepare for rapidly increasing prevalence. **Future policy documents from the Ministry of Health should clearly identify dementia care as a priority for integrated clinical care pathways.**

¹⁰ Fong et al. "The Interface of Delirium and Dementia in Older Persons", 2015.

¹¹ Canadian Institute for Health Information. "Dementia in Canada", 2018.