PROVINCIAL FINDINGS FROM THE LANDMARK STUDY – PATH REPORT: MANITOBA

INTRODUCTION

This report outlines provincial specific results from The Landmark Study. The projections were developed using an agent-based microsimulation model developed by CANCEA (Canadian Centre for Economic Analysis). The model accounts for population dynamics including immigration and age-associated risk factors for dementia.

- Key health and demographic assumptions:
 - o Likelihood of getting dementia and death depends on age, sex, and health status of each individual.
 - o Birth and immigration add new people to the model.
 - o Ethnic immigration and health profiles remain constant.
 - o Age and sex distribution of immigrants follows recent trends.
- **Risk factors for dementia included in the model**: Diabetes; Hypertension; Obesity; Mood/Anxiety; Stroke; Hearing Loss; Diet; Physical Activity; Education.

This provincial report provides some of the province-specific findings from the Path Report (Navigating the Path Forward For Dementia in Canada). This includes estimates for 2020-2050 for the following:

- Number of people living with dementia, by sex (assigned at birth).
- Number of care partners and hours of care provided for people living with dementia.
- Estimates of the impact of delaying onset of dementia in the province.

BRIEF OVERVIEW OF RESULTS - MANITOBA

- We are expecting to see the number of people living with dementia in Manitoba more than double in the next 30 years. Under current trends, the projections for are as follows (more details can be found in the tables and figures on the following pages):
 - 2020: 17,500 (61.7% female)
 - o 2050: 39,100 (62.9% female)
- Estimated and projected number of unpaid dementia care partners, and hours of care provided in Manitoba:
 - 2020: 10,200 (13.0 million hours/year)
 - o 2050: 23,000 (29.7 million hours/year)
- The Landmark Study also used the simulation model to examine what the impact that delaying the onset of dementia would have on the incidence and prevalence rates in Manitoba. Below are some of the highlights:
 - Current trends indicate an increase of 21,600 cases of dementia in Manitoba by 2050. This is a 124% increase from 2020 estimates of dementia in the province.
 - Based on the model estimates, a 1-year delay in the onset of dementia in individuals would prevent approximately 11,000 new cases of dementia occurring by 2050 in Manitoba.
 - A 10-year delay of onset for dementia would result in 2050 Manitoba dementia projections (11,300)
 being lower than the 2020 estimates, effectively changing the trajectory.
 - If achieved today, this 10-year delay in onset would see Manitoba avoid 88,100 cases of dementia by 2050.
 - If the onset of dementia is deferred 10 years, the model estimates a 29% decrease in the number of care partners in Manitoba from 2020 to 2050, opposed to a 125% increase if current trends are continued. This deferred incidence is associated with a large reduction in estimate caregiving hours in 2050. With a 10-year delayed onset, the 2050 estimate of 29.7 million hours estimated with current trends reduces to 8.7 million hours.

TABLES AND FIGURES FOR MANITOBA

Figure 1. Number of people in Manitoba living with dementia by age group, 2020 and 2050.

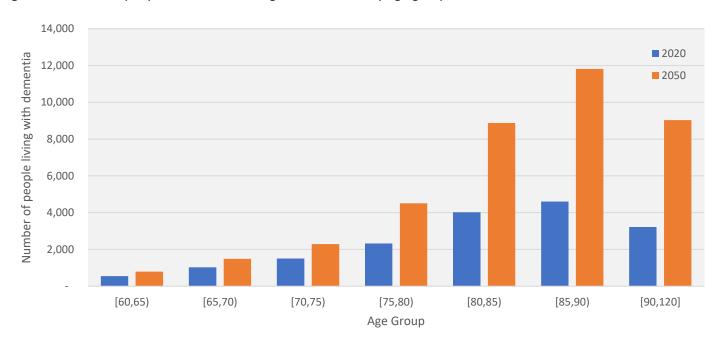


Figure 2. Number of people in Manitoba living with dementia 2020-2050, by sex.

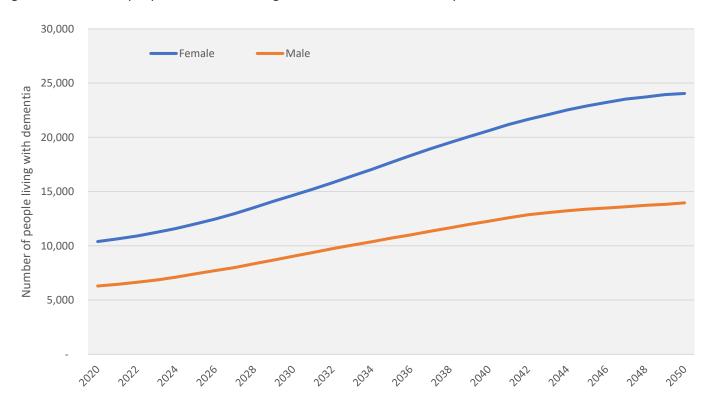


Table 1. Impact of delaying dementia onset on the projected number of people living with dementia in Manitoba.

	Number of People with Any Dementia		% Increase by 2050			
	Male	Female	Both	Male	Female	Both
Current Trends						
2020	6,700	10,800	17,500			
2050	14,500	24,600	39,100	117%	128%	124%
Onset Delayed 1 Year						
2020	6,600	10,700	17,300			
2050	13,000	22,200	35,200	97%	108%	104%
Onset Delayed 5 Years						
2020	6,300	10,300	16,600			
2050	8,000	14,300	22,300	28%	39%	34%
Onset Delayed 10 Years						
2020	6,100	9,900	16,000			
2050	4,000	7,200	11,200	-34%	-27%	-30%

Figure 3. Impact of delaying dementia onset on the projected number of people living with dementia in Manitoba in 2050.

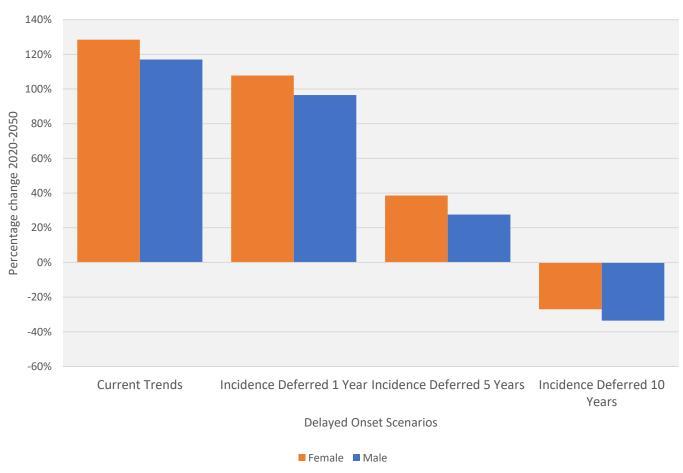


Table 2. The number of individuals in Manitoba who would avoid dementia across the three scenarios where dementia onset is delayed by 1, 5 or 10 years.

Cumulative New Cases Avoided by 2050						
Alzheimer's Dementia Other Dementia Vascular Dementia Total						
Onset delayed 1 year	5,800	2,500	2,700	11,000		
Onset delayed 5 Years	26,100	11,000	12,600	49,800		
Onset delayed 10 Years	47,000	18,700	22,400	88,100		

Figure 4. The cumulative number of individuals in Manitoba who would avoid dementia across the three scenarios where dementia onset is delayed by 1, 5 or 10 years.

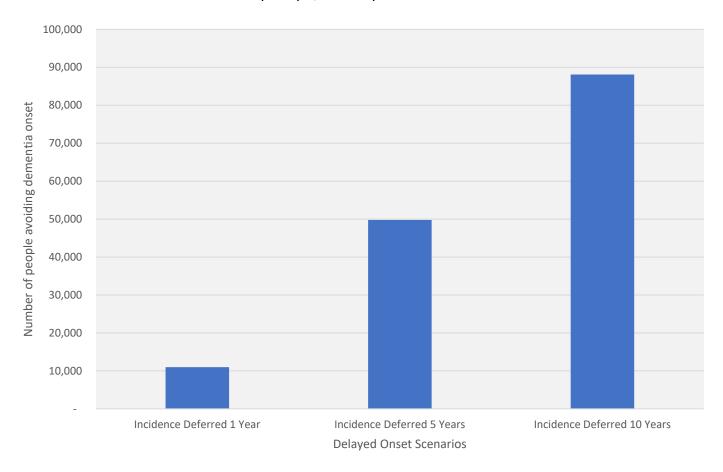


Table 3. Number of care partners for people living with dementia in Manitoba across 4 scenarios, 2020 and 2050.

	Number of Care Partners		% Increase by 2050				
	Male	Female	Both	Male	Female	Both	
	Current Trends						
2020	4,300	5,900	10,200				
2050	9,700	13,300	23,000	125%	124%	125%	
	Onset Delayed 1 Year						
2020	4,200	5,900	10,100				
2050	8,700	12,000	20,600	105%	104%	104%	
	Onset Delayed 5 Years						
2020	4,100	5,600	9,700				
2050	5,500	7,600	13,100	36%	35%	35%	
Onset Delayed 10 Years							
2020	3,900	5,400	9,400				
2050	2,800	3,900	6,700	-29%	-29%	-29%	

Figure 5. Age distribution of care partners for people living with dementia in Manitoba, 2020 and 2050.

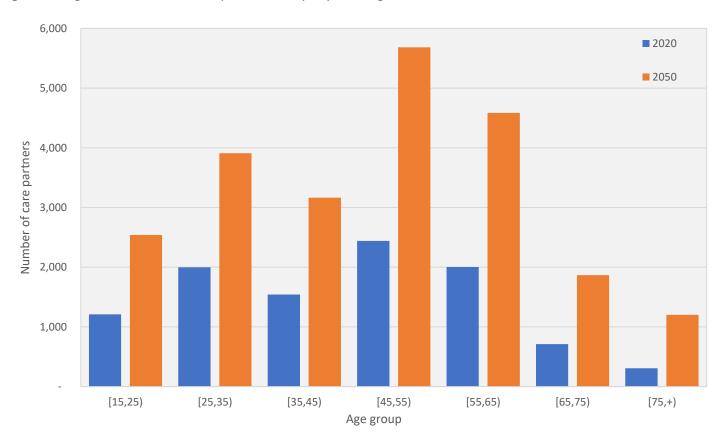


Table 4. Number of unpaid caregiving hours for people living with dementia in Manitoba across 4 scenarios, 2020 and 2050.

	Number of Unpaid Caregiving Hours (Annual, Millions)		% Increase by 2050				
	Male	Female	Both	Male	Female	Both	
			Current Trends				
2020	3.9	9.1	13.0				
2050	9.0	20.8	29.7	129%	128%	128%	
	Onset Delayed 1 Year						
2020	3.9	9.0	12.9				
2050	8.1	18.7	26.7	108%	107%	107%	
Onset Delayed 5 Years							
2020	3.7	8.7	12.4				
2050	5.1	11.9	17.0	38%	37%	37%	
Onset Delayed 10 Years							
2020	3.6	8.4	12.0				
2050	2.6	6.1	8.7	-27%	-28%	-28%	

Figure 6. Number of informal caregiving hours for people living with dementia in Manitoba across 4 scenarios, 2020 to 2050.

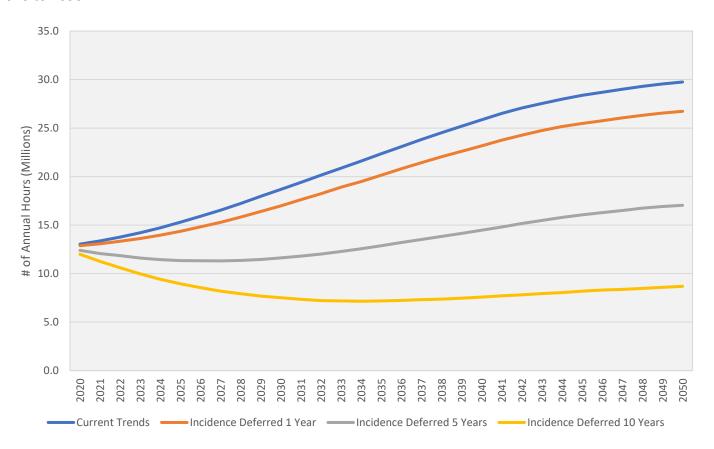


Table 5. Estimated prevalence, incidence, number of care partners, and number of caregiving hours per week for the province of Manitoba from the Landmark Study.

Year	Number of People Living with Dementia (Prevalence)	New Cases of Dementia (Incidence in Year)	Total Number of Care Partners	Total Number of Caregiving Hours per Week
2020	17,500	3,100	10,200	250,800
2022	18,400	3,200	10,800	264,700
2030	24,600	4,200	14,500	359,300
2040	33,900	5,500	20,000	497,100
2050	39,100	*	23,000	572,100

^{*}The model ends on January 1st, 2050 and no new cases were estimated for 2050.