

The Cost of Diabetes in  
**PRINCE  
EDWARD  
ISLAND**

# The Cost of Diabetes in Prince Edward Island

## The Prince Edward Island Diabetes Cost Model<sup>1</sup>

In 2009, the Canadian Diabetes Association commissioned a report, “*An Economic Tsunami: the Cost of Diabetes in Canada*,” to determine the cost of diabetes in Canada, including the impact of lost productivity on the economy. The report also evaluated the potential benefits of initiatives designed to delay or prevent the onset of type 2 diabetes and reduce the occurrence and severity of complications arising from the disease.

The diabetes cost model used in the 2009 report has since been adapted to provide an analysis of the costs of diabetes at provincial levels. The findings in this report are the preliminary findings concerning the costs of diabetes in Prince Edward Island derived through the Prince Edward Island Diabetes Cost Model. This is one of a series of reports issued on diabetes at a provincial level. The Association will continue to roll-out diabetes cost models across Canada.

The Canadian Diabetes Association continues to lead the fight against diabetes as it works to find a cure.



With thanks to our sponsor **NOVO NORDISK**<sup>®</sup>

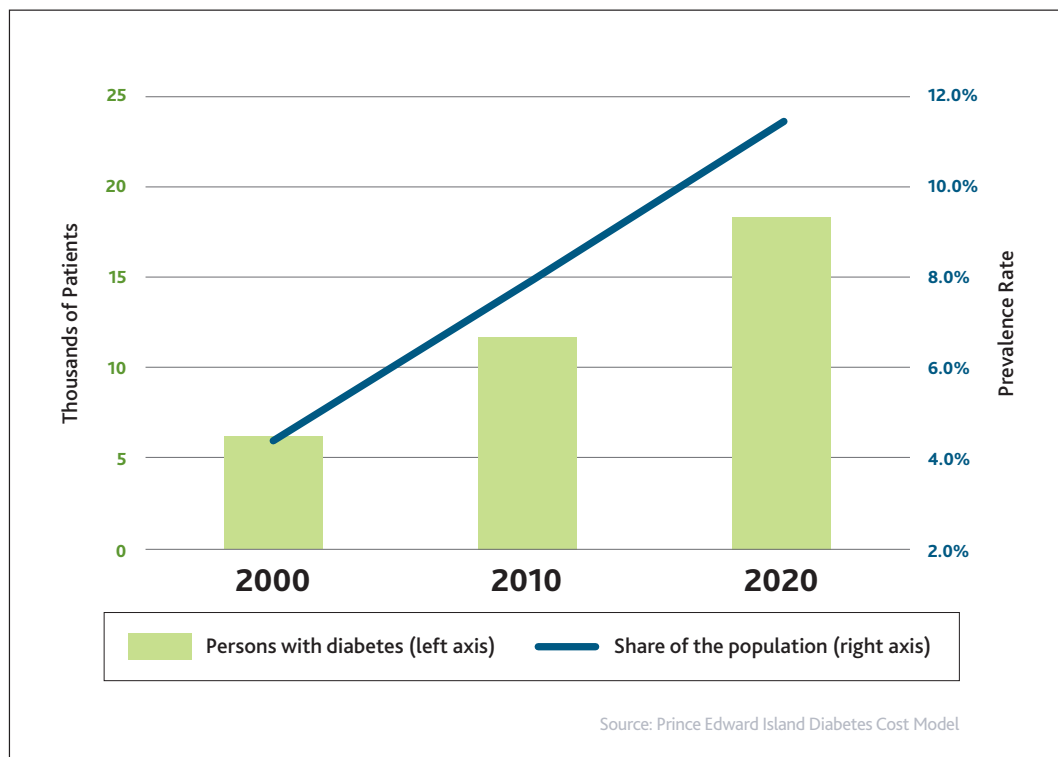
<sup>1</sup> The Prince Edward Island Diabetes Cost Model was created for the Association by the Centre for Spatial Economics based on the Canadian Diabetes Cost Model developed by Informetrica Limited and made possible by an unrestricted educational grant provided by Novo Nordisk Canada Inc. The two main sources of data used for the estimate and forecasts come from the National Diabetes Surveillance System (NDSS) and Health Canada's study the Economic Burden of Illness in Canada (EBIC). The Model aimed to integrate the administrative prevalence and incidence estimates from NDSS with the economic cost estimates from EBIC.

The Model supports analysis of the sensitivity of the prevalence and cost estimates to changes in demographic data, incidence and mortality rates by age and sex, and the average annual number of net general practitioner and specialist visits by people with diabetes. Assumptions made in this model are conservative and may understate the prevalence and cost of diabetes in the future, rather than to overstate it.

## The Prevalence of Diabetes in Prince Edward Island

The Prince Edward Island Diabetes Cost Model estimates<sup>2</sup> that 12,000 people in Prince Edward Island have been diagnosed with type 1 or type 2 diabetes in 2010 – representing approximately 8.0% of the population. This number is expected to increase by 6,500 over the next decade to 18,500 or 11.4% of the population of Prince Edward Island.

### Diabetes in Prince Edward Island: 2000 to 2020



### Diabetes in Prince Edward Island (Table 1)

	2000	2010	2020
Persons with diabetes (left axis)	6	12	18
Share of population (right axis)	4.4%	8.0%	11.4%



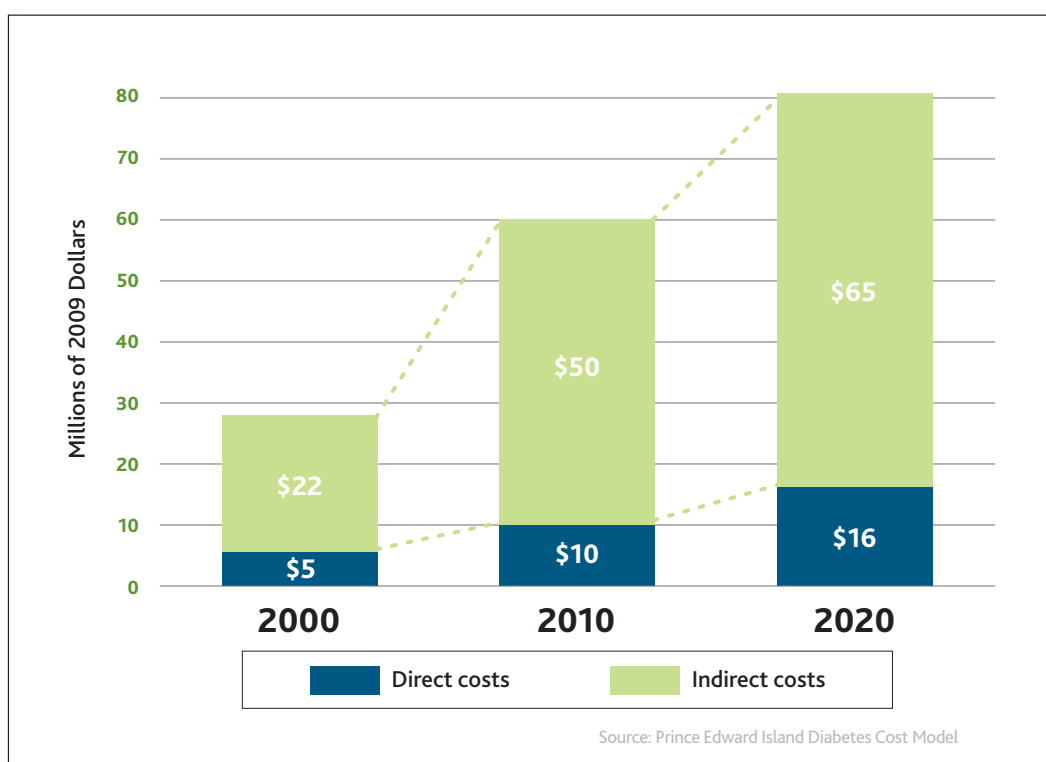
With thanks to our sponsor **NOVO NORDISK**

<sup>2</sup> The estimates provided in this report include the most current data available from all sources but should be viewed as preliminary and will be subject to revision based on continuing research and more complete data.

## The Economic Burden of Diabetes in Prince Edward Island

The economic burden of diabetes in Prince Edward Island is estimated to be \$61 million in 2010 (measured in 2009 dollars). This cost is expected to increase by 33% in the next decade to \$81 million by 2020.

### Cost of Diabetes in Prince Edward Island: 2000 to 2020



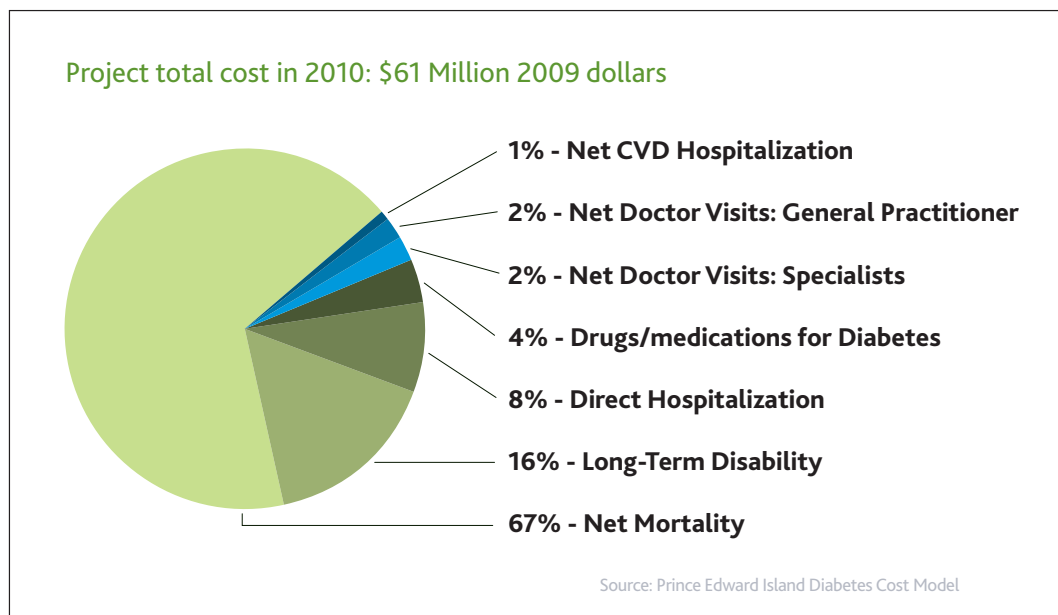
### Cost of Diabetes in Prince Edward Island in Millions of 2009 Dollars (Table 2)

	2000	2010	2020
Direct costs	5	10	16
Indirect costs	22	50	65



The direct costs of diabetes – which accounts for 17% of the total cost of the \$61 million in 2010 - are led by hospitalization costs. Indirect mortality and disability costs account for 83% of the total cost attributed to diabetes by the Diabetes Cost Model.

### Economic Cost of Diabetes in Prince Edward Island by Source in 2010



### Economic Cost of Diabetes in Prince Edward Island in Millions of 2009 (Dollars Table 3)

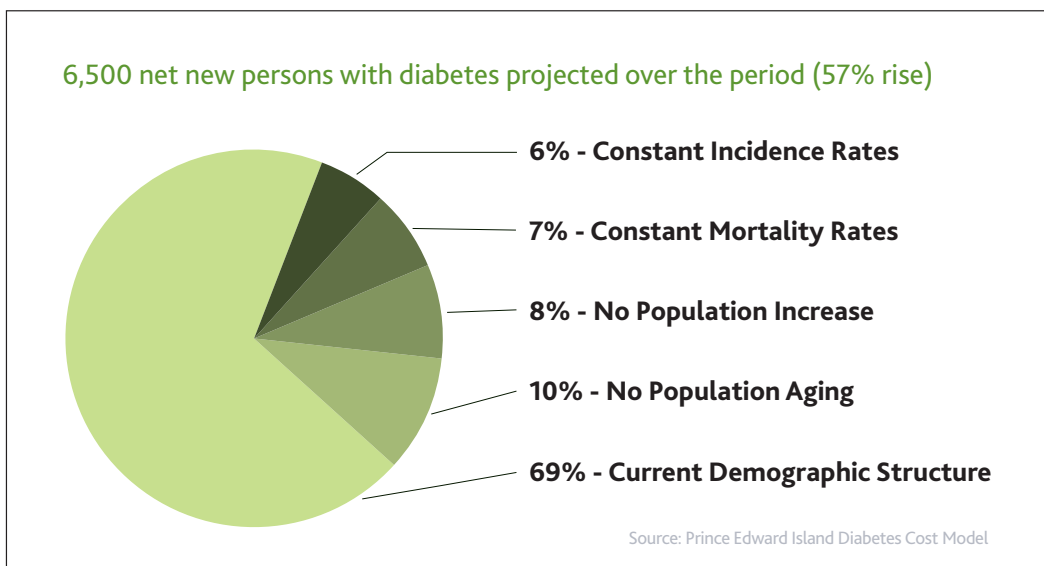
	2000	2010	2020
Direct Hospitalization	3	5	8
Net CVD Hospitalization	0	1	1
Net Doctor Visits: General Practitioner	1	1	2
Net Doctor Visits: Specialist	1	1	2
Drugs/medications for Diabetes	1	3	4
Net Mortality	17	41	51
Long-Term Disability	5	10	13
<b>Total</b>	<b>28</b>	<b>61</b>	<b>81</b>



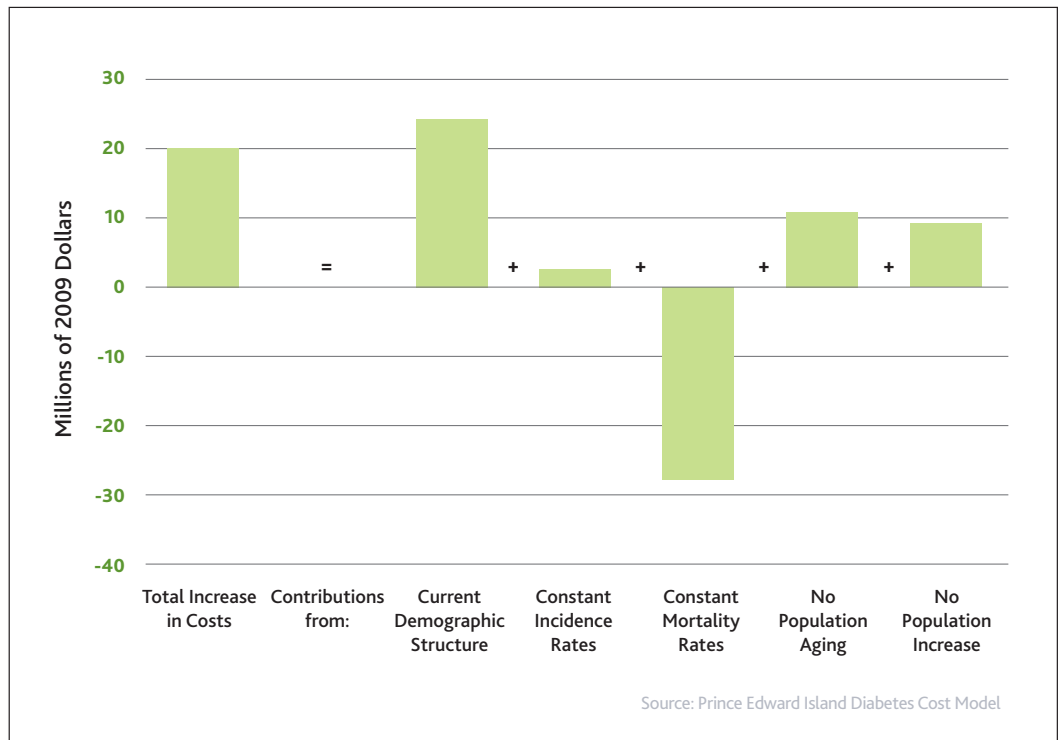
## The Factors Driving Diabetes Prevalence and Costs in Prince Edward Island

Over the next decade, population growth, an aging population, rising incidence rates and declining mortality rates will be responsible, in part, for the 6,500 net increase (a 57% rise) of people diagnosed with diabetes in Prince Edward Island. About 70% of the increase is, however, locked-in – based on the prevalence of diabetes and the province’s current demographic structure – due to the number of net new people diagnosed with diabetes in Prince Edward Island each year. These same factors are also responsible for the projected \$20 million increase in costs over the next decade. While declining mortality rates for persons with diabetes increases the prevalence of the disease over the period, also decrease the cost of the disease associated with premature mortality.

### Factors Driving the Increase in Prevalence from 2010 to 2020



### Factors Driving the Increase in Costs from 2010 to 2020



## About the Canadian Diabetes Association

Today, more than nine million Canadians live with diabetes or prediabetes. Across the country, the Canadian Diabetes Association is leading the fight against diabetes by helping people with diabetes live healthy lives while we work to find a cure. Our community-based network of supporters help us provide education and services to people living with diabetes, advocate for our cause, break ground towards a cure and translate research into practical applications.

For more information, please visit [diabetes.ca](http://diabetes.ca)  
or call 1-800-BANTING (226-8464).

This initiative was supported by an unrestricted  
educational grant provided by



We thank Novo Nordisk Canada Inc. for its ongoing  
commitment to diabetes in Canada.