



## **2019-2020 Pre-Budget Submission**

**Submitted to the Honourable Joe Ceci, Minister of Finance  
Government of Alberta**

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## About Diabetes Canada

Diabetes Canada is a registered charitable organization that leads the fight against diabetes by helping those affected by diabetes to live healthy lives and preventing the onset and consequences of diabetes while we work to find a cure.

Diabetes Canada is the driving force to build awareness of the disease and its implications, which are often misunderstood and is the national voice for millions of Canadians living with diabetes or prediabetes.

End Diabetes is our rallying cry to end the terrible health impacts of diabetes, including heart attacks, strokes, kidney failure, blindness and amputation, as well as its shame, blame, stigma and misinformation. It's also time to End Diabetes altogether with a cure.

## Executive Summary

Today, approximately 1.1 million Albertans are living with diabetes or prediabetes, which represents one quarter of the provincial population. The increasing rate of diabetes and its serious and costly complications continue to place a serious burden on Albertans living with the disease and their families and on Alberta's publicly funded health-care system.

To alleviate cost pressures on both Albertans living with diabetes and the health-care system, Diabetes Canada recommends that the government adopt the following recommendations, and assign adequate resources, in its upcoming budget:

- **Publicly fund the supplies and devices Albertans with diabetes need to monitor their blood sugar.**
- **Publicly fund amputation prevention devices for Albertans with a diabetic foot ulcer.**
- **Expand the provincial *Guidelines for Supporting Students with Type 1 Diabetes in School* to include support for daily management tasks.**
- **Support Diabetes 360° framework for a nation-wide diabetes strategy.**

## Introduction

Today, 24 per cent of Alberta's population, or 1.1 million, live with diabetes or prediabetes. While Alberta currently has the lowest diabetes rate among the provinces in Canada, it has experienced a 73 per cent increase in prevalence over the last ten years (2009-2019), the largest among provinces. Over the next ten years, Alberta is facing another 48 per cent increase in diabetes prevalence, again the largest among all provinces.<sup>1</sup>

Diabetes is the leading cause of blindness, kidney failure and non-traumatic amputation. Compared to those without diabetes, Albertans living with diabetes are 2 to 4 times more likely to be hospitalized for cardiovascular or kidney disease, and over 14 times more likely for lower limb amputations. Adults with diabetes spend over 2.5 times the number of days in hospital each year than people without diabetes; and children and adolescents spend over 7 times the number of days in hospital than those without diabetes.<sup>2</sup>

In Canada, diabetes is associated with 30 per cent of strokes, 40 per cent of heart attacks, 50 per cent of dialysis due to kidney failure, and 70 per cent of non-traumatic amputations every year. We estimate that in 2019 diabetes will cost the Alberta health-care system \$436 million with 80 per cent of this cost attributed to treating its complications.

## Issues and Recommendations for Alberta's 2019-20 Budget

### **Issue #1:**

#### **Many Albertans with diabetes are unable to access the blood sugar monitoring supplies and devices they need to self-manage their diabetes.**

Self-management is a cornerstone of diabetes care so that individuals can work to prevent or delay the serious complications of the disease. Diabetes self-management includes balancing medications (e.g. insulin and/or pills) with eating and physical activity. Monitoring blood sugar is necessary in order to know if blood sugar is being maintained within a target range. Blood sugar levels that run too high (hyperglycemia) can over time lead to the serious and costly complications.

Monitoring blood sugar is also the only way to immediately determine if an individual with diabetes is experiencing hypoglycemia (low blood sugar) which can be life-threatening if not promptly treated with fast-acting sugar. Some people with diabetes are not able to recognize the symptoms of hypoglycemia so must have a means of regularly knowing their blood sugar level.

Diabetes Canada's *2018 Clinical Practice Guidelines* recommend that the frequency of blood sugar monitoring be individualized to suit individual unique circumstances, based on type of diabetes, the treatment prescribed, the need for information about blood sugar levels (prompted by a tendency to have hypoglycemia, lack of awareness of hypoglycemia, inadequate glycemic control, occupational requirements and acute illness); and the individual's capacity to use the information from testing to modify behaviours or adjust medications.

### **A. Blood glucose test strips**

Currently, Albertans who require insulin to manage their diabetes have access to only \$600 per year for all their diabetes supplies through the Alberta Blue Cross Non-Group Coverage and Coverage for Seniors plans. Albertans with type 2 diabetes who must also self-manage their disease but do not use insulin have no coverage under these plans. (Alberta Health programs for low income Albertans and for Albertans who are eligible for the insulin pump program do provide better access to blood glucose test strips.) For working and retired Albertans with no other coverage, Alberta falls short of meeting Diabetes Canada's recommendations for minimum quantities of test strips for public reimbursement.

Diabetes Canada completed an Alberta White Paper on self-monitoring of blood glucose test strip reimbursement options that was formally submitted to the government in 2018. The paper analyzes utilization and expenditures under Alberta public programs and projects that Alberta could reduce expenditures in the low-income programs by introducing utilization limits in line with other provinces. In turn, this would help to offset higher expenditures in the Alberta Health programs by enhancing quantity limits of blood glucose test strips.

### **B. Continuous glucose monitors**

Alberta and other provinces do not provide public coverage for devices that help people with specific needs to optimally monitor and manage their blood sugar levels. The most recent recommendations for use were released by Health Quality Ontario (HQO). HQO recommends publicly funding continuous glucose monitoring (CGM) for patients with type 1 diabetes who are willing to use CGM for the vast majority of the time and who meet one or more of the following criteria:

- Severe hypoglycemia without an obvious precipitant, despite optimized use of insulin therapy and conventional blood glucose monitoring, and/or
- Inability to recognize, or communicate about, symptoms of hypoglycemia.

### **C. Flash glucose monitors**

Similarly, Health Quality Ontario's draft report, released January 2019, recommends publicly funding flash glucose monitoring systems for:

- People with type 1 diabetes who experience recurrent hypoglycemia despite frequent self-monitoring of blood glucose and efforts to optimize insulin management, and
- People with type 2 diabetes requiring intensive insulin therapy (multiple daily injections or use of insulin pump) who experience recurrent hypoglycemia despite frequent self-monitoring for blood glucose and efforts to optimize insulin management.

#### **Recommendation #1:**

The Government of Alberta enhance access to the supplies and devices needed to monitor blood sugar so that Albertans with diabetes can live healthy lives and prevent or delay the serious complications of the disease.

## **Issue #2**

### **Every 22 hours in Alberta, someone has a lower limb amputated due to a diabetic foot ulcer.**

Diabetic foot ulcers are serious wounds that are common, debilitating and one of the most feared consequences of diabetes. They are the leading cause of all non-traumatic amputations below the knee in Canada. Each year, close to 400 Albertans with diabetes have a lower-limb amputation.

Up to 85 per cent of these amputations may be prevented if foot ulcers are properly treated. When a diabetic foot ulcer heals properly, a person spends approximately five days in the hospital, ER and clinics. Alternatively, with lower limb amputations, a person spends approximately 86 days in the hospital, ER and clinics – dramatically increasing the burden on people with diabetes and our health-care system.

Devices, including total contact casts and removable cast walkers, that relieve pressure on foot ulcers to help them heal and reduce risk of amputation are available to Albertans, but they are expensive. A device to prevent amputation can cost up to \$2,500.

Diabetic foot ulcers directly cost Alberta's health-care system an estimated \$70-\$86 million a year, but the cost to provide offloading devices plus orthotist visits would be \$4.4-\$7.4 million a year. Therefore, with public funding the direct costs related to diabetic foot ulcers would fall by an estimated \$17.3-\$20.4 million a year, **creating a net savings of \$9.9-\$15.9 million annually.**

#### **Recommendation #2**

The Government of Alberta implement public coverage and ensure timely access to medical devices that help treat diabetic foot ulcers and reduce the risk of amputation.

## **Issue #3:**

### **Children with diabetes do not have consistent and adequate support with their daily diabetes management tasks and are at risk of emergency situations while attending schools in Alberta.**

Type 1 diabetes requires treatment with insulin, close monitoring of blood sugar levels, and careful balance of diet and physical activity every day. Ongoing effective self-management helps to avoid serious health problems from occurring, from emergency situations such as severe hypoglycemia (low blood sugar) to long-term complications such as heart disease, blindness, amputation and kidney failure.

Given that children spend 30 to 35 hours in school per week, these children and their families need support to effectively manage diabetes at school. While most students can manage their diabetes independently, some may need help with blood sugar testing or insulin administration, such as very young children.

The Government of Alberta has acknowledged this as an important issue and has expressed its desire for children with type 1 diabetes to have the same opportunities to learn and participate at school as children without diabetes. Diabetes Canada and parents across Alberta are pleased with the work of the government to date and look forward to the release of the *Guidelines for Supporting Students with Type 1 Diabetes at School* on February 12, 2019 by the Minister of Education, the Honourable David Eggen. However, if children with type 1 diabetes are to truly benefit, work must continue so that the Guidelines are made mandatory as well as include support for insulin administration and blood sugar checking for children who are unable to self-manage.

### **Recommendation #3:**

Diabetes Canada recommends the Government of Alberta continue its work to establish a mandatory provincial standard of care for students with type 1 diabetes that is in line with Diabetes Canada's *Guidelines for the Care of Students Living with Diabetes at School* and the Canadian Paediatric Society's position statement "Managing type 1 diabetes in school: recommendations for policy and practice".

### **Issue #4**

**The World Health Organization recommends that every country implement a national diabetes strategy, yet despite higher prevalence and per capita costs of diabetes than most of the world's developed nations, Canada has been without one since 2013.**

With an aging population and exploding growth rates amongst at-risk populations – from South Asians to Indigenous Canadians – Canada's diabetes burden will continue its rise over the next decade. Both prevalence and direct costs for treating the disease in Canada have been rising at a rate of 4 per cent and 10 per cent respectively per year and show no signs of slowing down. Treating diabetes costs Canada's health care system \$28 billion per year and will approach \$40 billion per year by 2028, unless we act with a sense of urgency.

Canada needs a strategy to coordinate the efforts underway in all provinces and territories to combat this epidemic, one which would bring Canada in line with global best practice, reduce the human burden of this disease significantly in a very short period and achieve savings in health care costs.

Diabetes Canada partnered with representatives from more than 100 stakeholder organizations over the past year to develop Diabetes 360° – a measurable, outcome-focused national strategy for the prevention and management of diabetes. It is based on the hugely successful 90-90-90

model implemented globally to combat HIV/AIDS and is the product of collaboration among 129 stakeholders including representation from nine provincial governments. If implemented, the strategy could achieve \$9 billion in health care cost savings across Canada from diabetes prevention alone over seven years.

The Diabetes 360° framework includes specific evidence-based recommendations in the areas of prevention, screening, treatment and patient outcomes for diabetes, and is set up to deliver results in just seven years by focusing on the following key targets:

- 90 per cent of Canadians live in an environment that preserves wellness and prevents the development of diabetes
- 90 per cent of Canadians are aware of their diabetes status
- 90 per cent of Canadians living with diabetes are engaged in appropriate interventions to prevent diabetes and its complications
- 90 per cent of Canadians engaged in interventions are achieving improved health outcomes

These targets are based on extensive consultation and rigorous analysis of research, and the actions required for their achievement are detailed in our Diabetes 360° report.

Diabetes Canada has submitted its recommendations for a nationwide diabetes strategy to the Government of Canada and requests the establishment of a seven-year national partnership with the federal government's strategic investment of \$150 million over the seven years. The partnership would collaborate with provinces and territories, civil society and private sector to prioritize and implement programs to achieve the Diabetes 360° targets and then sunset.

#### **Recommendation #4**

The Government of Alberta express its support to the Federal Government for a nationwide diabetes strategy and commit to partnering with federal, provincial and territorial governments to implement the Diabetes 360° strategy framework.

## **Conclusion**

The recommendations contained in Diabetes Canada's pre-budget submission represent our priorities for government investments. By adopting these recommendations, the government will meaningfully improve the lives of Albertans living with diabetes, reduce the health-care costs associated with diabetes, increase productivity of the workforce and ensure students with diabetes are not excluded, stigmatized or discriminated against while at school. Diabetes Canada will continue working with the government and other stakeholders towards achieving optimal health outcomes for people with diabetes and those at risk of diabetes. We thank the Alberta government for the opportunity to provide these recommendations.

## References

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<sup>1</sup> Canadian Diabetes Association. (2013). Canadian Diabetes Cost Model.

<sup>2</sup> Johnson, J.A., Rabi, D.M., Edwards, A.L. ... & Balko, S.U. (2009). Diabetes and health care utilization in Alberta. Alberta Diabetes Atlas 2009. Accessed from [https://www.researchgate.net/profile/Doreen\\_Rabi/publication/265099105\\_Chapter\\_4\\_Diabetes\\_and\\_Health\\_Care\\_Utilization\\_in\\_Alberta/links/5458f3190cf2bccc4912afca.pdf](https://www.researchgate.net/profile/Doreen_Rabi/publication/265099105_Chapter_4_Diabetes_and_Health_Care_Utilization_in_Alberta/links/5458f3190cf2bccc4912afca.pdf)