



Submission to
the Honourable Donna Harpauer, Minister of Finance
for consideration
for Saskatchewan Budget 2018-19

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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 by preventing the onset and consequences of diabetes while we work to find a cure. Our staff and more than 20,000 volunteers, including health-care professionals, provide education and services to help people in their daily fight against the disease, advocate on behalf of people with diabetes for the opportunity to achieve their highest quality of life, and break ground towards a cure.

About a renewed Canadian diabetes strategy for diabetes and related chronic conditions: 90-90-90

Diabetes is a vast and growing epidemic which costs our health care system many billions of dollars each year. If current growth trends continue, this debilitating disease will erode Canada's social and economic fabric and bankrupt the health-care system. International best practice suggests Canada could benefit from adopting a renewed Canadian Strategy for Diabetes – one which achieves greater impact through the inclusion of more targeted, measurable outcomes. To establish these outcomes, Canada can learn from the experience of UNAIDS with establishing a 90-90-90 target to end the HIV/AIDS epidemic, and modify the target to the context of diabetes in Canada.

A 90-90-90 strategy for diabetes and related chronic conditions in Canada developed to measure performance against key metrics will support better prevention and management of diabetes in Canada. The strategy will promote health equity and access to care for all Canadians by making screening, diagnosis, and support for self-management of diabetes more uniformly available to those affected.

Much work involving multiple stakeholders will need to be done in order to confirm specific definitions, outcomes and measures for 90-90-90 for diabetes in Canada. However, as a starting point for thinking and discussion, below are some possibilities we can consider:

1. Target 1: 90% of Canadians at risk for or living with diabetes know their status.
2. Target 2: 90% of those at risk of or living with diabetes are receiving treatment.
3. Target 3: 90% of Canadians receiving treatment for diabetes have improving health.

Diabetes in Saskatchewan

According to Diabetes Canada's Diabetes Cost Model, 100,000 people have diabetes in Saskatchewan representing 9.1 per cent of the total population. Between 2007 and 2017, the number of people diagnosed with diabetes has increased by about 56%.

The fact that approximately 9.1 per cent of the population has diabetes is alarming, but this does not represent the full burden of diabetes. About one-third of people with diabetes are, in fact, undiagnosed. There are also an estimated 176,000 people living with prediabetes, a precursor to type 2 diabetes. With undiagnosed diabetes and prediabetes factored in, an estimated 320,000 people live with diabetes or prediabetes, representing 29 per cent of Saskatchewan's population. The increasing rate of diabetes and its complications, including heart attack, stroke, blindness, amputation and kidney failure poses a serious burden on the quality of life of the people of Saskatchewan and is estimated to have cost the province \$100 million in 2017.

To address the escalating burden of diabetes in Saskatchewan, Diabetes Canada urges the Government of Saskatchewan to implement the following recommendations as measures to reduce the burden of diabetes in the province:

1. Establish a Provincial Diabetes Pathway
2. Expand the insulin pump program
3. Enhance access to medications
4. Establish a provincial standard of care for kids with diabetes in school

1. A Provincial Diabetes Pathway

A care pathway is defined as "a multidisciplinary management tool-based healthcare plan for a specific group of patients with a predictable clinical course, in which the different tasks by the professionals involved in the patient care are defined, optimized and sequenced."ⁱ Pathways are intended to promote standardized care and reduce inappropriate clinical variation. They help achieve consistency in assessment and treatment approaches, may reduce wait times for access of key services, increase efficiencies in processes, and can improve patient experience and health outcomes. Saskatchewan has already demonstrated several different clinical pathways to help patients access timely and appropriate services. To date, these include hip and knee, spine, prostate assessment, bariatric surgery, pelvic floor, acute stroke, lower extremity wound, and fertility care pathways.ⁱⁱ Similarly, the Government of Alberta has a diabetes foot care clinical pathway in place that is used by provincial health authorities to guide providers in the early detection of foot problems, the selection of effective treatment options and the offer of appropriate support services.ⁱⁱⁱ These pathways help to put the patient at the centre of care and guide health care providers' management of disease.

Diabetes Canada Recommendation:

The Government of Saskatchewan work with Diabetes Canada to articulate a diabetes pathway for people at risk of and living with diabetes in the province.

2. Insulin pump program

Optimal diabetes management is **key** to decreasing the risk of complications, such as heart attack, stroke, blindness, amputation and kidney failure. However, managing diabetes in Saskatchewan is costly for many individuals, as treating its complications is to the healthcare system.

Diabetes Canada estimates that adults with type 1 diabetes who rely solely on public coverage and take insulin through multiple daily injections can spend on average \$700 to \$2,700 a year to manage their diabetes, depending on their income.^{iv} For people with type 1 diabetes who meet medical criteria for insulin pump therapy and choose to use an insulin pump, the Government of Saskatchewan will offset the cost of the pump (\$6,000 to \$7,000 a year on average) and supplies (\$2,000 to \$4,000 a year on average). However, this reimbursement program is currently only available to those 25 years of age and under. Others must pay anywhere between \$4,300 and \$6,200 annually, depending on their age and income.^v

Evidence shows that intensive insulin therapy using an insulin pump can lead to better blood sugar control and patient outcomes compared to multiple daily injections of regular or long-acting insulins, as clearly stated in Diabetes Canada's *Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*:

- Insulin pump therapy is a safe and effective method of intensive insulin therapy for people with type 1 diabetes, and has shown improvements in blood sugar control over other insulin therapies.
- Insulin pump therapy may provide some advantages over other methods of intensive therapy, particularly in individuals with specific clinical characteristics.
- Insulin pump therapy results in fewer episodes of severe hypoglycemia (low blood sugar) compared to multiple daily injections.

Insulin pump therapy is available to all eligible individuals in Alberta, Ontario, the Territories and those eligible for non-insured health benefits (NIHB) coverage.

Diabetes Canada Recommendation:

The Government of Saskatchewan expand the insulin pump program to all eligible individuals with type 1 diabetes, regardless of age.

3. Diabetes medications

Access to medications can improve the quality of life for those living with diabetes and decrease the likelihood of having to undergo future medical interventions due to

complications. Those living with diabetes are at risk of developing a variety of complications, including heart attack, stroke, blindness, amputation and kidney failure. If diabetes is left untreated or is not well managed (e.g. fluctuating blood sugar levels), the risk of experiencing complications increases substantially.

Proper diabetes management, therefore, is vital. Drug therapy is one form of treatment for diabetes. In order for those living with diabetes to be able to access the medications they need, diabetes medications must be listed on the provincial formulary, be prescribed appropriately, and individuals must be able to afford the cost of the drug, or the deductibles and copayments required to purchase the drug.

Recent studies have shown that some newer diabetes drugs, within the GLP-1R agonist and SGLT-2 inhibitor classes of medications, significantly improve mortality for patients with type 2 diabetes and pre-existing cardiovascular disease. CADTH also published recommendations that support specific SGLT-2 inhibitors for second-line therapy directly after metformin for specified populations.^{vi}

Currently, all people with type 2 diabetes in Saskatchewan are required to try therapy with insulin or a sulfonylurea after treatment with metformin. This is inconsistent with the most up-to-date research and recommendations for diabetes care. When clinicians are constrained by outdated access criteria, it is extremely challenging for them to prescribe the best course of treatment for their patients. Patients are denied health benefits from proven therapies. And when patients' access to medications that have the potential to improve their outcomes is limited, the health-care system may be unnecessarily burdened by costly complications that result.

[Diabetes Canada Recommendation:](#)

The Government of Saskatchewan enhance access to diabetes medications on the provincial formulary.

4. Kids with diabetes in school

An estimated 1,400 kids and adolescents (ages 1-19) in Saskatchewan have type 1 diabetes – an autoimmune disease that is neither preventable, nor curable. The only treatment is daily injections/infusions of insulin, combined with multiple blood sugar checks and maintaining a careful balance between insulin, food and activity.

A supportive school environment is critical to keeping students with diabetes safe and healthy. Proper diabetes management reduces the risk of life-threatening emergencies, prevents or reduces the risk of serious long-term complications, such as heart attack, stroke,

amputations, blindness and kidney failure. It also ensures that students with diabetes are able to learn and participate fully in all school activities.

In Saskatchewan there is no uniform standard of care for students with type 1 diabetes which place students with diabetes at risk. Parents are often left struggling to find in-school supports that their children need as well as face countless challenges to prevent their children from being stigmatized at school and ensure their children's safety, long-term health and academic potential.

- Most schools will not permit training for school staff to help monitor blood sugar or administer insulin for students who are newly diagnosed or too young to independently self-manage.
- Many schools will not train staff to administer glucagon to a student with diabetes in the event of a life-threatening emergency (e.g. severe low blood sugar).
- Many schools will not permit students with type 1 diabetes to perform blood sugar checks or administer insulin wherever and whenever required.
- Many schools fail to adequately accommodate students with diabetes (e.g. students are denied participation in field trips; students with low or high blood sugar are made to write exams when their cognitive abilities are impaired, etc.)

Saskatchewan has fallen behind. There is no province-wide standard of care to protect students with type 1 diabetes. British Columbia, Nova Scotia, New Brunswick, Newfoundland and Labrador, Ontario and Quebec all have province-wide policies or guidelines in place to support children with diabetes.

Diabetes Canada's Recommendation:

The Government of Saskatchewan establish a mandatory standard of care for students with diabetes that is in-line with Diabetes Canada's *Guidelines for the Care of Students Living with Diabetes in School*.

Conclusion

We urge the Government to implement the recommendations presented in this submission, to ensure people living with diabetes in Saskatchewan have the support to achieve their health potential. With concerted efforts and strong leadership from the Government, in close collaboration with key stakeholders in the diabetes community, we can bend the impact curve of diabetes and significantly improve the lives of those with diabetes and all residents of Saskatchewan

References

- ⁱ European Pathway Association. (no date). Care Pathways. Belgium: EPA. Retrieved from <http://e-p-a.org/care-pathways/>.
- ⁱⁱ Government of Saskatchewan. (no date). Using Patient Pathways. Saskatchewan: Government of Saskatchewan. Retrieved from <http://www.sasksurgery.ca/provider/patientpathways.html>.
- ⁱⁱⁱ Alberta Health Services. (2017). Diabetes Foot Care Clinical Pathway. Alberta: Alberta Health Services. Retrieved from <http://www.albertahealthservices.ca/scns/Page10321.aspx>.
- ^{iv} Estimated out-of-pocket costs for type 1 and type 2 diabetes are calculated based on composite case studies. As such, the estimates may reflect the out-of-pocket costs for many people with diabetes in Saskatchewan, but not all. The costs are 2015 estimates and may vary depending on income and age. For details on the methodology and estimates, please see the appendix in the Diabetes Canada's *2015 Report on Diabetes: Driving Change*, available at <https://www.diabetes.ca/getmedia/5a7070f0-77ad-41ad-9e95-ec1bc56ebf85/2015-report-on-diabetes-driving-change-english.pdf.aspx>.
- ^v Estimated out-of-pocket costs for type 1 and type 2 diabetes are calculated based on composite case studies. As such, the estimates may reflect the out-of-pocket costs for many people with diabetes in Saskatchewan, but not all. The costs are 2015 estimates and may vary depending on income and age. For details on the methodology and estimates, please see the appendix in the Diabetes Canada's *2015 Report on Diabetes: Driving Change*, available at <https://www.diabetes.ca/getmedia/5a7070f0-77ad-41ad-9e95-ec1bc56ebf85/2015-report-on-diabetes-driving-change-english.pdf.aspx>.