

AT THE TIPPING POINT: Diabetes in British Columbia

Overview

KEY STATISTICS ¹	2013	2020
Estimated diabetes prevalence	8.3%	10.3%
Estimated number of people with diabetes	400,253	548,000
Estimated number of people with type 1 diabetes	31,356	35,522
Estimated prediabetes prevalence	21%	21.6%
Estimated cost of diabetes	\$1.5 billion	\$1.9 billion
Estimated annual out-of-pocket cost for type 1 diabetes (income level: \$/% of annual individual income)	<\$15K: \$475/3.3% \$43K: \$1925/4.5% \$75K: \$2481/3.3%	
Estimated annual out-of-pocket cost for type 2 diabetes (income level: \$/% of annual individual income)	<\$15K: \$2033/6.8% \$43K: \$2313/5.4% \$75K: \$2880/3.8%	
Estimated diabetes prevalence increase	37% (from 2013 to 2020)	
Estimated cost increase	25% (from 2013 to 2020)	

Policy Framework

Provincial strategy

- Chronic disease strategy

Major Developments since Diabetes: *Canada at the Tipping Point – Charting a New Path Report, 2011*

- Healthy Families BC Strategy (2011) which focuses on healthy eating, healthy communities, healthy lifestyles and healthy start for babies.
- Childhood Healthy Weights Intervention Initiative (2013)
- The reduction in generic drug pricing. As of April 1, 2013, the price of generics dropped from 35% to 25% and will further drop to 20% by April 1, 2014.
- Adding detemir (Levemir) and linagliptin (Trajenta) to the provincial formulary, by special authority. (2011, 2012)

KEY INDICATORS	RANKING ²
Diabetes Prevalence	Middle
Prevalence Increase	Bottom
Prediabetes Prevalence	Top
Cost Increase	Bottom
Out-of-pocket cost for type 2 diabetes	Middle

¹ Estimated annual out-of-pocket costs for type 1 and type 2 diabetes are calculated based on composite case studies as noted in *The Burden of Out-of-Pocket Costs for Canadians with Diabetes*. As such, these situations apply to many people with diabetes in British Columbia, but not all.

² Top performers are those jurisdictions with the lowest prevalence, cost burden and type 2 diabetes out-of-pocket costs. Bottom performers are those jurisdictions with the highest results in prevalence, cost burden and type 2 diabetes out-of-pocket costs. Middle performers fall in between these indicators.

- Delisting of acarbose (Glucobay) from the drug formulary. (2012)

Factors Influencing Diabetes in British Columbia

- BC has fewer risk factors for developing type 2 diabetes, including far lower rates of overweight and obesity, prediabetes, and higher medium incomes than other provinces and territories.
- However, BC has concentrations of people whose risk of developing type 2 diabetes is higher than the national average, including South Asian, Chinese and Aboriginal populations. This may partially explain the significant estimated increase in diabetes prevalence from 2013-2020.

Other Best Practices

- BC's *Primary Health Care Charter* identifies diabetes management as a priority medical condition and establishes outcome measures.
- BC introduced public coverage for insulin pumps and supplies for children and youth (18 and under) in 2008.
- BC requires that people with type 2 diabetes visit a diabetes educator before gaining access to test strips coverage under the PharmaCare program.
- BC has family practice incentive programs and billing codes for physicians providing care for chronic illnesses, including diabetes.
- BC's Guidelines and Protocols Advisory Committee produced a diabetes care guideline.
- BC's public health plan, *Promote, Protect, Prevent: Our Health Begins Here*. BC's *Guiding Framework for Public Health* includes age-standardized incidence rate for diabetes as a plan performance measure.

Coverage for Medications, Devices and Supplies

Two composite case studies were compiled for *Diabetes: Canada at the Tipping Point - Charting a New Path* to show the challenges faced by Canadians living with diabetes. Access to medications, supplies and devices still depends upon where they live in Canada. Below is a snapshot of coverage in British Columbia.

COVERAGE FOR DIABETES MEDICATIONS	
L –	Cost will be fully or partially covered according to the terms of the BC drug formulary.
R –	Only available to those who meet eligibility criteria and are preapproved by BC drug formulary.
NL –	Not available through the BC drug formulary.
DL -	Has been removed from the formulary, and therefore no longer available through the public drug plan.
acarbose (Glucobay)	DL
sitagliptin (Januvia)	R
saxagliptin (Onglyza)	NL
linagliptin (Trajenta)	R
liraglutide (Victoza)	NL
exanatide (Byetta)	NL
insulin aspart (NovoRapid)	L
glulisine (Apidra)	L
lispro (Humalog)	L
insulins, Regular	L
pork insulin (Hypurin regular & NPH)	R
detemir (Levemir)	R
glargine (Lantus)	R
gliclazide (Diamicron)	R
glimepiride (Amaryl)	NL
glyburide (Diabeta, Euglucon)	L
tolbutamide	L
nateglinide (Starlix)	NL
repaglinide (Gluconorm)	NL
metformin (Glucophage, Glumetza)	L
pioglitazone (Actos)	R
rosiglitazone (Avandia)	NL
metformin & rosiglitazone (Avandamet)	NL
glimepiride & rosiglitazone (Avandaryl)	NL
sitagliptin & metformin (Janumet)	R
linagliptin & metformin (Jentadueto)	NL
Totals: 7 Listed; 8 Restricted; 10 Not Listed	

COVERAGE FOR SUPPLIES AND DEVICES ³			
Janet, 22, Type 1 Diabetes Composite Case Study: No deductible. 70% gov't co-pay of Rx and medical supply costs until maximum of 2% of net family income reached, then 100% gov't coverage.		Peter, 52, Type 2 Diabetes Composite Case Study: Deductible: 3% of net family income. 70% gov't co-pay of Rx and medical supply costs until maximum of 4% of net family income reached, then 100% gov't coverage	
Blood Glucose strips	✓	Blood Glucose strips	✓
Ketone strips	✗	Ketone strips	✗
Lancets	✗	Lancets	✗
Meters	✗	Meters	✗
Syringes/Pen needles	✓	Oral medications	✓
Pumps	≤18	Infusion sets	
Pump supplies	Infusion sets		
Insulin	✓		

RECOMMENDATIONS

1. Extend the coverage for insulin pumps to include all British Columbians with type 1 diabetes who would benefit as medically prescribed, regardless of age.

All people with type 1 diabetes are at high-risk of developing one or more serious long-term complications. Expanding the insulin pump program to include people with type 1 diabetes over the age of 18 will not only help improve the quality of life of these individuals, but also reduce the burden on the publicly-funded healthcare system by preventing or delaying serious and costly complications from diabetes.

2. Expand the weight reduction support for those who are obese under the Healthy Families BC initiative to include people who are overweight.

Over half of the adults and close to one in three children and youth in the province are overweight or obese. However, it is important to note that those who are overweight (BMI 25-30) carry a greater population risk of type 2 diabetes, meaning more new cases of type 2 diabetes will come from those who are overweight rather than obese. Therefore, we encourage the government to expand support for weight reduction to include people who are overweight.

3. Enhance access to diabetes medications, devices and supplies to effectively prevent or delay secondary complications from diabetes.

High out-of-pocket costs for diabetes-related medications, devices and supplies, as well as lack of access to recommended diabetes care, continue to be a barrier for many British Columbians with diabetes to effectively manage their disease. Thus, we encourage the government to improve access to medications for diabetes and related complications, and implement measures to ensure British Columbians with diabetes receive all four tests as recommended: HbA1C test, urine protein test, dilated eye exam and foot check.

³ Based on composite case studies as noted in *Diabetes: Canada at the Tipping Point - Charting a New Path*; see note 1.