

Coverage of Self-Monitoring of Blood Glucose (SMBG) Strips



Background

There are over 3.5 million people living with diagnosed diabetes in Canada. Diabetes is a chronic, progressive disease that affects the body's ability to regulate the amount of glucose (sugar) in the blood. It has no cure but can be managed through an individualized combination of lifestyle approaches and medications.

Self-monitoring of blood glucose (SMBG) is one way for people living with diabetes to measure and assess their glycemic control. A sample of blood, usually drawn from the fingertip, is applied to a test strip and analyzed within seconds by a glucometer to provide a glucose reading. According to Diabetes Canada's 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada, SMBG is the "optimal way to confirm and appropriately treat hypoglycemia" (low blood sugar).¹ SMBG also provides data that can guide short and long-term treatment modifications and increase empowerment and adherence to therapy.¹ Those with diabetes are advised to work with their care team to determine the frequency and pattern of testing that is right for them.

In Canada, SMBG test strips cost, on average, \$0.79 each.² Reimbursement from the government for test strips is provided through provincial drug plans and is based on prescribed course of treatment, age and income (see chart on page 2).

Challenges

Public coverage varies across the country. Some provincial plans reimburse the entire cost of test strips for people who are eligible, and others provide little to no reimbursement at all. Diabetes Canada has developed **minimum reimbursement** recommendations for SMBG test strips **based on an evidence review and the expertise of leading clinicians** across the country. Alberta, New Brunswick, Prince Edward Island, and Newfoundland & Labrador lag behind the other provinces, as they do not meet the suggested minimum amounts for yearly coverage to support people's diabetes management.

Policy Implications

The out-of-pocket cost of SMBG test strips is very high for Canadians residing in provinces with limited coverage and/or co-pays and deductibles, and for those who do not meet the eligibility criteria for their provincial plan. Private insurance can help offset the cost of test strips, but approximately 30 per cent of Canadians do not have any.³

Those who cannot afford test strips may be unable to monitor their blood glucose according to best practice recommendations. An absence of SMBG data can make it more difficult for people living with diabetes and their practitioners to properly identify and treat abnormal blood glucose levels, potentially leading to poorer outcomes. Uncontrolled diabetes can have very serious short and long-term effects and represents a burden to individuals, families and Canadian society at large. Significant and unnecessary costs are incurred from lost productivity and high health-care system use secondary to diabetes and its complications.

Recommendations

Diabetes Canada recommends that the provinces of Alberta, New Brunswick, Prince Edward Island, and Newfoundland & Labrador provide reimbursement for SMBG test strips to meet Diabetes Canada's **recommended yearly minimum amount**. Eligibility clauses should allow exceptions without limits to the test strips coverage policy on a case-by-case basis, where clinically indicated. In every jurisdiction, where they are a barrier to access, co-pays and deductibles on test strips should be limited or eliminated. People living with diabetes across Canada should also have access to the education and supports they require that allow them to test with purpose and effectively self-manage their disease.

References

1. Berard LD, Siemens R, Woo V. Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada: Monitoring Glycemic Control. *Can J Diabetes* 2018; 42 (Suppl. 1): S47-S53.
2. Yeaw J, Lee WC, Wolden ML, et al. Cost of Self-Monitoring of Blood Glucose in Canada among Patients on an Insulin Regimen for Diabetes. *Diabetes Ther*. 2012; 3(7):1-17.
3. Diabetes Canada. 2015 Report on Diabetes: Driving Change. Toronto, ON: Diabetes Canada, 2015.

Coverage of SMBG Test Strips

	Diet/ Lifestyle	Oral Medicines with <i>Lower</i> Risk of hypo	Oral Medicines with <i>Higher</i> Risk of hypo	Insulin	Eligibility for Additional SMBG Test Strips
Diabetes Canada Recommended Yearly Minimum Amount	180	180	360	No limits; to be determined for each individual	Additional strips should be approved for clinically valid reasons on an individual basis
Yearly Maximum Amount by Province/Territory					
British Columbia*	200	200	400	3,000	Up to 100 more if approved by MD/HCP at DEC or MD/ endocrinologist if on insulin
Alberta*	0	0	0	\$600 allocated to supplies (including strips) insulin pump users: 2,555	No
Saskatchewan*	200	200	400	3,650	Up to 100 more if approved by MD/NP/pharmacist/CDE
Manitoba*	200	200	400	3,650	Up to 100 more if approved by MD/NP
Ontario*	200	200	400	3,000	100 more at a time if approved by MD
Quebec	200	200	400	3,000	Up to 100 more if approved by HCP providing care
New Brunswick*	50	100	100	As prescribed	Up to 2 requests of 50 more if approved by MD/NP
Nova Scotia*	As prescribed	As prescribed	As prescribed	As prescribed	Not Applicable
Prince Edward Island	0	0	0	1,200 pregnancy: 3,000	No
Newfoundland & Labrador*	50	100	100	Short acting: 2,500 Long-acting: 700	Up to 100 more for long-acting insulin users and 50 more for others if approved by HCP

NOTES: Orange shading denotes inconsistency with Diabetes Canada recommendations for minimum SMBG test strips coverage. * denotes restricted eligibility for SMBG test strip reimbursement based on different criteria (e.g. age, income).

ABBREVIATIONS: hypo = hypoglycemia; DEC = diabetes education centre; MD = medical doctor; HCP = health-care provider; NP = nurse practitioner; CDE = certified diabetes educator.