

Coverage of Advanced Glucose Monitoring Devices



Background

Glucose monitoring gives people living with diabetes a more complete picture of their blood sugar levels, which can influence short- and long-term treatment decisions and improve health outcomes. It can help identify when blood sugar is trending down, which allows for appropriate, timely action to be taken to avoid an episode of hypoglycemia (low blood sugar). It can also provide early indications of an episode of hyperglycemia (high blood sugar) over the course of the day. This can prompt adjustments to medications, activity, and food intake to help keep blood sugar within range, and reduce A1C and the risk of long-term complications, including kidney failure, blindness, and amputation.

Until recently, the standard way to test blood sugar has been to obtain a drop of blood from a finger prick and to get a blood glucose reading using a blood glucose meter. This is called self-monitoring of blood glucose (SMBG). Some people have concerns about SMBG, including the pain of pricking one's fingers (up to several times a day when using insulin therapy) and less thorough information on blood glucose trends.

Advanced glucose monitoring devices have the potential to improve blood sugar management and quality of life for people living with diabetes, resulting in physical, social, emotional, and functional benefits. Currently, there are two advanced glucose monitoring devices available to Canadians: (1) continuous glucose monitoring (CGM), and (2) flash glucose monitoring (GM).

A CGM is a wearable device that can be offered to people with type 1 and type 2 diabetes to improve glycemic management and reduce the risk of hypoglycemia.¹ A CGM includes a small disposable sensor that is worn under the skin (often on the stomach or arm). The sensor tests glucose levels every few minutes and sends this information to an attached

transmitter and, generally, to a separate receiving device, such as a smart phone. The readings can then be viewed by the patient, caregiver, or health-care provider, even remotely. This can be lifesaving for people who experience low blood glucose at night, which puts them at risk of not waking up in the morning.

A flash GM is a method of glucose testing that measures, displays, and continuously stores glucose readings that are recorded automatically. It can be used by adults (ages 18 years and older) with both type 1 and type 2 diabetes, depending on individual circumstances.¹ A flash GM system uses an externally-worn glucose sensor with a small filament inserted under the skin of a person's upper arm. When the sensor is scanned with a separate touchscreen reader device, it transmits the glucose reading and information on the most recent 8-hour trend to the reader. If the person with diabetes performs at least 3 sensor scans per day, at approximately 8-hour intervals, the flash GM can record 24-hour glucose profiles. A sensor can be worn continuously for up to 14 days.

Challenges

While advanced glucose monitoring devices are included in many private and employment health insurance plans, public coverage is inconsistent across Canada. In Canada, CGM is only covered by Yukon, Ontario, and NIHB on a case-by-case basis; and flash GM is only covered by Ontario, Quebec, Yukon, and NIHB on a case-by-case basis. Depending on the province or territory, coverage is restricted by age. The high cost of advanced glucose monitoring devices is a barrier to access for many Canadians living with type 1 and type 2 diabetes.

Policy Implications

Canadians living in provinces and territories with no coverage, limited coverage, or not meeting eligibility

criteria for their provincial/territorial plan must pay out-of-pocket for advanced glucose monitoring devices, which carry an annual price tag of \$3,000 – \$6,000 for CGM and \$2,500 for flash GM. For many people, this cost is prohibitive. Restricted access means a lost opportunity for people with diabetes to enhance their health and safety, support treatment decisions, improve quality of life, and reduce disease management distress.

People living with diabetes across Canada should also have access to the education and support they require that allows them to effectively self-manage their disease with advanced glucose monitoring devices.

References

1. Diabetes Canada Clinical Practice Guidelines Expert Committee, Berard LD, Siemens R, Woo V. Monitoring Glycemic Control. *Can J Diabetes*. 2018 Apr;42 Suppl 1:S47-S53.

Coverage of Advanced Glucose Monitoring Devices Across Canada

Provinces/Territories	Continuous Glucose Monitor (CGM)	Flash Glucose Monitor (GM)
NIHB	Covered on a case-by-case basis by NIHB.	Covered on a case-by-case basis by NIHB.
Yukon	100% coverage for CGM for people living with type 1 diabetes.	100% coverage for flash GM for people living with type 1 diabetes.
Nunavut	No coverage	No coverage
Northwest Territories	No coverage	No coverage
British Columbia	No coverage	No coverage
Alberta	No coverage	No coverage
Saskatchewan	No coverage	No coverage
Manitoba	No coverage	No coverage
Ontario	100% coverage by the ODSP for eligible ODSP clients living with diabetes, if prescribed by a physician or nurse practitioner.	Coverage for the Freestyle Libre reader and 33 sensors per year for ODB clients who manage their diabetes with insulin, if prescribed by a physician or nurse practitioner.
Québec	No coverage	100% coverage for the Freestyle Libre sensors by the RAMQ for Quebec residents 18 years or older who manage diabetes with insulin and meet the specific eligibility criteria. Authorization required.
Newfoundland & Labrador	No coverage	No coverage
New Brunswick	No coverage	No coverage
Nova Scotia	No coverage	No coverage
Prince Edward Island	No coverage	No coverage

Abbreviations: Non-Insured Health Benefits (NIHB); Continuous Glucose Monitor (CGM); Glucose Monitoring (GM); Ontario Disability Support Program (ODSP); Ontario Drug Benefit (ODB); Régie de l'assurance maladie du Québec (RAMQ).