

## Is a CGM right for you?

CGM, or Continuous Glucose Monitor, measures your subcutaneous glucose (that's your sugar level under your skin) every 1-5 minutes, providing a near-continuous trend that typically mirrors your blood glucose.

CGMs have been an absolute game changer to patients on insulin who must check their glucose frequently (before meals, 1 and 2 hours after meals, at bedtime, and in the middle of the night) to ensure that their glucose is in a safe range, to adjust or give extra insulin dose, or to treat a low blood sugar. For those who have hypoglycemia unawareness (when they can't feel their glucose becoming dangerously low), CGMs can be vital tools.

*Lifesaver* candy was given its name because it can treat a low sugar reaction (hypoglycemia). CGMs can be actual lifesavers, because they can predict hypoglycemia so that insulin can be stopped to prevent hypoglycemia from even happening.

When CGMs were first presented to the market, the studies showed that patients could obtain better glucose control with less hypoglycemia. Many times, the barrier to reaching glucose goals is limited by increasing the risk of hypoglycemia. Continuous glucose monitors protect against that.

CGMs are ideal for:

- Patients on insulin shots 4 times per day
- Patients on insulin with risk for hypoglycemia
- Patients on insulin who have hypoglycemia unawareness
- Patients who may dislike needles or finger sticks
- Patients who may not have time in the day to get out their glucose meters to check before each meal

As CGMs became more popular and affordable, more patients have started using them. Many patients report that the data helped them understand which food raises their glucose and which food doesn't. These patients say CGMs helped them tailor their insulin and exercise.

What about people NOT on insulin? Are CGMs covered by insurance in those circumstances?

As the use of CGMs has risen, some patients not on insulin have also started using them. Again, patients report that the information has been valuable in helping them understand the impact of food, exercise, sleep, and stress on glucose levels. However, unlike studies of patients on insulin, there have not been enough studies to show that CGMs help non-insulin patients reduce A1c. For that reason, insurance companies may not cover a CGM device if you are not already on insulin. The *American Diabetes Association* reports that CGMs might be helpful to patients and providers to obtain data on how certain medications, diet, and exercise affect an individual, even if that person is not on insulin. If you are able to afford a CGM without insurance, you may want to consider it if you are having difficulty managing your diabetes.

There are three CGMs on the market, *Abbot Libre*, *Dexcom*, and *Medtronic Guardian*. Abbot sells the Libre 14 and the Libre 2. Both the Libre 14 and the Libre 2 are placed on the back of the upper arm and should be changed every 14 days. The data is sent to a reader or a smartphone. The Libre 14 does not have an alarm, so patients need to scan the device to see the glucose reading. The Libre 2 does have an

alarm for glucose levels that are too low or too high. High levels of vitamin C may affect the readings for both types of Libre devices. The Dexcom is approved for children over 2 and adults and is placed on the abdomen. The data automatically flows to a receiver, as well as Android and Apple devices. Alarms are customizable and predictive. High doses of acetaminophen (the ingredient in *Tylenol* and some cold medications) and hydroxyurea can interfere with the reading. Both the Libre and Dexcom have data that can be shared with providers or family members.

CGMs aren't for everyone. Some people find the additional data intrusive. Others patients have been found to be allergic to the skin adhesive or don't like the feel of something inserted into their bodies. All patients need access to training on how to use and wear the device, and all patients need to be capable of inserting the device by themselves or with the help of a trained family member or caregiver.