

# CONTINUOUS GLUCOSE MONITORING CHART

**The concept** is simple, it allows people with diabetes to discretely monitor their blood sugar levels on a real-time basis via a small device attached to their abdomen. If the monitor indicates a blood glucose high, the patient knows to inject insulin to bring the BG level down. If the monitor indicates low blood glucose, the user can consume quickly absorbed carbohydrates to bring levels back up.

## Advantages

Another advantage is that a CGM device replaces the large number of skin pricks that some people with diabetes, especially type 1s, have to administer to themselves daily. The devices have small sensors placed under the skin that provide glucose readings on a continual basis. Those embedded sensors eliminate the use of blood glucose meters and the discomfort of multiple daily finger pricks (although users are recommended to do some daily finger pricks to calibrate their devices' accuracy).

Another feature is trend spotting, where a CGM not only shows current blood sugar levels but detects trends, up or down, in patients' blood glucose levels. These data can be stored and later used to show users' levels over the long-term.

For several years now, CGM devices have been joined with insulin pumps on some diabetes patients to create a closed-loop system—virtually an "artificial pancreas"—where CGM measurements of low blood sugar cause the insulin pump to inject a corrective dose. Such systems are both expensive and not thoroughly reliable—the ideal situation where people don such devices and go weeks or months without worries about malfunctions is not here yet.

## Manufacturers

The two major CGM manufacturers are Dexcom and Medtronic. The competition between them has resulted in a very quick evolution of CGM size, design, and capabilities.

Dexcom's G5™ offers users the ability to monitor their blood sugar levels via their smartphones, and so does Medtronic. The units are small and unobtrusive, and can stand up to active lifestyles that include fitness training, running, and most sports.

**Remote Monitoring:** Yes. Through secure wireless connections, the Dexcom G5 Mobile CGM System allows remote viewing of glucose levels, trends and data between the person with diabetes and their spouse, grandparent or other loved ones from their compatible smart device.

Keep Your Eye on This Development



Black G5 Dexcom Receiver 202



iPhone G5 transmitter

## Updates in the News

In November, an administrative judge ruled in favor of a type 1 Wisconsin woman who petitioned to have Medicare cover the cost of her continuous glucose monitor. At this time, Medicare considers CGMs to be "precautionary" devices rather than a statutory benefit.

Although the legal process in this matter has not run its course, the judge's ruling accompanies increasing pressure by medical associations and legislators on Medicare to pay for the cost of CGMs and the supplies that accompany them.

To see news of the decision, go to: [www.medpagetoday.com/PublicHealthPolicy/Medicare/54785](http://www.medpagetoday.com/PublicHealthPolicy/Medicare/54785).

**For a comprehensive chart with product and product specifications, go to our website at [www.DiabetesHealth.com/charts](http://www.DiabetesHealth.com/charts).**