

WHAT IS CONTINUOUS GLUCOSE MONITORING?

Continuous Glucose Monitoring (CGM) is a FDA-approved device that provides real-time glucose readings, throughout the day and night, allowing people with diabetes to know their glucose levels and trends with a touch of a button. CGM has been an established technology since 2006 and performance advances throughout the years have made today's systems extremely accurate. A typical CGM provides up to as many as 288 glucose readings per day (once every 5 minutes). CGM does not completely eliminate the need for blood glucose meter readings but provides additional information for more informed treatment decisions and improved glucose control. CGM can be used by people with Type 1 or Type 2 who are concerned with their diabetes management.

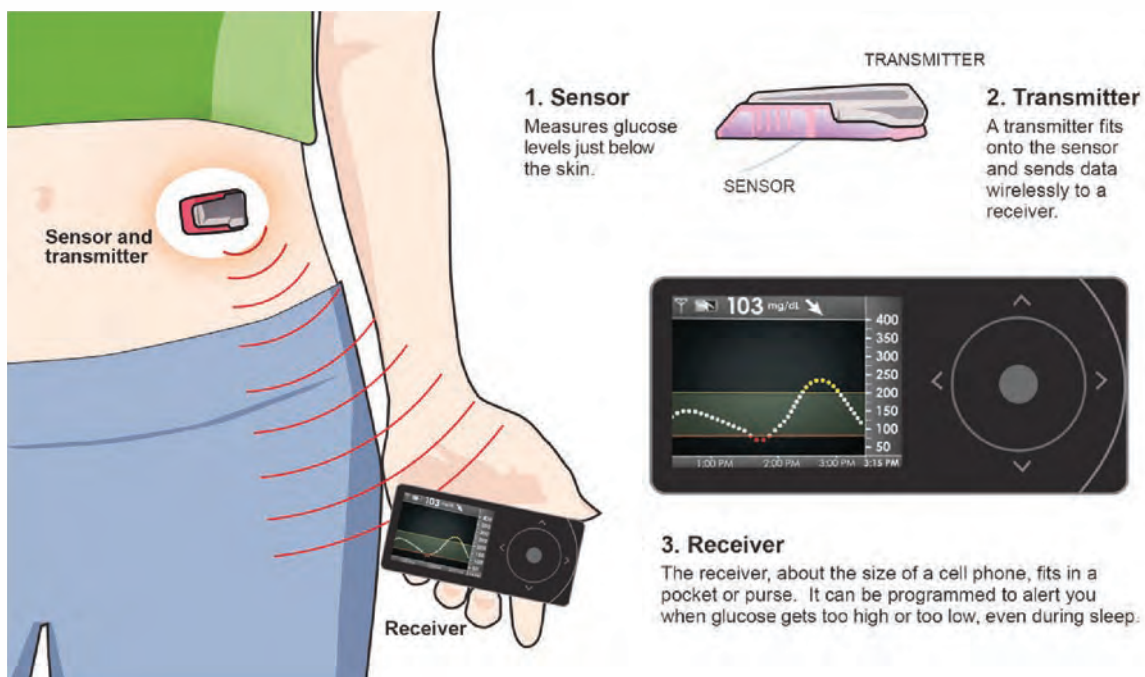
HOW DOES CGM WORK?

A CGM system consists of three parts: a glucose sensor, a transmitter and a small receiver that displays the glucose information.

The sensor is easily inserted just under the skin with an applicator and is used to measure glucose levels. Sensors are typically placed on the abdomen but some sensors are approved for use on alternate body locations. The sensor has a small adhesive to hold it in place and typically lasts for approximately one week before replacement is necessary.

The transmitter is a small, lightweight piece that fits onto the sensor. The transmitter wirelessly sends the glucose data from the sensor to the monitor or an insulin pump if the sensor is integrated with a pump.

The receiver is a slim, portable and discreet component that is carried by the user and displays the glucose information sent from the transmitter. This device displays the current glucose level as well as the trended information. The receiver also alerts the user in the case of impending highs and lows. Many CGMs can also send glucose information directly to an insulin pump.



Picture is of a typical CGM device (this example is not integrated with an insulin pump).

CGM

HOW IS CGM DIFFERENT THAN A TYPICAL BLOOD GLUCOSE METER (BGM)?

The traditional method of measuring blood glucose levels is a fingerstick blood glucose measurement that is displayed using a blood glucose meter (BGM). The BGM provides a single glucose reading at a single point in time. The key difference between CGM and BGM is that CGM provides continuous glucose readings throughout the day and night. Beyond just the glucose readings, CGM displays a glucose trend graph and direction arrows that allow people with diabetes to anticipate approaching glucose highs and lows. Finally, CGM is designed with alerts to warn the wearer of approaching glucose highs and lows during distracted times like playing, sleeping or exercising.

Along with the continuous glucose readings, CGM provides unique information about the speed and direction that glucose is heading. Glucose speed and direction helps people with diabetes to be more proactive with their glucose management. Here is an example of how that information could impact glucose management decisions:

BLOOD GLUCOSE METER (BGM) READING: 105

CONTINUOUS GLUCOSE MONITOR (CGM) READING: 102 ↓↓

(the double arrows signal a rapid decline in glucose)

Based on the blood glucose meter (BGM) reading of 105, this person is likely to decide that no action is required. But, with a similar glucose level reading on the CGM, and two arrows facing down, the patient might decide to eat some carbohydrates to avoid having an impending hypoglycemic event.

WHAT ARE THE BENEFITS OF CGM?

The main advantage of continuous glucose monitoring is that it can help identify fluctuations and trends that would otherwise go unnoticed with intermittent finger stick measurements. A CGM also provides the following:

- Glucose readings at the push of a button. Easy and discreet view of up to 288 glucose readings per day.
- Trend arrows that reflect the speed and direction of glucose level to help avoid impending lows and highs with appropriate action.
- Alerts to warn the patient of approaching glucose level highs and lows during distracted times such as sleeping, playing or exercising.
- Trend graphs to offer a retrospective view of the effect on glucose levels from things like food, exercise, medication and illness.

CGM is a unique technology that has been proven through clinical studies to help improve diabetes management and clinical outcomes as well as maintain that improvement over time. If CGM is worn on a near-daily basis, the on-going benefits are:

- Reduction in Hemoglobin A1c without increasing low blood glucose events¹
- Reduced time spent in the high and low glucose ranges¹
- Reduced events of severe hypoglycemia (<55mg/dL)¹
- More time in your target glucose ranges¹

In addition, CGM can provide the peace of mind that comes from having a tool that provides the information necessary to make the best daily management decisions.

WHO WOULD BENEFIT FROM USING A CGM?

CGM is designed for use by people with Type 1 or Type 2 diabetes who would like better glucose control. CGM can especially benefit people who experience any of the following:

- An A1c above target level.
- Frequent low glucose unawareness.
- Significant glucose variability.
- Fear of low and/or high glucose levels.
- Nighttime hypoglycemia.

CGM is covered by a significant number of insurers and policy coverage is growing. More information on CGM is available at the doctor's office and through searches for CGM suppliers on the internet.