



# There Is an App for That

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## AUTHOR BIO

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IN SPRING 2018, the FDA approved the Dexcom G6 CGM System, an integrated continuous glucose monitoring (CGM) system for those with type 1 or type 2 diabetes who are as young as 2 years.<sup>1</sup>

## HOW THE G6 SYSTEM WORKS

This system consists of an auto applicator, sensor, transmitter, and display device.<sup>2</sup> The auto applicator is applied to the skin of the abdomen, and the sensor is inserted just under the skin. The sensor measures the amount of glucose every 5 minutes while a transmitter that fits onto the sensor sends data wirelessly to a receiver or a compatible smart device.<sup>1,2</sup> The system allows the user to set personalized thresholds, which fire customized alarms and alerts. If and when glucose levels trend up or down or are out of range, the device will trigger an alarm.<sup>1</sup> However, if the alerts and readings from the G6 monitor do not match expectations or symptoms, Dexcom recommends using the results from a glucose meter for diabetes treatment decisions.<sup>2</sup>

Available only with a prescription, the Dexcom G6 CGM System is transformative in that it does not require fingersticks for calibration or for diabetes management.<sup>2,3</sup> With up to 288 readings in a 24-hour period, the system provides better insight into glucose levels and their direction and speed.<sup>4</sup>

CGM has been proven to lower glycated hemoglobin and the time spent in hypoglycemia, according to the results of a study published in the *New England Journal of Medicine*.<sup>4</sup> The Dexcom G6 System can also be integrated with automated insulin dosing systems, which can autonomously communicate the need for insulin and release it when needed.<sup>1</sup>

The G6 system builds on older-generation systems and offers new features, such as<sup>3</sup>:

- Discreet design
- Hypoglycemia predictor
- Longer wear of up to 10 days before the sensor needs replacing
- Redesigned sensor applicator, which allows for 1-touch simple insertion
- Water-resistant sensor and transmitter (may be submerged under 8 feet of water for up to 24 hours)

Another feature of the G6 is the acetaminophen-blocking feature, which minimizes interference

from acetaminophen and, in turn, provides more accurate glucose readings if and when acetaminophen is taken.<sup>5</sup> In previous versions G4 and G5, fingersticks were required to determine glucose levels with the ingestion of acetaminophen-containing products. This is because acetaminophen interference resulted in falsely elevated glucose readings.<sup>5</sup> With the newer version, users can safely take 1000 mg of acetaminophen every 6 hours and not worry about the medication interfering with their glucose readings. However, taking more than 4000 mg in a 24-hour period can lead to falsely elevated readings.<sup>5</sup>

## IMPORTANT SAFETY INFORMATION

There are risks associated with using this system. Redness or skin irritation may occur where the adhesive patch is applied. In the case where the hardware or set-up issues prevent the alarms and alerts from firing or if inaccurate information from system readings is used to make treatment decisions, there is a risk for hyperglycemia or hypoglycemia.<sup>1</sup>

To ensure proper and safe use of the device, as well as accurate glucose readings, following the instructions is critical. This includes those for calibration, insertion, inspection, troubleshooting, and use with the available mobile applications, which can all be found on the manufacturer's website. Given the internet connection, users can track and visualize glucose levels on a suitable device via the Dexcom G6 App. Compatible with both Android and Apple smart devices, the system transmits information every 5 minutes. The app also allows sharing data with caregivers or loved ones. Furthermore, a separate app, the Dexcom Follow App, allows remote sharing of glucose data with up to 5 individuals.<sup>6</sup>

Patients can easily track glucose levels and identify patterns and trends over time with specialized software, Dexcom CLARITY. The data provided can be downloaded, printed, and sent to the provider before an appointment.<sup>2,6</sup>

Two clinical trials, including 320 adults and children with diabetes, compared the data obtained from the Dexcom G6 with glucose levels obtained from a lab over the course of 10 days. No adverse effects were reported, according to the FDA.<sup>1,7</sup> ♦

FOR REFERENCES, GO TO [PHARMACYTIMES.COM/ LINK/144](http://PHARMACYTIMES.COM/ LINK/144).