**Continuous Glucose Monitoring Devices**

# Date Implemented:

**Review/Update Dates:**

# Policy

This policy establishes guidelines for the use of Continuous Glucose Montioring (CGM) devices to ensure effective diabetes care and management in accordance with physician’s orders and appropriate regulatory guidance.

**Definitions**

**Continuous Glucose Monitoring (CGM)** **Devices** are wearable medical apparatus designed to track glucose levels in real-time throughout the day and night. It operates via a small sensor inserted just under the skin, typically on the abdomen or arm, which measures glucose concentrations in the interstitial fluid. The sensor transmits data to a receiver or compatible device, such as a smartphone, providing users with continuous insights into their glucose fluctuations.

**Diabetes** is a condition that happens when your blood sugar (glucose) is too high. It develops when your pancreas doesn’t produce enough insulin or any at all, or when your body isn’t responding to the effects of insulin properly.

**Procedures**

Before any resident or tenant uses a CGM device, the staff that provide care or service to the resident/tenant must be educated and demonstrate competency with the CGM including individual provider policies and procedures such as physician notification of hyper/hypoglycemic episodes.

**Benefits of CGM Devices**

1. A CGM gives you real-time information on how glucose levels are changing which can be especially important because several factors affect blood sugar levels.
2. A CGM reduces (does not eliminate) the need to lance resident’s/tenant’s fingers to complete manual glucose monitoring.
3. The CGM provides alerts for high and low blood sugar levels allowing caregivers to quickly provide treatment and reduce the risk of negative outcomes.
4. Data can be transferred to smart phones or computers for analysis and documentation. This can provide physician’s necessary information to make accurate adjustments to insulin orders.

**Limitations & Drawbacks of CGM Devices**

1. Like all technology, CGM systems can run into issues, be inaccurate or fail.
2. Certain medications and supplements may affect the accuracy of certain CGM sensors including Acetaminophen, Hydroxyurea, and Vitamin C which may cause the device to display higher or lower glucose levels. Each device manufacturer should be consulted to determine specific medications or supplements that may impact the reading accuracy.
3. The CGM and supplies may be expensive compared to using a typical point-of-care (POC) testing device, which will vary based on the individuals health insurance plan.
4. Alarm Fatigue may occur from different alarms that can be set in the CGM as well as possibly disrupting sleep patterns.
5. The device is always attached to the individuals body which may lead to difficulty covering the device or a mode for infection to enter the body.
6. Adhesive allergies are possible.
7. Data can be compromised similar to other technologies (i.e. software hack).

**Nursing Procedure**

1. Any resident/tenant requesting to use a CGM must have a physician’s order to do so, unless State rules dictate otherwise. Physician’s orders should include:
   1. The use of the CGM
   2. Frequency of sensor changes
   3. Frequency of expected readings/documentation in the resident/tenants record
   4. Procedures for high or low blood glucose alerts, which includes physician notification parameters. These orders may be included in a standing order protocol as appropriate.
   5. Frequency of calibration with a POC glucometer.
2. Only CGM and equipment approved by the U.S. Food and Drug Administration or similar regulated entity will be used.
3. To insert the CGM sensor:
   1. Clean the insertion site which commonly includes the abdomen, upper buttocks, or other areas with adequate subcutaneous tissue with an alcohol or other disinfectant wipe. Allow the area to fully dry.
   2. Remove the sensor applicator from the packaging and align with the prepared site, press firly to insert the sensor beneath the skin. Products such as a Dexcom G6 may have an auto-applicator that may be used.
   3. Ensure that the sensor is firmly in place, attach the transmitter to the sensor (if applicable) and use adhesive patches or tape to secure the sensor and/or transmitter to prevent the device from displacing during daily activity.
   4. Activate the sensor by following the manufacturer’s specific instructions and begin monitoring the glucose levels via accepted device.
   5. Specific device instructions may vary, providers should always review the CGM manufacturer’s instructions to ensure accurate insertion, securement, and transmitting data.
4. Providers must ensure that devices have software updates as necessary and information is retrieved, stored, and maintained in accordance with HIPAA standards.
5. Supplies for continued use of the CGM will be ordered as indicated in the resident/tenant’s service/care plan.
6. Blood glucose levels will be documented in a frequency and manner outlined in the physician’s orders.

**Resources**

LeadingAge Illinois/Iowa acknowledges the use of ChatGPT <https://chatgpt.com> to assist

in drafting and editing this document. The AI was employed to generate initial content outlines and provide language suggestions.

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Dexcom. (Retrieved 31 Mar. 2025). *Dexcom G6: How to Insert the Sensor & Attach the Transmitter*. <https://provider.dexcom.com/education-research/cgm-education-use/videos/dexcom-g6-how-insert-sensor-attach-transmitter?utm_source=chatgpt.com>