



Pharmacy Pearls

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Use of continuous glucose monitors for patients with diabetes mellitus: What you need to know.

Contributors: Samantha Leistman, PharmD
 Contact: AHPPharmacist@urmc.rochester.edu

The 2021 ADA Standards of Medical Care in Diabetes state that personal use of a continuous glucose monitor (CGM) can be useful for reducing/maintaining HbA1c and reducing hypoglycemia in patients using insulin, as a replacement for traditional blood glucose monitoring. Additionally, use of a CGM can help patients to identify and correct patterns of hyper- and hypoglycemia even when they are treated with non-insulin therapies. Consider a CGM for the following types of patients:

- Not testing glucose frequently enough due to forgetfulness, pain, fear of needles, etc.
 - Review time between test strip refills (refilling infrequently = patient is not testing as much as they should be).
- Documented hypoglycemic unawareness.
- Have been frequently testing glucose for a long period of time and are showing signs of diabetic distress syndrome.
- Those expressing interest in having additional glucose data to identify triggers/patterns of hyper- or hypoglycemia.

Comparison of Personal CGM Devices:

Characteristics	Dexcom G6 CGM System*	Freestyle Libre 14-day Flash*	Freestyle Libre 2*
Warm up period	2 hours	1 hour	1 hour
Type ⁺	Real time	Intermittent	Real time
Maximum wear time	10 days	14 days	14 days
Receiver	iPhone/Android/Receiver	iPhone/Android/Reader [#]	iPhone/Android/Reader [#]
Approved site	All ages: abdomen Ages 2-17 yrs: upper buttocks	Back of upper arm	Back of upper arm
Calibrations per day	0	0	0
Frequency of glucose readings	Every 5 minutes	Every minute	Every minute
FDA approved ages for use	≥ 2 years old	≥ 18 years old	≥ 4 years old
Insulin pump integration	Yes	No	Not yet
Alarms for highs/lows	Yes (every 5 minutes)	No	Yes (every minute)
Water resistance	8 ft, 24 hours	3 ft, 30 minutes	3 ft, 30 minutes
Additional Information	<ul style="list-style-type: none"> • No CGM is currently FDA approved for use in pregnancy. • Medtronic Guardian Connect CGM: available option, but typically only used in patients that have a Medtronic insulin pump and is not available through retail pharmacies. 		

*FDA approved to guide medication dose adjustments

⁺Real time CGM: Continuously measures and displays glucose levels, Intermittent (“flash”) CGM: Continuously measures glucose levels, but only displays readings when sensor is scanned

[#]Works as a glucometer (can insert test strips into reader device) – compatible only with Freestyle Precision Neo Test Strips

Important Counseling Point:

CGMs measure glucose levels in the interstitial fluid – this correlates well with plasma glucose, but can lag behind if glucose levels are rapidly increasing or decreasing. Patients should be educated on when to check a finger-stick blood glucose reading:

- When reader device instructs to do so (symbol displayed when sensor is scanned)
 - Symbol shown on Freestyle Libre Reader:
- When physical symptoms do not correlate with the CGM reading
- Anytime they are concerned about accuracy of the CGM reading

Insurance Coverage for Excellus Plans:

Commercial Insurance – covered under prescription benefit (retail pharmacy)

Medicare Insurance – covered under medical benefit (DME supplier)*,[#]

Medicaid Insurance – covered under medical benefit (DME supplier)[#],[^]

*Excellus Medicare Advantage Plan – can be filled at retail pharmacy but will require prior authorization

[#]Required to be on multiple daily insulin injections that require frequent adjustments based on BG’s, testing BG’s ≥ 4x/day, & been seen by PCP within past 6 months

[^]Must have diagnosis of Type 1 Diabetes Mellitus

References:

Schumacher, CA, et al. *J Am Coll Clin Pharm.* 2020; 3: 1333– 1343.
 Diabetes Educators Calgary. The Basics of Continuous Glucose Monitoring [Internet]. 2021
 Standards of Medical Care in Diabetes 2021. American Diabetes Association. *Diabetes Care* Jan 2021, 44 (Supplement 1)