CASE STUDY

The New Standard of Diabetes Care: Continuous Glucose Monitoring in Pharmacy Practice

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~ RWJBarnabas Health

CHALLENGES FOR PATIENTS USING INTENSIVE INSULIN THERAPY

Diabetes is a challenging disease for patients and caregivers to manage. For some patients, the use of insulin is required to achieve glycemic control but it can have significant adverse consequences if not used appropriately. Incorrect administration of insulin (too little, too much, or at the wrong times) can result in both transient and serious hypo- and hyperglycemia, severe hypoglycemia, and diabetic ketoacidosis.

Patients with Type 1 (T1D) and Type 2 diabetes (T2D) who are using intensive insulin, defined as three or more injections of insulin per day or the use of an insulin pump, may have frequent unrecognized episodes of hypoglycemia during the day and at night. These frequent episodes can result in a patient's awareness of hypoglycemia becoming impaired, where they have trouble "feeling their lows" and leaving them more at risk for severe hypoglycemia and its potential consequences of seizures, coma, or even death.

The American Diabetes Association recommends that patients using intensive insulin monitor their blood glucose levels at least 6 to 10 times per day in order to make diabetes treatment decisions regarding diet, lifestyle, and the safe and effective use of their treatment. Unfortunately, due to the pain, burden and inconvenience of fingerstick testing, many patients test far fewer times than recommended to successfully manage their disease.

Due to the stress and consequences of hypoglycemia, many patients on intensive insulin and even their caregivers may develop a fear of hypoglycemia and will test with fingersticks throughout the night to prevent a seizure or even death due to a hypoglycemic episode. Unfortunately, most patients and caregivers then decide to use less insulin than prescribed, leaving the patient hyperglycemic with essentially uncontrolled diabetes.

For many patients and caregivers, monitoring with fingersticks is difficult and does not provide enough information to manage their diabetes with the stress affecting their sleep, quality of life, and productivity at school and work.

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REAL-TIME CONTINUOUS GLUCOSE MONITORING

VS.

INTERMITTENTLY SCANNED CONTINUOUS GLUCOSE MONITORING

There are differences in commercially available continuous glucose monitors (CGMs), which are available as real-time or intermittently scanned. Real-time CGM does not require any action on the user's part for glucose data to be transmitted automatically to the receiver. An intermittently scanned CGM requires users to take an action to actively scan the sensor for their glucose data to be displayed.

The Dexcom CGM system is the only real-time CGM available for patients 2 years and older. The user or caregiver is able to make diabetes treatment decisions with zero fingersticks and no calibrations.*

The Dexcom G6 lets patients see their glucose numbers on their compatible smart device or receiver, receive alerts when their glucose levels are heading high or low, and share their data with up to 10 followers.

OPPORTUNITY FOR PHARMACISTS

Pharmacists are considered one of the most trusted and accessible health care professionals. For this reason, they are afforded the opportunity to identify patients and caregivers who may be struggling with diabetes management and offer solutions such as real-time continuous glucose monitoring (CGM). CGM is increasingly recognized as the standard of care for people with T1D and insulin-requiring T2D and one of the most important advances in managing T1D since the discovery of insulin.

Ronald Simbulan, RPh, Director, Mail Order and Specialty Pharmacies at RWJBarnabas Health in West Orange, New Jersey conducted an outreach program to employees and dependents who were using mealtime insulin. Patients were informed that CGM could help them manage their diabetes and if they agreed, the pharmacy would contact their provider to obtain a prescription for CGM.

"We needed to help our employees and dependents with diabetes manage a difficult disease and, based on the evidence, we felt that recommending real-time CGM to those who could benefit was important," Simbulan noted.

The education and outreach by the pharmacy was appreciated, with many patients agreeing to have the pharmacist discuss CGM with their provider and to request a prescription. "Don't assume that the patient's doctor discussed CGM – we found that most patients who could benefit from CGM weren't even aware that it was available as an option for them," Simbulan advised.

DEXCOM REAL-TIME CONTINUOUS GLUCOSE MONITORING

The Dexcom G6 is the only real-time CGM that is FDA approved for patients ages 2 and older. The user or caregiver can make diabetes treatment decisions without confirmatory fingersticks or calibrations.*

The Dexcom G6 is approved for patient self-start and uses a simple one-touch auto-applicator to insert a small water-resistant sensor just beneath the skin. The sensor continuously measures glucose levels and sends data wirelessly to a display device through a transmitter. The display device is either a small touch screen receiver or a compatible smart device, which displays real-time glucose data with rate and direction 24 hours a day. The system alerts patients when it is time to change sensors and transmitters; the sensor is replaced every 10 days and transmitters are replaced every 90 days.

The glucose readings with rate and direction help Dexcom CGM users proactively manage glucose highs and lows, plus give added insight into the impact that meals, treatment, exercise, and illness may have on their glucose levels. Dexcom CGM users are also notified with customizable alerts and alarms if their glucose is heading high or low, allowing them to take action to prevent and/or treat the high or low glucose levels.

The CGM data can also be shared with up to 10 followers who will receive the user's glucose data in real time and can then check in or assist if needed. Users can also allow their providers access to the last 90 days of their glucose readings via CLARITY software reports. The diabetes management application, CLARITY, lets providers and patients identify glucose trends and patterns to assist in making changes to the diabetes management plan.

*If your glucose alerts and readings from the G6 do not match symptoms or expectations, use a blood glucose meter to make diabetes treatment decisions.

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Who Should Use Continuous Glucose Monitoring?

Continuous glucose monitoring (CGM) is recommended for patients with type 1 and type 2 diabetes who use any form of mealtime insulin (with or without a pump). Pharmacists can expand their patient-care relationships to identify, educate, and advocate for those who may benefit from CGM, as conversations and screening of hypoglycemia and suboptimal compliance can occur at the pharmacy quite readily.

Pharmacy profile-related indicators to identify patients who may benefit from CGM include:

- Use of multiple daily insulin injections
- Use of mealtime insulin
- Use of an insulin pump
- Fills for glucagon or glucose tablets
- Excessive test strip use
- Low test strip use
- Erratic insulin fills
- Reduced insulin fills

IN CONCLUSION

There have been tremendous advances in CGM technology; in fact, CGM is an emerging standard of care in diabetes management, particularly for patients with T1D and T2D using three or more insulin injections per day or receiving insulin through a pump.

Pharmacists are uniquely positioned to identify patients with diabetes who are struggling with the challenges of using their insulin safely and effectively and could benefit from continuous glucose monitoring. The value of real-time CGM glucose data cannot be understated, as studies have shown that CGM use can result in lower A1c values and reductions in hypoglycemia and hyperglycemia for patients of all ages, education levels, and mathematical ability.

The Dexcom system is available through all pharmacy wholesalers, and access and coverage are increasing, with many insurers covering the technology through the pharmacy benefit. Additionally, Medicare currently covers CGM for patients with T1D and T2D who are using intensive insulin treatment.

To learn more, Dexcom's website (https://www.dexcom.com) offers a wealth of educational content, videos, and promotional print materials to share with patients, which are available upon request. Also, CGM continuing education for pharmacists is available on https://cgmeducation.net/ and https://www.powerpak.com/course/preamble/118584.

Please contact Roy Thomas, PharmD at roy.thomas@dexcom.com for more information on how CGM can be incorporated into your pharmacy practice for patients with diabetes.

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dexcomG6

ZERO FINGERSTICKS* WITH THE DEXCOM G6 CONTINUOUS GLUCOSE MONITORING (CGM) SYSTEM.

Always know your glucose level and where it's heading with just a glance at your smartphone or watch.†

Smart devices sold separately.

- SMARTPHONE COMPATIBILITY†
- WATER-RESISTANT WEARABLE‡
- SMALL SENSOR
- SIMPLE AUTO-APPLICATOR
- 10-DAY SENSOR WEAR
- ALERTS AND ALARMS
- SHARE GLUCOSE DATA§
- AGES 2 YEARS AND UP

*If your glucose alerts and readings from the G6 do not match symptoms or expectations, use a blood glucose meter to make diabetes treatment decisions.
†For a list of compatible devices, visit www.dexcom.com/compatibility.
‡The Dexcom G6 Sensor and Transmitter are water-resistant and may be submerged under eight feet of water for up to 24 hours without failure when properly installed. §Separate Follow app required. Available by prescription only. Failure to use the Dexcom G6 Continuous Glucose Monitoring System (G6) and its components according to the instructions for use provided with your device and available at https://www.dexcom.com/safety-information and to properly consider all indications, contraindications, warnings, precautions, and cautions in those instructions for use may result in you missing a severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) occurrence and/or making a treatment decision that may result in injury. If your glucose alerts and readings from the G6 do not match symptoms, use a blood glucose meter to make diabetes treatment decisions. Seek medical advice and attention when appropriate, including for any medical emergency.

LBL017519 Rev001

For more information, visit provider.dexcom.com

For the Pharmacist: Dexcom G6 Ordering Information

PRODUCT	QUANTITY	REFILLS	NDC	CARDINAL	MCKESSON	AMERISOURCE BERGEN
DEXCOM G6 RECEIVER KIT	1-PACK	ONCE A YEAR	08627-0091-11	5447537	3788783	10186954
DEXCOM G6 TRANSMITTER KIT	1-PACK	EVERY 3 MONTHS	08627-0016-01	5447545	3788841	10186958
DEXCOM G6 SENSOR KIT	3-PACK	EVERY 30 DAYS	08627-0053-03	5447552	3788858	10186959

If your patient does not have pharmacy benefit coverage:

Have them call Dexcom at **888-738-3646** for a durable medical equipment (DME) benefits check or FAX the order to Dexcom at **877-633-9266**.

Voucher Offer—Up to $140 in Co-Pay Savings!†

Commercially insured patients may be eligible to save up to $140 in co-pays on the Dexcom G6 components.† If they have not activated their offer, have them visit **dexcom.com/pharmacyoffer** or offer to register for them.

For more information about Dexcom CGM, visit **provider.dexcom.com**.

Smart device sold separately.*

* For a list of compatible devices, visit dexcom.com/compatibility
† Maximum Savings Limit applies. Patient out-of-pocket expense may vary. Please visit dexcom.com/pharmacyoffer for program terms, conditions, and elibility criteria.

BRIEF SAFETY STATEMENT Failure to use the Dexcom G6 Continuous Glucose Monitoring System (G6) and its components according to the instructions for use provided with your device and available at https://www.dexcom.com/safety-information and to properly consider all indications, contraindications, warnings, precautions, and cautions in those instructions for use may result in you missing a severe hypoglycemia (low blood glucose) or hyperglycemia (high blood glucose) occurrence and/or making a treatment decision that may result in injury. If your glucose alerts and readings from the G6 do not match symptoms or expectations or you're taking over the recommended maximum dosage amount of 1000 mg of acetaminophen every 6 hours, use a blood glucose meter to make diabetes treatment decisions.
Seek medical advice and attention when appropriate, including for any medical emergency.