THIS ACTIVITY IS SUPPORTED BY AN EDUCATIONAL GRANT FROM DEXCOM, INC.

Real-Time Continuous Glucose Monitoring: Timely Opportunities to Improve Quality of Life

DHIREN PATEL, **PharmD, CDCES, BC-ADM,** moderated a faculty panel discussion for part 2 of the CGM live virtual crossfire series titled, *Incorporating Real-Time–Integrated CGM: Opportunities in the Pharmacy to Improve Quality of Life for Patients With Diabetes.* The panelists presented an engaging discussion about the latest advances in real-time continuous glucose monitoring (rtCGM). There was a clear theme throughout this informative and practical presentation: rtCGM is a solution for the unmet need in glucose monitoring, making an impact on patients' quality of life, attainment of glycemic goals, and health care costs.

The session began with a brief recap of part 1, where the role and accessibility of rtCGM was highlighted. The panel discussed how, with the use of rtCGM technology, an unmet need in diabetes care has now been met. While finger sticks and A1c tests allow for a glimpse into a person's glucose level, as **Diana Isaacs, PharmD, BCPS, BCACP, BC-ADM, CDCES, FADCES, FCCP,** emphasized, "The value of rtCGM for people to be able to see the direct effects of food, medication, physical activity, and stress on their glucose levels, is so wonderful and leads to improved outcomes." **Erin Shaal, PharmD,** reinforced the ways in which rtCGM is accessible to patients and that insurance coverage should be checked, as it has become more widely available through pharmacy benefits. **Samir Mistry, PharmD,** expanded on the topic of coverage; he explained that from the health insurance side and coverage standpoint, while CGM devices were mainly covered under the medical benefit, now more health plans are covering the devices through their pharmacy benefits and how processing these claims is uncomplicated. As a result, it was noted that the community pharmacies should run test claims for CGM coverage. During this part of the session, there were also educational videos that depicted pharmacists counseling a patient on how to use the CGM system, including pertinent steps that are vital when providing patient education. It ended with a message encouraging pharmacists and pharmacy technicians to bring awareness to patients who will benefit from the device.

After summarizing the important details discussed in part 1, Dr Patel led the panel into part 2, starting with how CGM has allowed his family member with type 2 diabetes to "improve his quality of life." There were 3 sections within this panel discussion, with a deeper dive into the transformational role of rtCGM in patients' lives and the ways in which pharmacists and pharmacy technicians are integral in the care of patients with diabetes. The panel spoke about how to increase awareness and access to tools that will improve the quality of life throughout a patient's diabetes journey. In addition, considering that the world of diabetes technology is constantly evolving, experts are reviewing evidence and making recommendations as expeditiously as possible. Concurrently, researchers are continuing to evaluate the role of CGM in different circumstances and patient populations and its impact on overall diabetes care. The panel provided a thorough analysis of the most recent evidence as well as conference and guideline updates. Some topics of discussion were the American Association of Clinical Endocrinology (AACE) Clinical Practice Guideline: *The Use of Advanced Technology in the Management of Persons With Diabetes Mellitus* that was released during the AACE Annual Meeting, May 26-29, 2021, the International Conference on Advanced Technologies and Treatments for Diabetes that took place virtually in early June 2021, the 2021 American Diabetes Association Standards of Care updates, and results from the DIAMOND, MOBILE, and Kaiser studies.

Additionally, clinical video vignettes were embedded throughout the discussion that resembled patient experiences with rtCGM and offered examples of how pharmacists and pharmacy technicians can interact with patients in meaningful and practical ways. These videos portrayed real-life interactions that included identifying persons who benefit from rtCGM, teaching how to use and interpret data, and highlighting the role of the pharmacist and pharmacy technician to empower patients in their diabetes management.

Dr Shaal stated that rtCGM gives patients the opportunity to be "proactive versus reactive" and maximize time in range. Dr Mistry provided important insights from the payer perspective, describing the access to rtCGM that patients have, and the role pharmacies and pharmacists have in reducing barriers to care. Updates about Medicare coverage were also discussed. Dr Isaacs spoke about the growing body of evidence for rtCGM in various patient populations beyond just type 1 diabetes and those taking intensive insulin regimens; rtCGM can improve glycemic control in patients with type 2 diabetes, those taking non-intensive insulin and non-insulin regimens, during pregnancy; and among patients who are at high risk of hypoglycemia. "The guidelines are strongly advocating the use [of CGM]," she

stated, "the evidence supports the use of CGM for all people with diabetes, not just type 1 where initially we had the strongest evidence, but now there is so much evidence which supports people with type 2 diabetes on intensive insulin regimens and for those on basal only and those at risk for hypoglycemia." [1]

Two studies were reviewed in detail: MOBILE and Kaiser. The MOBILE study was a multicenter, randomized, open-label, parallel-group design that randomized 175 patients with type 2 diabetes treated with basal insulin without prandial insulin to CGM or traditional blood glucose monitoring in a 2:1 ratio. One hundred sixteen patients were randomized to CGM and 59 were randomized to traditional blood glucose monitoring. The overall study cohort was 50% women, had a mean hemoglobin A1c of 9.1%, and a mean age of 57 years. The study results showed that the participants in the CGM group had a significantly lower mean A1c of 8% compared with the traditional blood glucose monitoring group A1c of 8.4% (adjusted difference, -0.4%; 95% CI, -0.8 to -0.1; $P = .02$). Dr Isaacs commented on the significance of this study, stating, "This is really important because… we've always long had evidence of [benefit] in type 1 diabetes [because] we know those people are at risk of hypoglycemia. But the evidence hasn't always been as strong for type 2 diabetes, and I think this study really did an amazing job of showing that." She went on to discuss the Kaiser study, which was a retrospective cohort study that compared the use and nonuse of CGM in patients with type 1 and type 2 diabetes. A total of 41,753 patients were included in the study, with 3806 who initiated rtCGM (3462 had type 1 diabetes and 344 had type 2 diabetes). The authors reported that the mean A1c declined from 8.17% to 7.76% among the rtCGM group while the nonusers' A1c declined from 8.28% to 8.19% (adjusted difference-in-differences estimate, -0.40%; 95% CI, -0.48 to -0.32; $P < .001$). Hypoglycemia rates also went from 5.1% to 3% in the CGM initiators while increasing from 1.9% to 2.3% in the nonusers (difference-in-differences estimate, -2.7%; 95% CI, -4.4 to -1.1; $P = .001$). Dr Isaacs talked about the importance of these data, stating, "Here you have a device that actually reduces hypoglycemia and then also has these A1c benefits."[2,3]

Another population that was discussed were women with gestational diabetes. Dr Isaacs highlighted the challenges of having to perform finger sticks upward of 8 times a day and the potential complications for the baby if a mom has hyperglycemia during pregnancy. She stated that while it is not yet an FDA-approved indication, there is a role for CGM in gestational diabetes. Dr Patel concluded, "Sometimes the evidence and literature are out there and sometimes, as we've heard here today, in the new regulatory process we'll catch up." The video that followed was about a pregnant woman who has started an rtCGM and is at the pharmacy to learn how to set alerts for high and low blood glucose levels and what the trend arrows implicate.

In the final segment, Dr Patel led the panel in a discussion about the current landscape and the future directions of rtCGM. Dr Isaacs described the steps of developing a pharmacist-driven personal CGM program, explaining it may vary depending on the clinical setting. She stated that the first step is to understand the patient population and who would benefit from CGM. Dr Isaacs shared that in her practice, they first started by prescribing a professional CGM to introduce patients with diabetes to this concept. The other key step discussed was forming a team that would include the CGM champion, as well as thinking about "who's going to be prescribing it, who's going to be educating the patient on it, who is going to download the reports or teach the person how to download those reports." Dr Shaal went on to add that "education is really key for your team" so that the team can feel comfortable and confident when discussing CGM and providing advice. The panel continued to discuss how to incorporate a CGM service into a clinic's workflow. Dr Mistry stated that he went through the journey this past year, noting the reduction in prior authorization volume that came with CGM coverage through pharmacy insurance benefits. The last video brought the conversation full circle, where viewers were able to understand the CGM experience from the patient perspective. This patient, with the pharmacist's help, was able to make connections between the glucose values, the food he ate, and his medication.

Throughout the presentation, the moderator and panelists delivered an in-depth program, vividly connecting the evidence and their extensive experiences so that the audience was able to enhance their knowledge about rtCGM and understand the impact this technology has on people with diabetes. The panelists provided pharmacists and pharmacy technicians with many practical approaches to bring awareness, accessibility, and usability of rtCGM to positively impact patients' quality of life. To watch the entire discussion and learn more about rtCGM, please visit: www.pharmacytimes.org/on-demand/incorporating-realtimeintegrated-cgm-opportunities-in-the-pharmacy-to-improve-quality-of-life-for-patients-with-diabetes-pharmacist-enduring. ■

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