CLINICAL PEARL CE

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DIABETES MANAGEMENT THROUGH TELEHEALTH: HELPING CLINICIANS FEEL CONFIDENT MANAGING THEIR PATIENTS VIA TELEHEALTH

This activity is a collaboration between
Medical Learning Institute, Inc and the Endocrine Society.

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Accreditation Information

Learning Objectives - At the conclusion of this accredited CE activity, participants will be able to:

- Review how to use telemedicine to manage different aspects of diabetic care, including glycemic control and behavioral challenges.
- Discuss how to use telemedicine to consult with colleagues to cooperatively manage frequently encountered co-morbidities associated with diabetes.
- Describe the boundaries and limitations of telemedicine to be able to determine when patients need to be seen for in-person visits.
- Demonstrate teleconference-specific communication skills: how to behave naturally, professionally and persuasively, with comparable levels of empathy, patient-teaching potential and amount of information provided comparable to in-person encounters.
- Apply strategies for using telemedicine and telemonitoring to improve medication adherence and treatment plan adherence, including switching strategies among patients with diabetes.
- Compare and contrast the various pharmacotherapies and devices that can be used to manage patients with diabetes in light of changed patient management conditions.

Target Audience

This activity is intended for endocrinologists, primary care physicians, nurses, advanced practitioners, physician assistants, diabetes educators and other allied healthcare professionals who manage patients with diabetes.

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Rayhan Lal, MD, has disclosed he is a consultant/advisor for: Abbott Diabetes Care, Biolinq, Capillary Biomedical, Morgan Stanley, and Tidepool and receives grant/research support from Abbott Diabetes Care.

Marie E. McDonnell, MD, has disclosed she is a consultant/advisor for Everlywell and stockholder of Abbott Industries.

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DIABETES MANAGEMENT THROUGH TELEHEALTH:

HELPING CLINICIANS FEEL CONFIDENT MANAGING THEIR PATIENTS VIA TELEHEALTH

COVID-19 severity is tripled in the diabetes community at a time when in-person medical care poses risks. As a result, clinicians treating patients with diabetes face new urgency to intervene using telehealth sessions, which poses new opportunities and challenges. While diabetes experts have relied on remote uploads of data for a long time preceding the pandemic, they now can use those data and more to create powerful telehealth interventions.

COVID-19 SEVERITY **3x** IN DIABETES COMMUNITY

In a recent podcast on telehealth for managing Type 2 diabetes (T2DM), Rayhan Lal, MD, a pediatric endocrinologist who collaborates with the Stanford Diabetes Research Center, explored best practices for using telemedicine to provide optimal diabetes management. His discussion addresses issues of glycemic control, blood pressure control, weight gain, and behavioral challenges. https://mlicme.org/fe/aqdce-e002.

In a second podcast, https://mlicme.org/fe/aqdce-e003, Marie E. McDonnell, MD, Director of the Brigham Diabetes Program at Brigham & Women's Faulkner Hospital, reports how the Brigham's telehealth practice has evolved to make telehealth sessions more effective.

> *"There are some [diabetes] populations that were more sidelined by COVID... they had to focus on survival of themselves and their families; their health was not a priority."*

The COVID pandemic has introduced special considerations for the diabetes telehealth session. What additional issues should be covered in telehealth sessions?

Diabetes often is a reflection of what else is going on in a person's life. As a result, it is essential to ask about the human factors influencing the individual. The pandemic has changed lifestyles in ways that also may affect diabetes management; for example, the stress associated with social isolation, the dietary effects of restricted shopping and eating at home, and limits to exercise regimens as gyms remain closed, are all factors that may alter the patient's response to their current T2DM regimen.

"You really need to be warm, very warm immediately and ask patients how their day is going and tell them that you're really happy to be talking to them about their health. Just establish right away what your goal is but also that you're there to help them."

You can pick up on cues as to how the patient is doing that by looking at a patient virtually ...you can sense sometimes that a patient is either upset about a certain subject or they're just going to need a different approach, and you can let them take the conversation where they need it to go. And we know that that's also therapeutic for a lot of patients just to feel like they have somebody listening to them. During the pandemic, a major theme of my visits was that patients were lonely and they wanted mostly to talk. And I would say 5 of the 20 minutes or 30 minutes was spent on actual medical management and the rest was on counseling, Dr. McDonnell noted.

What pharmacotherapies and devices that can be used to manage patients with diabetes in light of changed patient management conditions?

During the pandemic, while patients are staying at home, this can be an ideal time to try new therapies. Before the pandemic, patients may have felt they were too busy or working too much to start a new therapy—they just didn't have time. Now is as good a time as any to try new therapies and see how things go.

Many patients have reported weight gain from the increase in sedentary behavior and the access to the food more easily at home, which may suggest

"It is very important to help patients reflect on what choices they did make [during the pandemic] around food and exercise and how they let stress invade their health to prepare them for future emergencies."

the value of a regimen with demonstrated weight neutrality such as those based on dipeptidyl peptidase 4 (DPP-4) inhibitors and sodium-glucose co-transporter 2 inhibitors (SGLT2). While dealing with multiple stressors such as working at home with children, some patients may need a simple regimen such as a once daily oral medication to be taken with or without meals.

Telehealth is a powerful way to keep patients engaged on step therapy. It is important to communicate to the patient ahead of time that we're likely going to need to add this medication or titrate this one and then decide if we need to add the second or third medicine. And telemedicine can be so focused so easily because everybody's really interested in defining a specific period of time where they will get back on the video or phone to check the results, even if a follow-up telehealth visit is brief.

As new T2DM medications emerge, there are more options for tailoring antihyperglycemic regimens. Today, cardiovascular and renal considerations, in addition to glycemic control, have become paramount in T2DM medication decisions. The SGLT2 inhibitors have been shown to delay the development of severe kidney disease for individuals with diabetes, provide cardioprotection, and also decrease blood pressure. Therefore, regimens including these agents may offer new options for specific patients.

A meta-analysis of 25 RCTs (14,264 participants) of add-on dual initiation therapies in patients uncontrolled on metformin, dual antihyperglycemic agents (AHA) added to metformin had statistically significant or a trend of greater reduction in HbA1c compared to single AHAs, with ertugliflozin + sitagliptin showing the greatest improvement. Statistically significant reductions in weight and systolic blood pressure were observed with ertugliflozin + sitagliptin, ertugliflozin, or canagliflozin compared to single initiation DPP-4 inhibitors.

In Dr. McDonnell's practice, she establishes a plan of potential steps and writes them out based on the patient-specific factors: Step one is we're going to start this medicine. If this doesn't do the trick, we're going to do step two. And if you have trouble with step two, here is the optional step three. And then a rapid follow-up visit that might be just ten minutes is scheduled to check on progress.

A Point to Ponder...

Type 2 diabetes poses multiple clinical concerns. Which treatment regimens have been shown to address concerns about weight gain and cardiovascular risks?

When dual antihyperglycemic agents (AHA) were added to metformin, ertugliflozin + sitagliptin showed the greatest improvement, and statistically significant reductions in weight and systolic blood pressure were observed with ertugliflozin + sitagliptin, ertugliflozin, or canagliflozin compared to single initiation DPP-4 inhibitors.

What telemonitoring and telemedicine strategies have the potential to improve medication adherence and treatment plan adherence?

You have to establish that the telehealth session is not just a friendly call for a chat. You have to define the time frame for the telehealth visit and set the agenda for the patient, recognizing that you cannot cover all the issues. The understanding and expectation that this is a real doctor appointment has to be communicated by the clinic staff. That should be all settled before you get on the line with patients.

In the office, most clinicians explain complex diabetes physiology or show therapeutic steps that we want the patient to take in order to determine the best eventual final strategy. We would write them down and draft a graphic for patients to understand. Or we would utilize some graphics we have in the office that tell the story. In diabetes education, that's a common tool. So virtually we can share these resources. You can share screen to display the glucose data they've sent to you, or draw out a regimen, so you can talk about it or even just to pop up a Word document.

Patients have provided remote uploads of their blood glucose data for a long time preceding the pandemic, but now we are using that data via telehealth and other modalities like continuous glucose monitoring (CGM) to get data from the Cloud and access it wherever we need to be. With the growth in telehealth, device companies have improved the built-in connectability of glucose monitoring devices and focused on devices to help people manage themselves.

Patients are now more aware of their glucose data. and more knowledgeable about their personal diabetes journey. This awareness can contribute to an improvement on medication adherence and treatment plan adherence. Patients have become familiar with uploading their blood glucose data and when we review this in a telehealth session, it is an opportunity to relate behaviors, eating, and medication adherence to the numbers they are seeing. It is an opportunity to link what patients are doing to what is happening with their devices and the glucose numbers that they're getting. That is patient empowerment for their self-care.

Patients feel empowered when they know what their blood glucose numbers are and what behaviors affect those number. They feel in control, and that's the name of the game.

Diabetes management requires interprofessional teamwork. How can telehealth be used to maximize the team approach with minimal hassle?

Management of T2DM may include an educator, a dietitian, a social worker, a trained diabetes psychologist, wound care and retinal specialists in addition to the diabetes expert, and all of these resources are tremendously important. Rather than having multiple appointments and the risks of in-patient visits or missed appointments, telemedicine offers the potential for multiple members of the care team to view a telehealth session simultaneously from remote computers and for different providers to take different roles during the discussion. When you have those resources at your beck and call during a telehealth session, it makes it a lot easier for patients to take advantage of them. Additionally, if telehealth sessions are recorded (with appropriate privacy protections), recordings can be shared with the team. In fact, retinopathy screening often involves remote assessment of a retinal image by a retina specialist. And wound assessment can be initiated with images taken during a telehealth session.

There is evidence in diabetes for the effectiveness of mindfulness training, and this can be helpful during stressful times, like the pandemic. Mindfulness training gives patients tools they can use in hard times, especially when they're off track or there's increased stress, to remind themselves of who they are and what their real goal is and where health fits into their priorities.

What are the limitations of telehealth for T2DM management? When are in-patient visits required?

Not all patients have access to the necessary technology, such as a smartphone, computer, or tablet with camera-ready, audio-capture speakers and an email address, internet connectivity and some may have difficulties using the system interface. Patient appropriateness must also take into consideration visual or hearing deficits. The cost of technology may also be another significant concern for patients.

It is part of the art of diabetes practice to know when a patient needs to be seen in person. For example, if hyperglycemia remains uncontrolled despite regimen alterations and adherence to diet and exercise recommendations, when hypoglycemia is a significant risk, when wound care or neuropathy become urgent concerns, or when psychological stressors are inhibiting patient adherence to treatment, in-person visits may be required. Some patients may need to be seen for yearly labs to check for microalbumin in the urine, to measure A1c, and perform other screening tests. So, since it's been a year since many of us did those things in person, it may be a good opportunity to get people back into the clinic. As vaccination becomes more widespread, patients may be more comfortable about in-person visits, and, for some elderly patients, these visits may be important for social contact and reassurance.

Disaster Planning

The pandemic highlighted the critical need for disaster planning for people with diabetes. Dr. McDonnell reported that, in her Boston hospital system, there was substantial decline in good control, which is an A1C less than 7. Unfortunately, the patients who fared worst were those in underserved populations, who

"Coupled with the surge in telemedicine, companies [have focused on] built-in connectivity of their devices and mobile health area where they could help people manage themselves. So with all of that, we see patients are more interested in seeing their glucose data."

did not speak English or were nonwhite, specifically black people. Some populations that were just more sidelined by COVID; they had to focus on survival for themselves, and their families. Their health was not a priority.

It is important to prepare patients for a crisis by asking them, "What's would happen if one day you couldn't go to the store anymore? Or what kind of preparation are you going to have for being mindful about your own health if your world gets turned upside down?" The Diabetes Disaster Response Coalition (DDRC) has a useful set of patient guidance for disaster planning, and clinicians should discuss disaster plans with patients.

It is essential to ensure that patients always have adequate supplies of their medications and, for example, glucagon--a lifesaving therapy for people with severe hypoglycemia. Dr. McDonnell reports that some patients were forced to ration their insulin and got into trouble. Patients should be reminded to inform their doctors if supplies run low in an emergency, and they should be reassured that their healthcare team can and will help solve the problem.

Conclusion

Telehealth became necessary during the pandemic, but its benefits mean it also is likely here to stay. The fact is that there are not enough endocrinologists in this country to take care of all the endocrine needs of the people; there are some states that don't have a single pediatric endocrinologist.

Now that insurance companies will pay for remote management, and if we can find the time and the energy and we get enough support from our staff, we can design a real feasible clinical program for ourselves and our patients so that they get what they need.

As Dr. Lal concluded, "With telehealth, we can deliver care without making people travel. Telehealth existed before the pandemic and it will exist after the pandemic."

ENDOCRINE SOCIETY

Claim credit for your participation by completing the posttest and evaluation at:

https://mlicme.org/fe/cp001

Resources

- American Diabetes Association. 8. Pharmacologic approaches to glycemic treatment: Standards of Medical Care in Diabetes. Diabetes Care 2018; 41 (Suppl. 1): S73-S85
- Association of Diabetes Care & Education Specialists. Coronavirus facts, guidance & updates for your practice. Accessed Feb. 8, 2021. https://www.diabeteseducator.org/practice/practice-tools/app-resources/covid-19-information
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