Speaker 1:
Welcome to the ASHPOfficial Podcast. Your guide to issues related to medication use, public health and the profession of pharmacy.

Kelly Mullican:
Thanks for joining for the Therapeutics Thursdays Ambulatory Care Pharmacy podcast. This podcast is hosted by the ASHP Section of Ambulatory Care Practitioners and provides updates on hot topics and ambulatory care pharmacy practice. My name is Kelly Mullican and I'm a primary care clinical pharmacy specialist at Kaiser Permanente, mid Atlantic States, and I am your host. With me today are Jonathan White from Froedtert and the Medical College of Wisconsin. He is an endocrinology clinical specialist. Also, with me today is Diana Isaacs from Cleveland Clinic Diabetes Center. She is an endocrinology clinical specialist and CGM program coordinator. Thanks for joining us today, Dr. Jonathan White and Dr. Diana Isaacs.

Kelly Mullican:
Let's get started talking about today's topic, continuous glucose monitoring, CGMs and ambulatory care pharmacy practice, exploring the basics. To get started, I was wondering if you both could explain the role of CGMs at ambulatory practice and how is CGM utilization typically initiated?

Jonathan White:
Yeah, I think I can start with this one. So the role for patients might be different patient to patient, but as far as for ambulatory care pharmacy practitioners, CGM data and using that data is all about filling in the gaps that have been kind of left by other parts of the patient's diabetes management. So we have finger sticks, which are very patient dependent person to person. They may be making decisions based on those. And we also have A1C, which we measure infrequently. And we also know that there are some gaps in there. So the ambulatory care pharmacists are typically used to managing diabetes, but the data we get from CGMs really gives us an entire ambulatory glucose profile that we can then use.

Jonathan White:
And so while patients who are not on CGM, who oftentimes are using our patient interview to try and fill in some of those gaps and make treatment decisions, the CGM will give us the patient's time and their range, or maybe if their A1C is not matching up with their finger sticks, can tell us if, if they are having hypoglycemia at times that we're not seeing or hyperglycemia overnight. The other part of it is actually it's giving the patient more information and we can be the
practitioners that coach the patients through that. And so patients can actually be making
different choices throughout their day based on the information that they're receiving. That could
be pharmacotherapy or that could be related to kind of their daily routine. Now, the second part
of the question is how is it initiated? And we are pretty lucky at our institution that we had some
key stakeholders take a lot of ownership of this piece. And so the way that we actually do it is
we're able to generate a prescription to one of our internal pharmacies.

Jonathan White:
And with that, we also send a referral to our prior authorization department. They're able look at
that claim, look at the patient's insurance and kind of determine what next steps would be. They
do communicate directly with us as well as with the patient and kind of figure out next steps.
Unfortunately, sometimes that does mean that it may dead end and maybe it's just not an option
for that patient, but we know that relatively quickly and we can move on from there. So the big
key there for us was actually having some folks who really took some ownership of this so that
we could move and really fill that other gap as well.

Diana Isaacs:
Those are a lot of great points and I would just like to add to what Jonathan was saying about all
the information that CGM provides. So actually they measure glucose every five minutes. So if
you do the math that ends up being 288 glucose readings a day. So when you compare that to
even a person who is doing finger sticks, let's say before every meal, four times a day, you can
imagine you're getting a whole lot more information to guide therapy. Now, in terms of how CGM
utilization is initiated, my setting is a little bit different. We have patients that have a lot of
different types of insurance plans, and so I've gotten used to Medicare coverage. For example,
Medicare will cover for people that take multiple daily injections, whether type 1 or type 2
diabetes, and they have to be doing finger sticks at least four times a day previously.

Diana Isaacs:
So knowing that, I can immediately know if someone's going to qualify or not. With private
insurance or with Medicaid plans, it really varies. We do have a running list of some of them, but
if I don't know, that's where I utilize my reps for the different CGM companies. Once the person
has kind of decided which one that they would like to use, it is always easiest if you can send
the prescription to the pharmacy, which you can for some systems, but some insurance plans
prefer to go through medical benefits. And in those cases, then you have to fill out different
paperwork. And usually the companies will send that to us and we fill it out and then move
forward with that.
Kelly Mullican:
Now, do you think their sites have access to professional units or CGMs that a patient may wear for a period of time and then return after use? If so, can you describe how this service has been integrated with the rest of your clinic?

Diana Isaacs:
Yeah, we do a lot of professional CGM. I think it's a great gateway to see if someone may be interested in personal CGM. Also, just because the insurance coverage for professional CGM is so much better than personal coverage. For example, almost anyone with a diagnosis of diabetes, whether they're taking insulin or they're not taking any medications can usually qualify to get professional CGM done at least a couple of times a year. This is different from personal CGM, which often has more requirements or requires people to be willing to pay out of pocket for it. So we have a pretty robust practice where we do these with shared appointments and bring in multiple patients each time to be utilizing the service. So I'm curious, Jonathan, how you utilize these in your practice.

Jonathan White:
Yeah, ours is referral based. And so the providers within our practice can refer into our service for use of our professional CGM. So we have two Dexcom Professional CGMs that we can loan out for a seven day period. And then we also use the Libre Pro, which for our listeners is a blinded version of CGM. So the patient wears the CGM for a week and then they come back and we scan it and get that information. So the way I kind of look at the two is providers many times they're looking to fill in those gaps like we were talking about earlier. And they refer into our service and we'll meet with that patient after another seven days and kind of go through everything with them.

Jonathan White:
More of the Libre Pro use is kind of more of that as needed type situation, where maybe one of us ... there's another pharmacist and myself, we're seeing patients or maybe another provider in the clinic, and something's just not adding up during the visit or they need more information in a short term, think of some patients who we suspect hypoglycemia is occurring, we may ease to that visit, go into that appointment, put a Libre on that patient and have them follow up with us in a week and then place the referral at that point. So it is varied, but our Dexcom is used pretty much every week for those two patients that take that out and come back.
Kelly Mullican:
So one of the questions that I seem to get a lot from both patients and providers, I would love for you both to address is, do CGMs really replaced the need for finger sticks and are they really reliable for the management or titration of insulin?

Diana Isaacs:
Yeah, that's a great question. So of the four personal CGM devices on the market, the Libre and the Dexcom both are approved to make dosing decisions without having to do a confirmatory fingerstick. So that means their accuracy is considered to be as good or better than [meters 00:07:36]. Now, with that being said, there are certain times when you still really should confirm with a finger stick. So while both of these systems do not require calibrations, they don't require finger sticks, there's a warmup period for both of them. It's two hours for the Dexcom and one hour for Libre. For sure if you need to check your glucose during that time, you should do a finger stick. Also, the Libre recommends in that first 12 hours to confirm with a finger stick for dosing decisions, just because the accuracy isn't as good that first 12 hours as the sensor is adjusting kind of to the skin.

Diana Isaacs:
And I would say that's really true of all the systems. There sometimes can be more variability that first 12 to 24 hours. So if there's really any doubt where symptoms are just not lining up with what the glucose level is saying ... in general, it's a very good idea to confirm with a finger stick. For example, if it's saying that the glucose is 50, but a person feels fine, confirm because what happens if the glucose is really 150, you don't need to treat it. Same thing if they were saying a person's feeling symptoms of hypoglycemia and it's saying there's not. So I think for sure, with any technology, it's a good idea to do the occasional finger stick. That being said, there are so many errors that can happen with finger sticks that we have to keep in mind.

Diana Isaacs:
For a person, just say grapes for example, that residue can be on the fingers and causes glucose to be 200 points higher. So those are things we need to keep in mind when we're looking at the accuracy. One other point I just want to touch on is when the systems report accuracy, they talk about something called, MARD, which is mean absolute relative difference. This is basically where they're checking glucose with the CGM and comparing it to lab glucose. So it's very difficult or it's not really appropriate to compare the margin from system to system because the way they do this testing can be different. For example, one system may have tested more in the low range, another one may have tested more in the high range. And so
there's going to be more variability from system to system. In general, once MARD is below 10%, it's considered that they are all appropriate to be able to dose insulin off of.

Jonathan White:
Right. And those are some really good points. And patients really do have to also have a comfort level with this. So we'll see patients in our practice who have been doing finger sticks for many years and making treatment decisions based on those, and they do have to generally get a comfort level with their sensor. And I've seen patients over time where they start checking quite a bit at the beginning, and then over time, they start becoming more comfortable with the fact that that sensor is accurate and it can inform decision making. I completely agree with Diana where checking at those times when you're going to be making a pretty significant treatment decisions. So those very high glucose is where a patient on insulin may be giving a large correction dose and they want to make sure that their glucose actually is high. And the same thing could be true on the low end versus causing rebound hyperglycemia, which could be even more significant if they are not actually low, so it could be having a false low from the sensor.

Jonathan White:
As far as the margin of error, everything that goes along with that, there also is the fact that the sensor glucose does tend to be a little bit behind the blood glucose. And we do counsel patients at the beginning about that and how as the glucose is dropping very quickly, the sensor glucose could be behind that. And so it's good to confirm in those situations sometimes with a finger stick. But like Diana pointed out, there definitely are some issues with doing finger sticks, making sure to wash hands and making sure that that's done appropriately so that you can accurately respond.

Diana Isaacs:
There's just one more thing I want to add, and that's that the Eversense technically also has the FDA approval to be able to dose insulin off of it. The reason I didn't initially mention it is because they are not doing any new starts right now. So people that are currently using the Eversense product can continue to access it, but people who don't currently have it are not eligible to get it. The hope is that the six month product will be available sometime in the future, but currently there are no new starts with that product. And that is the implantable CGM.

Kelly Mullican:
So I'm curious as to how you guys are able to retrieve data from the CGMs, how often are you downloading and reviewing them? And then subsequently, how are you guys this information in the medical record?

Jonathan White:
So I'll kind of take this from an approach [inaudible 00:11:58] pretty practical for recent experiences with everything going on with COVID right now, we've been doing a lot of virtual visits. And so the way that we've been getting the data from the CGMs is similar to what we were doing before, but it's been very helpful to have the cloud based programs that are associated with the CGMs. So with Dexcom, there's a program called Dexcom CLARITY. And with the Libre, which these are the two most commonly used ones in our practice, we have LibreView. And so with each of those patients are able to actually self-assist and they can either download an app on their phone that will sync if they're using their phone as the receiver, or they can plug in their receiver or device into a computer and upload to the cloud.

Jonathan White:
Now, our compliance department at our clinic has allowed us to download a version of the software onto our computers, that then we can ask the patient to share their data with us. And other changes in workflow as a result of moving into more virtual visits have been having medical assistants contact patients, using smart phrases to have the patients be reminded to upload their data. Now, with moving more virtually, we have been checking in with these patients more frequently, just to make sure that they're supported. Otherwise, sometimes it's actually done more on an as needed basis where patients can call into the clinic between ... if they're doing three month followups, they may call in after four to six weeks and say, "Hey, I'm going to upload my data to Dexcom CLARITY, could Jonathan or Aaron ... the other clinical pharmacist I work with, could they look at my information and get back to me and we can do it that way."

Jonathan White:
We may also generate some of those requests as well via My Chat through our electronic health record, where we may just ask a patient between visits to upload their data so we can do a quick review. It's pretty helpful, patients feel really well supported in that way. So if you're making significant changes, you can follow up sooner. Otherwise, we do tend to still do the in person visits about every three months or so.

Diana Isaacs:
I agree with everything Jonathan said. We have very similar methods that we follow at my clinic as well. Something that I just want to add is that in the beginning, I think patients require kind of more followup, especially when they're brand new to CGM, it's kind of a whole new world of these metrics, and data, and learning what an ambulatory glucose profile represents, and what their glucose management indicator, which is kind of a really another way of estimating A1C and the whole thing about time and range and what that range is. And I find a lot of people don't even know what their glucose targets are supposed to be. So there's a lot of education at the beginning. And then once you have that education at the beginning, then I think you can go longer periods where sometimes it will be every three months and then if a person has an issue, then it will be more frequent.

Diana Isaacs:
We also do a tech talk class and that's for anyone who newly started CGM to basically get all their questions answered and to go through some of the reports, what the data means, what all the key metrics mean and everything. And just another thing to add too is, I think this is a really strong role for a pharmacist to have in reviewing the data with the person. And I think we want to be mindful that we're approaching it from an area of positivity. It can be really easy to look at data and want to nitpick it and say, "Oh, you were really high there, you were really low there. What went wrong? What went wrong?" And instead, I really like to approach it from a positive standpoint and look at the day perhaps where time and range was the highest and try to replicate the behaviors that led to that versus focusing kind of on the negative. And I find that that ensures people are more likely to want to keep talking to you and reviewing their data together.

Kelly Mullican:
Thank you. So now with all the experience that you both have with your CGM practice, would you be able to describe a few barriers that pharmacists may experience when using CGMs in practice? How can they overcome these barriers so that CGMs can easily be incorporated into a workflow or a treatment protocol?

Diana Isaacs:
Yeah. So I think the biggest thing is the technology changes so quickly and keeping up with it, especially with how to access the data. So we have medical assistants that download when patients come into our clinic, and I feel like the process has changed multiple times for how to do that. Initially, everyone seemed to have a receiver or a reader and they would just plug it in and do it that way. But then everyone started using it on their smartphones, and initially, they
had no idea how to get that data because you couldn't just plug in the smartphone, you have to go through the cloud based system. So it really requires someone to be the technology champion, to stay current on all these vast changes and then explain them to the rest of the people in the clinic. I think that's a great role for a pharmacist. I've taken that role on in my clinic.

Diana Isaacs:
And just even another example, I noticed LibreView, to download the freestyle Libre, now there's a code that we can give to patients, so for all of our virtual visits, they can access versus us having to always email them the invite. So that was a recent change in that by knowing and keeping up with that, then everyone's happy because then we can still access patient's data and know how to fill their questions as they come with everything.

Jonathan White:
Yeah, I'll just add on that, as time moves forward, we have seen a significant increase in access to CGMs from a variety of insurances and getting them into more patient's hands, but insurance does remain a significant limitation. And so whether that's the requirements, like Diana had talked about earlier with having a patient checking four times a day or just having a point person who can navigate that for you, there are some pretty firm walls that are really hard to get past for some insurances. And so we have seen a dramatic increase in access, but it does still remain somewhat limited in some situations. And I'll also echo what Diana is concerned about, having someone who will be able to download this information and get it in front of the provider and in front of the patient within the clinic setting, sometimes this can be a timely process and when it is changing so rapidly, that can definitely be another significant barrier to providing efficient care.

Kelly Mullican:
Thank you. So based on your experience, how have you seen CGM utilization affect pharmacy consultation? Have you guys noticed an increase in diabetes focused pharmacy services?

Jonathan White:
Yes. Like I mentioned earlier, we not only do referrals for professional CGM use, but we also will get referrals for CGM exploration, where I will kind of sit down with a patient and be able to talk to them about the CGM options. And then the other type of referral for CGM would actually just be for placement of the patient's personal device. And so while there's another pharmacist [inaudible 00:18:46] we can do these referrals, we also have some RN CDEs that do some of these referrals as well. We take ownership of the professional use, but these typically result in a
follow up visit. And so we're following up with a patient on a professional CGM after a week and on a personal one, we follow up after about a month and check in and advise on clinical decision making.

Jonathan White:
Now, this usually generates a referral for collaborative management of that condition by the provider. And so our providers in our clinic have gotten very used to kind of how things are formatted, when we see patients, what our service looks like, and typically that results in us becoming a team member for that patient. And so becoming a point person in the clinic for CGM also generates other types of questions that we may get from providers. And then many times we're able to engage with those patients more frequently and kind of be another person for them and another contact.

Diana Isaacs:
Yeah. I completely agree. I've gotten so many referrals or patients inherited through CGM because we have this big professional CGM shared medical appointment that I coordinate. And so the patients get put into there, and then if I see ... I always check, if they don't have a follow-up scheduled for ... I don't know, for three to six months, then it's clear I need to make adjustments now and they need to be followed up much sooner than that, then I take them on. And so I get a lot of referrals that way and people have just kind of now know of me as that technology person. So anyone who now has insulin pump, has CGM, I often get to work with those patients.

Jonathan White:
Yeah. I'll just kind of add in. It does become pretty timely. And you see these folks that come in and all of a sudden, like the veil has been lifted and they have all this brand new data in front of them and they want to respond to it. And many times we're a really accessible provider on the team that can meet up with that patient sooner or help manage them electronically. So yeah, it does really ramp up for them.

Kelly Mullican:
So finally, a question that many pharmacists hoping to implement this service may be asking, do CGMs enhance revenue opportunities for pharmacists?

Diana Isaacs:
Yes. So I think that CGM definitely enhances revenue. There are three CPT codes that can be utilized and the CPT 95250 is for professional CGM placement. There's a 95249, which is for ... basically, it's a one-time use of a personal CGM device for education. And both of them require a 72 hour download, so that's important to keep in mind. So you generally build kind of your follow up visit and then 95251 for CGM interpretation. So when you look at kind of the rules of who can bill for these, pharmacists can directly bill for 95249 and 95250. The 95251 for the interpretation is a little bit trickier in that Medicare specifies it should be a nurse practitioner, a physician assistant or a physician. So in my practice, I do still do interpretation and bill for it.

Diana Isaacs:
The way we've gotten around it is I have my notes co-signed by the physician, and I am the service provider and the physician is the billing provider. And I asked the Ohio State Board of Pharmacy and they said, "Yes, this is within a pharmacist scope of practice." So I worked with my billing team to kind of come up with that solution. In terms of revenue from it ... so the interpretation, it's not that it's huge, but depending on, if it's Medicare versus private pay, it can be ... it generally, I would say maybe 35 to $50 per interpretation.

Diana Isaacs:
The insertion for the 95250 is actually the most, that's 150 to $300. So when I do a class of four to six people, we're bringing in pretty good profit for that. But with the interpretation, one of the things I've done is create a service where any of the downloads that we're doing, we use a smart phrase and I can make a list, it gets routed to me and go in there and then do kind of the interpretation, make sure all the requirements are there like time and range, percent hypoglycemia, all that stuff, and make sure it's being done and getting billed. So when you do that for hundreds or thousands of patients, you could imagine, you do bring in quite a bit of revenue.

Jonathan White:
Yeah. I agree with everything that Diana is saying is that things do tend to add up, and this can be a significant revenue source for pharmacists outside of the usual, just providing better care for these patients. The other part of this and kind of a pointer for everybody who's listening is, we do have our state boards of pharmacy who gives certain abilities to pharmacists and Medicare who gives the ability to bill for certain the personal placement and the professional placement. But your organization also has some responsibility in this as well. So there's your billing and compliance department, which may have different comfort levels with pharmacists doing billing for different parts of providing CGM care.
Jonathan White:
And so it's good to check there as well. And if it's not approved, then that's a great opportunity for a pharmacist to potentially up with with other providers who are interested in developing the service, providers who engage with this service and see what can be done to make this a revenue source for pharmacists in the ambulatory care setting.

Kelly Mullican:
Great. Well, thank you both so much. That's all the time we have today. I want to thank Diana Isaacs and Jonathan White for joining us today to discuss their experiences with how pharmacists can proactively integrate CGMs in providing diabetes care. Stay tuned for part two of our podcasts on Continuous Glucose Monitoring, CGM. When we discuss how to bill for CGM services and review how to clinically evaluate CGM data. Join us every Thursday, where we will be talking with ASHP member content experts on a variety of clinical topics.

Speaker 1:
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