

Dr. Stephen Taylor: Hello and welcome back. This is ASAM Practice Pearls, a podcast series from the American Society of Addiction Medicine. I'm your host, Dr. Stephen Taylor, and I am delighted to be joined by our respected expert, Dr. Melissa Weimer.

Dr. Melissa Weimer: Hi, Steve. How are you?

Dr. Stephen Taylor: I am doing well. It's great to have you on with us.

Let me just mention that April is Alcohol Awareness Month, a time dedicated to increasing public awareness, understanding and encouraging local communities to focus on alcohol use disorder. That's why this month we will be focusing our episodes on AUD-related topics.

Did you know that more people die each year from alcohol-related complications than from opioids?

While alcohol use among young adults may be declining, rates among women are on the rise. Despite decades of research proving effective treatment options, alcohol use disorder remains one of the most under-treated conditions in the United States. Of the nearly 29 million Americans with AUD, fewer than 8% receive treatment, and less than 2% receive FDA-approved medication.

So, why is this? Why are medications being underutilized? And what can we do to help? In today's episode, we're going back to the basics, reflecting on what 70 years of data has shown us to be effective and discussing why it's time to move beyond the traditional way of thinking that abstinence is the only goal. So, I have some questions for you, Dr. Weimer. We're going to pick your brain and benefit from your excellent body of work, which has been impressive, and your expertise. So, to start off with, I'm just going to ask what are some of the main FDA-approved treatment options for AUD, and how do they work? And how can they optimize treatment outcomes?

Dr. Melissa Weimer: Well, I'm very excited to be here and very excited to talk about this important topic, so thank you again for the invitation. It's wonderful to speak with you, Dr. Taylor, and obviously, you have a lot of experience in this as well, so I'm excited to talk about this. So, we have had FDA-approved medications for the treatment of alcohol use disorder since 1949. Did you know that?

Dr. Stephen Taylor: Wow. No, I did not, actually.

Dr. Melissa Weimer: It's pretty crazy, right? So, we have years, decades of experience and evidence in these very important medications. There are three FDA-approved medications for the treatment of alcohol use disorder. In alphabetical order, they are acamprosate, disulfiram, and naltrexone. Acamprosate is an oral formulation, disulfiram is an oral formulation, naltrexone comes in an oral or an intramuscular formulation. They all work a little differently, and they have all been found to be very safe and effective. If you don't get anything out of this conversation, please know

that these medicines are very safe and very effective. And again, decades of research showing that they work. Acamprosate works on the glutamate receptor, so for some people who utilize that, it seems to reduce alcohol craving as well as reduce some of the excitatory neurotransmitter activity you get from glutamate activity.

Disulfiram is what we call an aversive therapy, meaning that it doesn't actually work on neurotransmitters. It actually causes an unpleasant feeling after you take it and then use alcohol, and that's related to how it works in the body and its interaction with acetyl aldehyde, which is a metabolite of alcohol. There is some controversy around disulfiram, which we can get into, but I would say for highly motivated patients who have someone who can help ensure that they're taking that medication, it can be a very effective medication. And then finally, naltrexone, which, again, comes in an oral or an intramuscular formulation.

The oral formulation is taken daily at a dose of 50 or 100 milligrams per day. And the intramuscular formulation is a once monthly intramuscular gluteal injection. That works on the opioid receptor, which we know not only when someone has an opioid use disorder is the opiate receptor important in mediating ongoing use of opioids, but the opiate receptor is also involved in ongoing alcohol use as well. Naltrexone works primarily on the opioid neurotransmitters. It has some other effects, but that's its primary effect. We have seen again with years of data that naltrexone taken daily or in the intramuscular form reduces craving and has been found to reduce heavy drinking days as well as any drinking, and that's the same for acamprosate.

Again, I could go on and on forever, but that's sort of the general summary. I would encourage folks to look at a systematic review that was done by McPheeters et al. that's available in annals of internal medicine, so check that out.

Dr. Stephen Taylor: Oh, absolutely. Thanks for that. Now, that's a great summary. And yet, that's not the only list of options. For example, there are some other options like topiramate. And could you speak to that for a bit? Because there's been a recent study comparing topiramate to naltrexone. What can you share with us about that, and maybe some other options that have been considered?

Dr. Melissa Weimer: Yeah, great point. So, there was a recent head-to-head trial comparing topiramate to naltrexone. This study wanted to see what the effectiveness would be of utilizing topiramate at a specific dose compared to naltrexone at 50 milligrams. The dose that they were looking at for topiramate was 200 milligrams per day. They wanted to see if there was any benefit in heavy drinking/reduction of heavy drinking with topiramate more than naltrexone. And essentially, what they found was that both of them worked well.

Topiramate doesn't have FDA approval. It may never have FDA approval, quite frankly, because it's a very old medication, but we are seeing that it really can be as effective as these other FDA-approved medications. So, I definitely have it in my toolbox of medications that I'm offering to individuals.

And I think what's also really important about topiramate is we can utilize it in some patients where we may not feel as comfortable utilizing acamprosate or naltrexone. For instance, if you have a patient who has severe renal insufficiency, you can't use acamprosate, but you could use topiramate. Or if you had a patient who was on opioid agonist treatment, and they had an alcohol use disorder, well, you couldn't use naltrexone, but you could use topiramate.

Similarly, when we're looking at people who have severe alcohol-related liver disease, we can't use the highest dose of topiramate in those individuals, but we can safely use topiramate. There is definitely emerging evidence that we can use naltrexone in those folks as well, and we might get to that in a little bit.

But again, topiramate, I think, has a beneficial patient profile that you might be thinking about. The other group of people I'll mention is those with cocaine use disorder. Topiramate has also been helpful for those individuals. So, if you had someone who had both cocaine use disorder and alcohol use disorder, perhaps you're thinking about topiramate as a singular medication treatment for them.

Dr. Stephen Taylor: So those are excellent points, Melissa. And I got to say, you've sort of touched on, and very, significantly addressed already, the next question I was going to ask you regarding how to determine the right medication for a particular patient that you might have. And you highlighted something that I think is really important for our listeners to think about.

You touched on it, but I want to bring it out explicitly. And that is that much of the time, if not the overwhelming majority of the time, we're taking care of patients who don't just have alcohol use disorder. We're taking care of folks who have alcohol use disorder and cocaine use disorder; alcohol use disorder, and opioid use disorder; alcohol use disorder and the resulting medical complications of alcohol use disorders, such as renal failure or renal insufficiency or significant liver disease. And so, that really is important to take into account as we are looking at which of these medication options might be optimal for the particular patient in front of us.

Do you have any other thoughts on ways that our listeners can determine the right medication for the right patient or the particular patient that they have in front of them?

Dr. Melissa Weimer: I think everything you just said is totally spot on, and in addiction medicine, I think sometimes [we] fall prey to this idea that there's potentially a cookie-cutter approach we could have, and that patients are simple, and they aren't. We're all human beings. We're very complex. We all have our own goals, wants, desires, family situation, social situation.

And so, just like we have been talking about opioid use disorder for so long and ensuring that we're individualizing treatment, the same goes for alcohol use disorder or any type of treatment that we're utilizing a medication. Just like we would do for

someone who has hypertension, we're not going to always use the same medication, and one medication isn't always going to work for one person.

So, I think the same absolutely holds true for alcohol use disorder. The first thing I do when I'm talking to a patient about medications for alcohol use disorder is I try to understand what perspective they're bringing. Have they heard about these medications before? Has anyone ever offered them to them, have they ever taken them?

If they've taken them, have they taken them for a long enough period of time for them to actually work? What I generally find is that many people have been offered disulfiram, and again, it's been around the longest. So that makes sense why maybe more people have been offered that medication, but when we think about the options we have, honestly, it's not my first choice, generally. I'm probably offering another medication unless the patient specifically says, "I want to take disulfiram, and I want my partner to give it to me every day in a form of evidence-based treatment called network therapy." Wonderful. I'm so excited. Let's get started. Let's talk about that.

But if they say, "You know, all I've ever been offered is this medication that they told me if I took it, I would get sick, and that sounds terrible. And I'm not really sure if I'm ready to stop drinking entirely, but I do want to be healthier. I do want to address my alcohol use to the extent that I can. I do think it would benefit me and my health to reduce my drinking by X amount." Wonderful. Let's talk about how we do that, how we help assist you doing that and recognize that all of these incremental reductions are wonderful and need to be celebrated because this is all towards the progress of positive change and all towards the progress of this person being healthier.

And so, we see that many of the health risks related to heavy alcohol really are at those higher quantities. So, if we can reduce the quantity, we are helping our patients meet healthy goals. For instance, if we help people reduce from that heavy alcohol use to a lower amount, we potentially are reducing their risk of cancer.

The Surgeon General just came out with this warning about cancer risks related to alcohol and really that cancer risk is at the highest levels of alcohol use. So again, if your patient says, "I'm interested to reduce my use, I'm not sure if I want to stop, but I do recognize that there are some potential harms here, and I don't want to be harmed by my alcohol use." Then, I talk to them about naltrexone, acamprosate, topiramate. Baclofen is also an option, but I really haven't found it very effective in my practice. Gabapentin is also another option. I do find for individuals who have high anxiety, it potentially can be helpful, but quite honestly, I'm usually using it in combination with another medication such as acamprosate, topiramate, or naltrexone.

So, I talk to my patients about how they work. I talk to them about potential side effects. We ensure that they have informed consent on how these all work. We talk about medication adherence because the medicine doesn't work unless you take it,

and you know, that is one of the issues with acamprosate specifically because it's a three-times-a-day medicine.

Those are some of the things I do. I will say, generally, if the patient is open to it, I offer intramuscular naltrexone because I do have a pretty significant issue with medication adherence in individuals who are starting early treatment, and I do want them to have the benefit of getting the medication. So, if they're open to it, I do certainly talk about that and offer it if they're interested.

Dr. Stephen Taylor: Absolutely. That is great information. Thank you for that. That's really helpful. And again, you just added to our list of options that people need to think about and keep in mind, and you've also pointed out that sometimes we're going to need to use some of these medications in combination with each other.

What are some barriers that our audience may come across when they're trying to prescribe some of these medications and how can folks overcome them? So, you know, things like the drug shortages or issues with different modalities of treatment for patients.

Dr. Melissa Weimer: Yeah, great point, because we can talk about these medicines all day, but if we don't use them or offer them to our patients, then obviously they can't help them. Unfortunately, there is, or has been, a drug shortage of acamprosate and disulfiram recently, so that obviously leads to what your treatment options are.

We have had some patients who were stable on acamprosate, for instance, being offered naltrexone and not tolerating it. That can be a big barrier. Or we've had patients who are contraindicated to have naltrexone, such as those that are on opioid agonist treatment. And that is not safe for them to take naltrexone in that situation.

So, that's a real concern. And again, drug manufacturers and those that are making these medications need to know that they are vital to support our patients who are in recovery. So, whatever we can do to get those medications available is really important. I think the other barriers are medical knowledge.

Many of those of us in practice didn't receive any education about alcohol use disorder and medication treatment. For instance, when I was in residency, I don't think I offered any of these medications to any of my patients, and I absolutely saw patients with alcohol use disorder. So, if you don't know about how to use these medicines, it's really important that you are getting some of the free education that we have through PCSS-MAUD, which we'll talk a little bit about. So, educate yourself if you don't know about them. These are safe, effective medications.

They are not controlled. They're quite easy to use. There could also be institutional barriers, and in studies that have looked at why medications for alcohol or opioid use disorder are not more widely used, people cite that there's sort of a culture in whatever clinic or practice that they're in that advises them against treating

substance use disorders. So, as a practice, whatever practice you're in, it's important that you're supporting and normalizing the treatment because these are people that you're definitely seeing in a primary care practice or a cardiology practice or a hepatology practice, for instance.

Dr. Stephen Taylor: Absolutely true. And overcoming the stigma against people with SUD in general, including the stigma that is held by practitioners of medicine and healthcare providers is an ongoing struggle that we have in every aspect of what we do. And so, you're touching on that. And I think that's really important for people to keep in mind.

But then there's also another barrier that I wanted to bring up, and that is because of a good thing, actually. The fact that we're able to now treat people via telehealth that we might not have been able to reach previously. What about those folks for whom, for example, maybe Vivitrol, the injectable form of naltrexone, may not be an option?

What would you say about folks that we're treating via telehealth?

Dr. Melissa Weimer: I think it's wonderful if they're getting treatment via telehealth. Certainly not being able to go to a brick-and-mortar program to get that treatment would be a barrier to that specifically. If folks aren't doing well and they are receiving telehealth and they're interested in potentially receiving that injectable formulation, potentially going to their primary care practice and inquiring if it's possible for them to start utilizing that would be important.

But, you know, the oral formulation is quite effective. If the person's having difficulty remembering to take the medication, then I think partnering with a trusted individual in their life to, as I said before, help with that adherence, through something that has been described before as network therapy.

So, the idea that you're, you know, partnering with a trusted individual in your life to say, "taking this medication is really important for my health. Please help me with that." And then you're able to have this supportive conversation around why you are choosing to take this medication every day. That can be therapeutic in and of itself.

Dr. Stephen Taylor: Absolutely. And I actually trained under Dr. Marc Galanter, who was the developer of Network Therapy and who wrote the book on it and taught all of us fellows who trained under him about Network Therapy. And you're absolutely right. Not only is that a useful tool for use of disulfiram, which is the way he taught us to utilize it with respect to the medications for AUD, but it also can be helpful for that patient who needs to be on naltrexone oral form for whatever reason, and is not able to utilize the long-term injectable form of naltrexone and therefore may need some support in terms of adherence and other aspects of adherence to their treatment regimen. So, that's a great point.

I wanted to transition a little bit because I think one of the things that happens when people hear us talking so much about medication is that people forget that we are talking about a disease in AUD that is a multifaceted disease and really requires a number of different types of treatment approaches. And so, the whole idea that we are talking about medications because they are so underutilized, and they are FDA-approved, and they can enhance treatment outcomes doesn't mean that we're forgetting about the broader psychosocial treatment that is necessary for people with AUD.

Can you talk about this whole issue of making sure that folks remember to promote both the medication and the other psychosocial treatment approaches, including things like mutual help groups. What are your thoughts on that? And what would be your advice to our listeners on that?

Dr. Melissa Weimer: Yeah, I think it's a really important question and point that sometimes in our head, it becomes this either/or. I'm either taking a medication, or I'm participating in mutual help or kind of behavioral therapy. But really, it's got to be a both/and. When I'm talking to my patients about these treatments, some of them say, "I have zero interest in mutual health," or "I have zero interest in outpatient treatment." Great. Maybe that's how you feel right now. Maybe that will change in the future. Let's keep it on the table, but there is not a requirement that you have to attend those programs or you have to participate in those groups in order to receive this medication. So that's point number one.

Then point number two, I would say, is those supports. Mutual support, outpatient treatment, cognitive behavioral therapy can be really vital for many of our patients who are also taking medication and can solidify their motivation to take the medication, can solidify the neurobiological changes that are happening in their brain to help solidify their recovery or continue to reduce their alcohol use.

Whatever we can do to help them find treatments or groups that help. When I talk to patients about mutual help, which is a lot of what people think about when they think about alcohol use disorder treatment, they think about Alcoholics Anonymous. And that may be the only thing they think about.

Well, there is so much more that we have to offer patients. And there are different types of mutual support groups. There's smart recovery. There's groups that are based for women. There's so many types of different mutual help groups. And so, you know, if they had a bad experience or they didn't feel that one mutual support group helped them, that doesn't mean that a different one wouldn't.

It takes time to find a group that you feel comfortable with. Just like if you go to church, for instance, you don't always love the first church you go to, or if you are trying to make friends, you don't always connect with the first person you start talking to. So, it's the same idea with mutual support groups.

I do think, and I would love to see, that mutual support groups were more open to the idea of medication treatment. I would like to see those groups talking about just the option of medication because we do find that some groups are very closed off. Certainly, you don't have to talk about what medication you're on when you're engaged in a group like that.

But I think if more people could hear, "This medicine helped me," or "I talked to my doctor about this, and they were really supportive." I think that that would help a lot of people. I do hope that there is some movement as we get more people and more knowledge about alcohol use disorder that we start to see some of those changes.

The last thing I'll say is that speaking of telehealth or other types of entities that may help people, not everyone feels comfortable in a group. Not everyone feels like they want to share everything right in the beginning. And so, there are digital therapies that may be helpful. I do think there's a lot that can be gained from the social aspect of treatment.

But if that's not for you, that's okay. For instance, we're currently engaged in a research study, looking at a program called CBT4CBT, which is cognitive behavioral therapy that's computer-based. And that is giving cognitive behavioral therapy skills, specifically to address alcohol use disorder, for example. And it's self-run, and we see that it can help a lot of people. Those are some of the things that I would encourage people to think about.

Dr. Stephen Taylor: That is awesome. Thank you for that. CBT4CBT. Folks should keep that in mind. That sounds very interesting. I could not agree more with what you are saying here, Melissa. And I've told many of my patients, "Look, shop around if you're going to look at different mutual help groups.

And if you go and you visit a group and all they do is rail against the pharmacotherapy options for treatment of AUD or treatment of the condition that you're working on, then maybe you need to go to someplace else," because as we continue to educate folks and break through the stigma against MAUD and against AUD treatment in general, we're going to find that there are some places where people are more open and their thinking is more advanced and more enlightened and more up to date. And then there are other places where people are still thinking in a very antiquated way, and you're going to have to, for a while, at least, be discerning about which places you go to and you may need to just find a different group and go to one where people are a bit more enlightened and more updated in the way they think. And so, I agree with you completely that folks need to shop around and need to find a group that will affirm all of the aspects of their treatment journey and their recovery journey, including the MAUD that they may need.

One of the things that this makes me think about and that's related to what we at ASAM have been saying for a long, long time, and we have it codified in so many of our public policy statements and even in our ASAM Criteria, is the concept that

treatment needs to be focused on the needs of the individual. That needs to be the driving force.

And so, I had an example of a patient that was referred to me by a guy that, interestingly enough, is in the field and he and I've had many conversations about this whole idea that abstinence isn't necessarily the only goal. He referred this gentleman to me with severe AUD. And, after taking this gentleman's history, even as I was thinking about this whole notion of abstinence not being the only goal, it became very clear to me that for this particular guy, he needed to be abstinent, and abstinence was going to be his only way to get into recovery. And it was interesting as I'm realizing this as I'm taking his history, and then, once he started to talk to me about what he wanted and what he needed, the first thing out of his mouth was, "Doc, I need to never drink again. My goal is to never drink again. I have to completely stop drinking if this is going to work for me." The reason I bring that up is there are people for whom abstinence is absolutely what they need. And in many cases, they know that's what they need, and they will tell you. In some cases, they aren't so sure.

Then there are folks for whom abstinence is not necessarily the only goal or even the best goal. Can you speak to that a little bit? You've touched on it earlier, but I really wanted you to drill down on that and on this whole notion of a meaningful reduction in alcohol use.

Dr. Melissa Weimer: I think, you know if you're seeing someone and they say, "Abstinence is my goal," I don't think that we should try to convince them it's not their goal. If that's their goal, we should support them in that goal. I see most of my patients in the hospital. The people who are in the hospital related to alcohol harms really have had severe problems related to their alcohol.

They generally have some sort of health consequence. They also didn't necessarily come to the hospital seeking alcohol treatment, so for many people that I'm meeting in the hospital, they may say, "I really appreciate this information, but I'm really not ready to stop completely because this kind of knocked me over the side of the head. I wasn't ready for this. I'm just not there yet in my thinking about alcohol." So, for those people, granted, many of them are in the hospital, so we do have a period of abstinence, but it's not always very long, maybe a day or two, we encourage them to think about taking a medication. And if they're open to it, we will start it in the hospital.

This is only after a day or two of them not drinking alcohol. Now, certainly, if they're having severe withdrawal symptoms, we're not going to start the medication at that time. But once they've safely gotten through their alcohol withdrawal syndrome, we will start the medication, see how it goes for them, talk to them about how it works, and also counsel them if we're talking about topiramate, naltrexone, or acamprosate, that if they did go home and resume drinking, then they should still continue the medicine. Many times, they are actually confused to hear this because so many times

they think, "Oh, well, I have to stop completely." But again, the evidence shows us that these medications reduce heavy drinking days.

They do also reduce alcohol use at all, but many of the outcomes was reduction of heavy drinking days. That means that people are still drinking some alcohol, but they're drinking less overall. So, we encourage folks to continue the medicine, even if they are continuing to drink alcohol. We're also talking about harm reduction approaches, particularly if somebody's coming in with severe dehydration or electrolyte abnormalities. We're saying, "You know what? It's really important while you're drinking that you're also staying hydrated. So, maybe you make sure between every 1 of your drinks, you're drinking water, for instance, or Gatorade or something else where you're getting some electrolytes and nutrition. And then if you find yourself not eating a lot, then maybe you drink some Ensures in there, or you have some protein bars or something else. You're getting some nutrition to support yourself." We really talk through that and are open to the idea that abstinence may not be on the table for everyone.

Dr. Stephen Taylor: That is excellent. That is so true. And again, it may be the case, and probably is the case, that when you start with where the patient is and what their goals are, you have a better chance of helping them to achieve those goals. And then, who's to say that by keeping people alive with harm reduction measures, you know, decreasing the dehydration and the electrolyte imbalances and the malnutrition that can accompany heavy alcohol consumption, who's to say that that in and of itself isn't going to add some years onto a person's life. And that's a very important and very significant goal. So that's great. I appreciate that. And just to finish off that vignette that I described, that patient that said to me that announced from the beginning, "I want to stop drinking completely." I just heard from that guy, who reached out to me on LinkedIn to remind me that he was now celebrating his third-year anniversary of sobriety and was in solid, stable recovery. So again, when you start with the patient's goals and help them try to achieve those goals, it may be that that's when we're going to get better success in helping them reach those goals. I think that that's so important because you're right, in the hospital setting, when people end up there because of some complication, in many cases, that may not be what they're looking for, and it's important to start with our patients.

Dr. Melissa Weimer: One more point I wanted to make because many of our listeners might not practice in the hospital. So, if you were thinking about this in the outpatient setting, I just want to offer another potential way that you could consider utilizing this approach, which is something that many of the listeners might've heard of. It's been coined The Sinclair Method. And this is the basic idea that someone is continuing to drink alcohol, but while they're drinking alcohol, and again, you want to talk to them about harm reduction approaches. You want to make sure they're not at risk for severe, complicated alcohol withdrawal. So, with all those caveats, assuming that it's safe for this person to engage in this, you can start naltrexone treatment while they are still drinking alcohol, with the intended goal that they will attempt to reduce their alcohol use once they start that medication. The idea is that their cravings are reduced, and their use is hopefully reduced in the process. There are

individuals who will utilize that as a mechanism to reduce their alcohol use, and they have had a lot of benefit in that sense.

Dr. Stephen Taylor: Excellent. Thanks for mentioning that. Yes. The Sinclair Method is a well-known sort of harm reduction approach that I think folks should be aware of. Is there anything else that you would want our listeners to know about using medications for AUD or setting patient-centered individualized goals and helping them reach those goals?

Dr. Melissa Weimer: I think the other big misconception that I've heard as I've been really working to educate more people about the use of these medications is this idea that you can't use certain medications, such as naltrexone, in alcohol-related liver disease. I want to offer some newer evidence that we now have from many, many trials over decades at this point that are showing that in individuals who have alcohol-related liver disease, you can safely use naltrexone even in individuals with decompensated liver disease, so Child-Pugh C, class C liver disease, and certainly, you want to have a risk versus benefit conversation with those individuals, but much of the data is showing us that, even in those individuals taking naltrexone versus having heavy alcohol use, leads to improvements in their liver disease versus a worsening of their liver disease. And there was an important recent study that showed in individuals with alcohol-related liver disease, providing medications for alcohol use disorder actually reduced all-cause mortality.

That was by Rabiee et al. in Hepatology Communications from 2023. So, check that out. And we also have a lot more information about use of medications in individuals with alcohol-related liver disease on the pcss-maud.org website.

Dr. Stephen Taylor: That is awesome. Thanks so much for sharing that. That's such an important topic, and I'm glad that you brought that up and highlighted that. I want to get us to our takeaways. What are the key takeaways that we want to make sure folks have as they think about this podcast and think about this great information you shared with us today, Dr. Weimer. What are the main things you would want to make sure folks remember?

Dr. Melissa Weimer: So, number one, I would say medications for alcohol use disorder are safe and effective and need to be used for more individuals with alcohol use disorder. The fact that less than 2% of individuals with alcohol use disorder receive these medications is an indictment, quite honestly, when, in 2021, 178,000 people died of alcohol-related complications.

So, we need to have these medications available to people so that they can have longer, healthier lives. Number two, we talked a lot about, you know, what are the goals? Abstinence is not a requirement for initiation of these medications, and it is not always the goal that an individual will have. And we can utilize these medications to help people set other goals, which are a reduction of alcohol use.

Third, I would say, medications for alcohol use disorder can safely be used in the hospital setting. They can also be safely used in the setting of liver disease, and important research now coming out about how beneficial they can be for all-cause mortality for individuals with alcohol-related cirrhosis.

Dr. Stephen Taylor: That is so, so important. Thank you so much for that, Dr. Melissa Weimer. This has been a real treat, and I am so thankful that you have joined us and shared some of this wisdom with us, Dr. Weimer. And I want to thank our audience for tuning in to the ASAM Practice Pearls. Our expert, Dr. Melissa Weimer, has been phenomenal. She shares these amazing insights. She's shared with us several references where people can get some great information, so I want to direct you to those.

And I want to highlight that for additional resources, there's advanced learning techniques. There's diverse educational offerings. So, please explore the Provider's Clinical Support System, PCSS-MAUD education. This is a free program. It's comprehensive. It offers expert training, guidance, and mentoring on the prevention, diagnosis, and treatment of alcohol use disorder. Also, don't forget to subscribe. Share this episode with colleagues who may find this information helpful.

Again, we're talking about the disorder that kills many more Americans even than OUD, despite all of the attention that OUD gets, understandably so, many more people die from alcohol use disorder, and so this is really important.

We'd love to hear your thoughts. What tips do you have for treating alcohol use disorder? Please be sure to check us out on social media and join the conversation. Thanks for listening, and we'll see you next time on ASAM Practice Pearls.