

Opioid Podcast Series, Season 2, Episode 2: Role of the Pharmacist in the Treatment of Patients With OUD

Hello everyone and welcome to the insuring medical a medication for opioid use disorder (OUD). Through the care continuum and Larissa with Mount Pacific Quality Health and I'm joined with my colleague Kyla Newman from Alaska, and we will be your host today. In today's presentation we will discuss the role of the pharmacist in the treatment of patients with opioid use disorders. You will be hearing from three guests today, Kyla, Meghan and John and John will be your panelists at the second half of our call. So, I will start with introducing Kyla Newman. She's a PharmD who graduated from the University of Wyoming, School of Pharmacy in 2007. She has additional training in ambulatory care pharmacy with certifications in cardiovascular risk management, diabetes, medication therapy management, and vaccinations. Kyla worked as a community and clinical pharmacist for fourteen years, serving her local Alaska community. Now working with Mountain Pacific, Kyla supports several patient safety initiatives across Alaska via community coalitions, including reducing adverse drug events, opioid safety, chronic disease management, and immunization promotion and education. In 2022, Kaitlyn, we see the prestigious Bowl of Hygeia Pharmacy Award given by the American Pharmacist Association, recognizing pharmacists who possess outstanding records of civic leadership in their communities and encourage pharmacists to take active roles in their community. Graduated from the University of Kansas College of Pharmacy and subsequently completed a PGY-1 pharmacy residency at the University of Arkansas for Medical Sciences. Meghan is currently a clinical assistant professor at the Latchets' College of Pharmacy Anchorage campus. She practices as an inpatient clinical pharmacist. She teaches throughout the pharmacy curriculum in precepts 3rd- and 4th-year pharmacy students for clinical rotation at her practice site, her clinical focus, our pain management in substance use disorders. So, I have the pleasure to bring you Kyla Newlin who is again the PharmD working with Mountain Pacific. Today I'm going to discuss the pharmacist's role in opioid management, in the opioid epidemic, and working with patients with medication use disorder. So, the definition of the continuum of care is a system that guides and tracks a person over time through appropriate health services. And I think when we think about patients with opioid use disorder or medications for opioid use disorder, I don't think we always think about those patients in this continuum of care. An expanded definition of continuum of care, it includes prevention, early intervention, treatment, continuing care, and recovery support. And this is for all conditions. As we think of any other chronic conditions, we might be tracking patients on, such as diabetes or heart failure. And patients that are using medications for opioid use disorder are no different. And so, I think that's a really important thing to consider as we're learning about how we can best serve these patients. And this was from the a 2015 national survey on drug and health, and they estimated that 10% of patients who have a substance use disorder, so, this is not just opioid use disorder, but any substance use disorder are able to access treatment. So, 90% of patients may be unable to access treatment. So, I thought that was a pretty, pretty telling statistic. We do have some data on Medicare recipients based on Medicare-D claims. There is a significant portion of this population that is seeing deaths, overdoses, and less than 1 in 5 is actually being treated with a medication for opioid use disorder. And this is data from 2021. So, this really shows that in all populations, but specifically even in our older population, that we might not be thinking of as much, there is still significant gaps. So, what's the pharmacist role as we're talking about treating patients with opioid use disorder? So just kind of the same things that you would think of obviously with treating any chronic disease, really being that drug expert who can help in drug selection. As we know, there are multiple different formulas available of the medications for opioid use disorder. There's films, there's tablets, there's injectables. Pharmacists can help providers, or even if they're in a role where they're actually running a medication assisted treatment program for opioid use disorder, they may have even more control out of picking which drug they're going to use based on different factors. For example, patients who lack transportation or live in rural areas. You know, we see that a lot here in Alaska having to fly into many places. And I'm sure in your rural states there is distances to travel and patients that have those barriers. The injectable form might be a better selection than one of the other forms. So just being able to help make those decisions and really educate providers

to make sure patients are getting optimized treatment. And then dosing. So, as I was looking at the dosing, there's some new research that actually came out regarding buprenorphine. And there was a JAMA brief and just in September actually of this year, and this was a cohort study of 6,499 patients who initiated buprenorphine between 2016 and 2020 and those prescribed the recommended daily dose, 16 milligrams, were at significantly greater risk of treatment discontinuation within 180 days than those prescribed the higher dose of 24 milligrams. And so just looking at things like that, making sure that patients are getting dose optimized so that they stay on their therapy and are able to continue and not go back to using. Another thing pharmacists can help with is monitoring side effects. We know that buprenorphine has a high side effect of nausea and also chronically constipation, and we can help with recommending medications that might help mitigate some of these side effects. And also, treatment that can go along with medications for opioid use disorder to help either reduce side effects or other withdrawal symptoms. So, if you think about drugs like ondansetron, drugs like clonidine that might be co-prescribed, which can help optimize dosing on those to make sure that the patient isn't having those symptoms and that making them not want to take their opioid use disorder medication. So, here's kind of just the overarching pharmacist role. Our role essentially started with the opioid epidemic and has now moved into helping with medications for opioid use disorder. So, in the epidemic, we serve as an avenue for prevention because we're the people that are actually distributing these medications to the patients. We're doing the onsite patient education about these medications. We can also be a point of intervention, so we can be the person that identifies that a patient might have an opioid use disorder and be able to communicate that with the provider. So obviously one of our main roles is going to be dispensing. And in that role, we can be those the person that educates the patient, not only on the risks versus benefits of opioids, but also on how to use their medications for opioid use disorder. We can also serve as a point of education for patients to direct them to safe medication disposal, whether it be a medication disposal bag, whether it be information about drug takeback events, safe medication storage, so keeping their medication in a safe place in their home. We can help with identifying red flags for misuse, which I mentioned earlier communicated with prescribers. Very critical, just making sure that that we're on the same page and have all the information we need to give these patients the best treatment that we can. And then distribution of naloxone is going to be a big role that the pharmacist can play. So, if you're looking at all the different care settings in where a pharmacist works, you look at the hospital and I know last week our presenter talked about initiating buprenorphine therapy in the emergency department, and they know Megan's going to touch on that a little bit more in the community setting, supporting relationships with community resources. So, as we know, those supportive community resources are really important to make sure that patients have access to. So that would be maybe behavioral health supports, transportation supports, all the things that go along with making sure that a patient is able to maneuver, make it to their appointments and continue with their therapy. And then in the consultant settings, the consulting pharmacists in long term care has a huge role in really looking at screening patients and monitoring when they do their when they do their medication reviews. Risk assessment is another area. It's important as pharmacists that we make sure that we're keeping ourselves up to date with the current data and treatment recommendations for patients with opioid use disorder. To build that confidence, there's reimbursement gaps. If a pharmacist wants to do actual, direct patient care. In some states, pharmacists are allowed to prescribe and modify drug therapy, but in other states, they're not. So, this is a barrier, if a pharmacist wants to get more and more involved in this process. Drug shortages. We've seen drug shortages of buprenorphine kind of here and there. And then also some of the suppliers put distribution limits on some of the controlled substance medications. So that could be a barrier for patients to continue to get their medication. Potentially, they might have to go to multiple pharmacies if there's different suppliers involved. So that's another barrier. And then just inclusion and care teams. So, pharmacists may not always be included in care teams, especially if they're in a retail pharmacy where they're disconnected from the rest of the care team. And then last but not least, stigma. So, Megan's going to talk a little bit more about opioid stewardship and how to implement an opioid stewardship program. I will turn it over to Megan now. I should include other things that I'm doing as a pharmacist on the inpatient side, and that includes actually treating opioid use disorder and managing pain for people for patients with opioid use disorder. So, we're going to start by talking about prevention. This is one of the main pharmacists role now we've seen through the opioid epidemic the consequences of not monitoring our

opioid use correctly and not being good stewards of opioids. They're vital medications. We definitely need them. A lot of patients will need them chronically. But it's my job as a pharmacist to make sure that we're using appropriate doses and starting low and then working up and then identifying which patients really will need chronic therapy. And then the other part of prevention is just educating our patients. A lot of patients now are familiar with the opioid epidemic, but it's up to us as pharmacists and then working with the rest of our colleagues in the health systems to make sure that patients are aware of the risks but also of the benefits. And just talking through those risk benefit discussions together. We've had an opioid stewardship committee for a couple of years now in my institution, but prior to having a formal committee, we did do work on opioid stewardship, and part of that was tied into these joint commission requirements for monitoring safety and minimizing risk associated with pain treatment. So Joint Commission had already laid out these standards and wanted us to be compiling and analyzing data. But those things were happening outside of a formal committee. But we found that by creating a formal committee and now enabled a good avenue for us to all come together and talk about some of the challenges that we're facing and come up with solutions together. So, in the past, our team lead our chair was our chief quality officer. That's kind of changed in the past few months just with turnover at our institutions. And now it is actually myself and one other pharmacist are the chairs for our committee. You'll see that we have a lot of other disciplines involved and that includes our surgeons, but also our pre-op and post-op nurses, our anesthesiologists, our nurses on multiple units such as the medical surgical unit and OB. We also include our emergency medicine teams. So at least one ER physician and an ER nurse, a hospitalist, some of our ICU staff, mostly ICU nurse staff and then our PACU staff. We have started to also include our mental health clinicians. So, a psychiatrist and our primary care physicians that are within our health network, we also include our OBGYN team and providers from our urgent care. So even though our opioid stewardship committee is focused on inpatient care, we have worked on branching out now to our outpatient providers so we can get a more comprehensive reach to our community. So when we started our Opioid Stewardship Committee, we started by setting goals, and it's pretty overwhelming to think about what do we want to do within the health system? And we came up with three big overarching goals that we wanted to improve clinical outcomes. We wanted to ensure that we were in compliance with regulatory measures such as those Joint Commission measures, and then we wanted to track data so we can actually see whether we are improving in any of these settings. So, when thinking about improving clinical outcomes, that's a really broad goal. So, thinking about our SMART goals, I want it to be specific and measurable, attainable, reasonable, and timely. And so, we first wanted to look at decreasing adverse effects from opioids. So how do we know if we're actually decreasing adverse effects? First, we wanted to look at optimizing our daily MME use and identifying areas of overuse. And so, this started with our tracking data, and from that we found that we are actually overusing fentanyl patches. And oftentimes when we are using TCAs, so patient controlled analgesia, our doses were either too high or we are starting basal rates on people who weren't considered opioid tolerant. And so those are ways that we could optimize our MMEs. So, it's not necessarily that we're just setting stringent goals and saying that everyone has to be under 30 MMEs per day. We know that everyone has a different pain experience, and all these procedures are going to have different pain thresholds. So, we really just wanted to focus on finding those doses that were probably overtly wrong and minimizing the risk from those next. We wanted to improve our multimodal pain strategies. The best way to decrease is the MME use. So, the morphine milligram equivalent use is by increasing pain treatment from other modalities. So, this led us to developing a model multimodal pain management pathway that's just a 2-page sheet that we disseminated over to our urgent care providers, our primary care providers, and then we have handouts throughout the hospital that just highlight what multimodal agents we have on our formulary. So, this includes things like our NSAIDs talks about where nerve blocks can be done and what agents we can use for nerve blocks. Talks about nonpharmacologic therapies like where you can find resources for heat or ice, and then also covers some of our other multimodal agents, like medications for nerve pain and dosing strategies for Tylenol, things along those lines. And then from that multimodal pathway revised our order sets. We found that a lot of our older order sets were using a higher opioid dosing than were really necessary, and those were just being ordered because they were the easy click on the order set. So, by managing that order set, we were able to pretty easily start to move down on our MME use and then also add in those multimodal agents to the order set. So, you're only one click away from adding multiple

different targets for pain management and not just relying on opioid therapy. And then we thought about how else can we show that we're improving clinical outcomes? And then part of that just comes down to patient satisfaction and improving their experience. So, part of this was developing a pain management and opioid handout so that patients felt that they had a good understanding of their treatment modalities, why we're using multiple agents and why we are concerned about using too high of doses of opioids for too long of a period of time. And so those empower the patient to have control over their treatment. Also, we wanted to improve those multimodal pain management strategies. So that was kind of a 2 for 1 deal. And so, by incorporating both of those, our goal was to improve that patient experience. Next, we wanted to ensure regulatory compliance, so making sure that we are up to par with joint commission metrics and that also we were tracking appropriate documentation of medication dosing and titration, which also falls into that joint commission requirement. And then we also wanted to track data. So, the data is key to proving that what we're doing is actually improving patient care. The first part of tracking data is just our daily pharmacist chart review. We have a clinical monitoring dashboard called Sentry seven that highlights we are able to build in rules so it will ping any patient that's on more than 90 MMEs per day, or on a long-acting opioid, or on a medication for opioid use disorder so that our pharmacists are sure to review those for appropriateness and be able to provide recommendations accordingly. Next, we're tracking MME data, and we actually track this by specialty and then by specific provider. Our emergency team had been doing this for quite some time and they had a fun competition going that they could see who had been using the lowest amount of opioids, but then also just keeping themselves accountable if they noticed a certain trend with one medication that they were overusing and then looking at some of their multimodal agents. So, we track this data usually quarterly and then give kind of a progress report to each physician and it's blinded from their other position. So, it's truly just for their tracking of how many MMEs per day that they're using. And so, there's not a great way to show like there's a threshold that you should avoid because we do have a lot of patients who are opioid tolerant coming in for procedures. So of course, they're going to have higher MME utilization but can just help providers track that they're not increasing over time. And then next, we have been monitoring our adverse effect events. So that includes things like naloxone administration, oxygen supplementation, decreased respiratory rates. And then going back and tracking, why did that occur and how can we prevent that in the future? Next, we do high, high-risk medication reviews. Fortunately, we have a lot of pharmacy students who are on rotation with me who are able to help out with this. So at least once a year, we're doing a medication use evaluation for all of our long-acting opioids. And the initial medication use evaluation for fentanyl patches is actually what prompted the development of the policy and protocol. And then same thing with our patient control analgesia. And then next, we track our multimodal agent utilization. And this includes reviewing new multimodal agents that we could add to our formulary or just tracking whether we're appropriately using our current multimodal agents. You can go to the next slide. So overall, that was our journey for our opioid stewardship program. We're still in the process of improving that program, but fortunately with our multidisciplinary approach, we have a lot of different feedback from different providers, which has been fantastic, and we're all just working together towards the same goal and working together to create those new educational items and revising our order sets and overall and just improving the care. So, the next step of the pharmacist role in treatment of opioid use disorder is actually managing medications for opioid use disorder. Like Kyla mentioned, there's a huge disparity on who can actually reach treatment. Part of this was in place just because of the DEA X-waiver. So here in Alaska, at least, we had a shortage of physicians who were actually X-waivered. Now that that X-waiver is gone, we still have a lot of physicians who just aren't as familiar or comfortable with prescribing buprenorphine. And so that's one of the barriers to care. So that's an area that pharmacists can assist with. So, the pharmacist role in treating opioid use disorder starts with actually just prescribing the medication. And this is something that pharmacists can do in multiple states now. And there have been studies that show that increases patient access and retention. So, this is an area where we in Alaska are hoping to progress to allow pharmacists to prescribe medications for opioid use disorder. On the inpatient side, this is something I do probably every single week. We have a lot of physicians who are comfortable and familiar with prescribing Suboxone, but they know that I, as the pharmacist, have a little bit more expertise and choosing which way that we start Suboxone, because there are standard initiation methods where you start a higher dose of Suboxone once patients are actively in withdrawal. But there are newer

prescribing patterns, one called the Bernese Method. We're actually microdosing Suboxone, so it doesn't require the patient to go into withdrawal. The trick is that it requires a lot a pretty frequent administration of small doses. And so, the pharmacist can help out with setting that up and then discussing with the nurses the care plan and supporting them and administering those medications. I also help out a lot with the assessment of opioid use disorder and providing adjunctive medications for patients who are in opioid withdrawal, such as hydroxyzine or clonidine or medications for GI upset. So, some of those signs and symptoms that can come along with opioid use disorder and withdrawal. The other thing I'm involved with a lot is just monitoring. On the outpatient side, pharmacists are well equipped to order labs and evaluate them and that can be routine lab monitoring that you need for things like naltrexone and buprenorphine. And this can also involve assessing patients and assessing signs and symptoms of withdrawal with a clinical opioid withdrawal scale. And then also like Kyla mentioned, we can monitor for those side effects what the increase in dental concerns with the buprenorphine films. That's something that pharmacists can help ensure that patients are connected with dental care and make sure that they're routinely getting those exams. And then next, pharmacists are experts at adjusting medications for opioid use disorder. Something else that I'm always looking at is whether patients are comfortable and whether they need their dose titrated. More like Kyla mentioned with that new study that a lot of patients who are doses under 16 milligrams, they struggled with retention. And so this can be an area where pharmacies are able to evaluate a patient and see whether they would actually benefit from that higher dose or when the time comes and patients have been stable on buprenorphine and have a stable home environment and are wanting to taper off of people working or any other agents, this is a time that pharmacists can assist with that taper. One other thing that I'm doing a lot in the hospital setting is managing medications for opioid use disorder and the perioperative setting. And this is another area where I feel pharmacists have a lot of expertise. So next, kind of tying into that perioperative management, I'll talk a little bit about managing pain for patients with opioid use disorder and optimizing multimodal therapies. So, some examples here include with buprenorphine increasing the dose and separating the dose. The largest pain control action from buprenorphine happens in those for first 4 to 6 hours after a dose administration. It's actually taking their once daily dose and dividing it multiple times a day can usually successfully treat pain and then just add multimodal agents. So, then we don't require additional opioids on top of buprenorphine. Starting buprenorphine after it's been held prior to surgery can be really complex and require the microdosing strategy, which unfortunately usually requires a couple of days to successfully get them back up to their maintenance dose. So, this is something that I, as a pharmacist and advocating for the patient and that we should continue their medication and then other non-opioid therapies or potentially even just high affinity full opioid agonist on top of their buprenorphine for a short period of time. With methadone, it's a very similar approach that by dividing the dose into multiple daily doses, you actually get better pain control with methadone. But something that I frequently see providers want to do is to increase the methadone dose. But methadone has a really long half-life and does require a few days to reach steady state. And so that's not usually an effective way to manage acute pain. And so, it's my role to make sure that we're adding short acting opioids for the acute pain and our multimodal agents and then just keeping the same methadone dose and dividing it. And then lastly with Naltrexone, that's an opioid antagonist. There are a lot of complexities with managing that in the perioperative setting if it's an unplanned trauma or surgery. And that really comes down to maximizing our non-opioid and nonpharmacologic strategies first, and usually involving our anesthesiologists so that they can get some nerve blocks on board or potentially an epidural. A few resources that I wanted to highlight regarding opioid stewardship and multimodal management are these three resources. The University of Florida's Pain Assessment and Management Initiative is a pain management and dosing guide that's a modifiable multimodal handout. And this is actually what we based our multimodal handout off of. The University of Florida gets permissions to use their resources as you wish and modify them to your liking. So, we actually made ours to be our institutions colors and added our formulary medications onto that guide and then disseminated it out. The American Hospital Association Opioid Stewardship Hub. We found a lot of our inspiration there. And then the American Society of Hospital Pharmacy, they're ASHP, they have a pain management and MOUD resource center. And this is a great resource for identifying ways to expand pharmacists reach and the setting of medications for opioid use disorder. They highlight legislative change, the changes that are happening here and give resources for advocacy for

pharmacist prescribing for these medications and some resources on how you can actually be reimbursed in some states for that prescribing. And then they also just give some great resources on managing medications for opioid use disorder and have some perioperative guidelines as well. All right, Megan, thank you so much. And thank you, Kyla. So now we're going to have Jonathan Pouliot. Jonathan Pouliot is an M.S. and a PharmD and as well as a board-certified pharmacotherapy specialist. John received his B.S. in biology from the Providence College and his PharmD and M.S. from the Campbell University College of Pharmacy and Health Sciences. All right. Well, thank you for having me, my part of this presentation is really just to facilitate some of the questions that came in over the course of the session. I did want to just compliment the presenters today. They did a great job of kind of outlining some of the pharmacists' roles in both the inpatient and outpatient care and the management of opioid use disorders. Some of the important points that I took away were thinking about the continuum of care and not just siloing. And so, I thought the example of this idea that pharmacists are in a lot of these different areas of care and trying to think about patients that have that suffer from opiate use disorders in the continuum of care was helpful. I thought the study that was mentioned about dosing optimization was really key. So, you can get a patient, identify them correctly as having opiate use disorder, get them the resources that they need. But sometimes even when doses are optimized, they can still kind of fall through the cracks and can result in discontinuation. The last thing I thought I'll mention before I get into the questions was this idea of opioid stewardship in the inpatient setting. A lot of times we think about opioid use disorders as something that happens more in the outpatient setting or in the community. But it is something that we deal with in that inpatient side in the hospital, in emergency medicine and so forth. And so, I think it's important to be thinking through what stewardship looks like so that we're not creating a problem down the road. I think a lot of what we're seeing in our in our communities and in our healthcare facilities are the result of a lack of stewardship that took place over the course of the last few decades. And so, while we do want to deal with the problem that is occurring now in terms of the epidemiology of opiate use disorders, I do think it's important for us to be thinking to the future and making sure that we're identifying opportunities to decrease a problem that could occur down the road. With that, I will turn move into some questions. And so, I will kind of walk through the questions Where do we find information on state restrictions for pharmacy practice in OTPs? DEA website has a list of DEA like just providers who are able to be licensed by the DEA per state. So that's a good way to find resources on that. But you're looking specifically for pharmacy resources for a state. Usually, the State Pharmacy Association or the state board is a great place to look. Usually there's like a 200-page guidance that you can look out for the state pharmacists regulations, and you'll find some information there. But if you want an easy look, I usually just look at the DEA website on who can actually have a DEA license per state. And just kind of reflect on some of the information that's out there. I have found myself, especially in my emergency practice, emergency medicine practice role, kind of being a little bit of a legal expert for my providers, especially with some of the changes to X-waiver and things like that. They kind of want, hey, can you give me a one pager? And so that's another role of the pharmacist that that I've experienced over the last two years or so with a lot of the changes to who can prescribe, what's the difference between prescribing and dispensing of buprenorphine. And so, I think it's in addition to our medication expertise, sometimes we have to read those 200-page documents and boil it down so our providers know exactly what they can and can't do. The next question is talking about is more focused on the committee. The Opioid Stewardship Committee says that a lot of the healthy competition between providers about opioid prescription and MME, could you remind us how often your committee meets to review the data that you that you review? Yeah, we're meeting quarterly. We did at one point report out that prescribing monthly for them but got to be a little bit cumbersome to keep up with. So, we're right now we're doing quarterly, and it has been a fun, healthy competition. Some providers will come by, and they'll like, look at me and the like, I know I'm going to be higher this month. A couple more questions for you about your project. How did you discover the MMEs for MMEs that clinicians were choosing the easy button and maybe expand a little bit about what that entails? Yeah. As far as identifying whether somebody was using an order site, we're fortunate to be able to actually see in our electronic health record whether an order came from an order set or whether it was hand typed in. So that's kind of how we were able to identify that order set issue. And also, largely our orthopedic providers have standard order sets for total knees and total hips. And so, we knew that they were relying on those order sets for that easy pick. And as

far as identifying or calculating the MME data, in the past, I actually had to have a student hand calculating all the MMEs, and she created an Excel calculator in one hand, review all the data for the hospital. Now, Century seven is actually able to assess that data for us. So, it's an easy one click button to be able to calculate the MMEs. It does include methadone and buprenorphine and those MMEs. So, we've had to exclude those. And then we kind of have a separate section for patients with opioid use disorder or chronic methadone therapy, and then patients who are on different opioids just because methadone and buprenorphine are so potent. The next question how do you manage ongoing communication with such a large interdisciplinary group that goes across a variety of practice settings? Unfortunately, lots of emails got, I wish there was another way. I think the Google chat can be a good way to have like an ongoing instant message between the groups. Next question. Did you say that the pharmacists need to obtain a DEA license to initiate medications for opioid use disorder? And was that accomplished through legislation? So yes, pharmacist would need a DEA license in order to be prescribing buprenorphine specifically. Methadone can't be prescribed by any providers for anything other than pain. So, for opioid use disorder, they would have to actually be going to the methadone clinic for that. So, you might have a pharmacist involved in the methadone clinic, but they won't be independently prescribing methadone. But yes, that is managed through state legislation. Last question. Do you notice an increase in buprenorphine prescriptions? Did you notice an increase in buprenorphine prescriptions after the removal of the X-waiver? I personally have not seen an increase in patients on buprenorphine and I think there's just a lot of clinical inertia that kind of gets logs like you don't need that full 24 hours of training anymore. But just getting comfortable with the medication that you haven't used and potentially 20 years if you never had an X-waiver is really challenging. Kyla, do you have any other viewpoints on that from the community side? Yeah, I agree with what you said, Megan. I think people are just slow to even know that there's no x-waiver anymore. And then, you know, and not having not having the confidence to feel like they're able to prescribe buprenorphine seems like it's a barrier. And that can be part of our role as pharmacists is to really, you know, get the word out and educate and show providers that it really isn't that hard. It's much easier than managing a patient with diabetes, honestly. And, you know, folks with other chronic disease. Yeah. I'll just I'll just echo that. I think there's also still some of the stigma that you mentioned, Kyla, in your presentation that there's you know, providers are worried that, oh, if I if we start becoming a if we start prescribing Suboxone, then, you know, we're going to end up on some, you know, Reddit page and we're going to end up getting overwhelmed with opioid use disorder patients and so sometimes the stigma of the unknown, the stigma of like, what happens if we, you know, step into this, this area can contribute as well. We have one more one more question that just came in. Can you share your experience or order set when implementing buprenorphine in the inpatient setting with involvement of multiple disciplines in an effort to keep the patient in the hospital for the management of serious infection or other diagnosis? So, we do have an order set for implementing buprenorphine. I think that's part of what the question is about. The order set is specifically for patients who are presenting already in withdrawal just because it uses the higher dosing of 2 to 4 milligrams versus if somebody comes in and they have recently used heroin or fentanyl and potentially won't go into withdrawal for like the next 8 to 12 hours, then they're a better candidate for the microdosing induction and there's no real way to order set that one. It's really patient specific on like what your timeframe is as far as keeping them in the hospital for serious infections, this is something that I as a pharmacist typically like go talk to the patient about how important it is that they stay here for the treatment of their infection and really just assure them that there's no stigma. We can talk about what substance they use, how they used it, and there's no judgment on that. But we just want to make them comfortable. I think typically when patients are leaving against medical advice, it's because either they feel that they are being mistreated or they feel that they're not respected or listened to are heard or that they're just in a lot of pain. And because withdrawal is really uncomfortable. So, I think by just having the conversation with them and making sure that we provide the adjunctive medications for opioid use disorder and give them their options, that's a lot of patients also don't want to be just put on methadone or put on buprenorphine. You know, have the discussion about the pros and cons of those options and treat their pain accordingly. And then we've had pretty good success. Thank you so much. And again, I would like to second how thankful I am for the presenters. Great information.