

- Lynn McPherson: Hello, this is Dr. Lynn McPherson and welcome to Palliative Care Chat, the podcast brought to you by the Online Master of Science and Graduate Certificate Program at the University of Maryland, Baltimore. I have multiple guests today. I'm so excited to be doing this podcast.
- I've garnered as many members of the Society of Pain and Palliative Care Pharmacists who presented at Pain Week on this conference call here so that we could record how we thought the sessions that we presented at Pain Week went and where we think we're going to go next with this. So I've got a lot to slog through here. Let's see, where shall we start? Let's start with the session that Jessica Geiger-Hayes and Alex McPherson and I did. It was one of the very early sessions, literally and figuratively, where we did Pain Terminology, Knowing the Difference Makes a Difference. So Jessica Geiger-Hayes who is a Pharm-D but also a Master of Science from our program, is a Palliative Care Pharmacist at Ohio Health, and Alex McPherson is a Palliative Care Pharmacist at Washington Hospital Center MedStar in Washington, D.C. So Alex and Jessica, what did you think about that session?
- Alex McPherson: So this is Alex, by the way, but this is a session that is eternally at 7:00 AM. And each year I'm always pretty surprised by how many participants show up eager and ready to play Jeopardy, that is the format of our Pain Terminology Session. The Amazon gift cards might have something to do with it, but it is always well attended and this year was certainly no different. So a lot of fun.
- Lynn McPherson: Jessica what were some of the categories we had? Do you recall?
- Jessica Geiger: So I remember we had Pharmacotherapy, we had Equianalgesic Dosing, which was fun because it was great fun to watch people try to do math at 7:00 AM. Nobody wanted to volunteer for those because it was math at 7:00 AM.
- Alex McPherson: Especially the 500 point ones.
- Jessica Geiger: The 500 ones, true!
- Alex McPherson: [crosstalk 00:01:59] monitoring and.
- Lynn McPherson: [inaudible 00:02:01] an Amazon card.
- Jessica Geiger: What was that?
- Alex McPherson: Right? That's right. Totally.
- Lynn McPherson: We gave a \$5 Amazon gift card and I'm convinced that people would kill their mother for a \$5 Amazon card.

- Jessica Geiger: I think I had people that were answering more than one question. I probably should have done a better job of making sure we didn't have repeat answers.
- Lynn McPherson: Although I didn't notice a lot of takers for that Neuroanatomy Physiology column.
- Jessica Geiger: No that was [crosstalk 00:02:24]
- Lynn McPherson: And I think that would have been a \$10 Amazon card. But that was a lot of fun and I thought it really set the tone for the meeting and we learned a couple of years ago to make sure to remind Pain Week, "Don't post the handout!" Because some of our little kittens would cheat, wouldn't they? So would didn't let them do that this year. So while we're on the two.
- Jessica Geiger: It was a highly sought after handout, it was a highly sought after handout when we were done. I had so many people come up to me in the hallway or at other sessions saying, "Where's the handout?", "I want the handout.", "Did they post it yet?"
- Lynn McPherson: Well, I'm sure they could do it after just not before. But while I'm on Jessica and Alex, why don't you talk a bit about the Pain Therapeutics lecture that you gave? That was a couple of hours long. That was, there were a lot of people there.
- Jessica Geiger: We did have a lot of people, this is Jessica again, Alex and I, had to tag team that one and it was really fun.
- Alex McPherson: A guest appearance by Jessica.
- Jessica Geiger: We had a lot of content to cover in two hours, but it was also very well attended. There were so many people, and it was close to after the lunch break and I was very happy that everyone also stayed awake.
- Alex McPherson: It's hard to compete with the free lunch.
- Jessica Geiger: Or the food coma. I think there were a lot of great questions that came out of that one. They liked the participants liked the guideline review and how deep of a dive Alex took into the different options we had to help remind people that we're not just up here saying opioids are for everyone. We're talking about everything that we can do to appropriately manage people's pain.
- Lynn McPherson: Absolutely.
- Alex McPherson: And we even incorporated a very brief discussion on some of the non-pharmacologic interventions, which I think people these days, especially in midst, the opioid crisis, have a lot of interest in. So although we didn't spend a

whole lot of time on that section, I think it was one that garnered some question.

Lynn McPherson: I'm always afraid when I give that kind of a lecture, then I might be too basic, and be boring people. But I did not think that was the case at all with this. I thought you guys were very thorough and going over all the therapeutic classes. And sometimes I personally enjoy getting back to basics and making sure that what I think I know I still do know and that I'm correct and there's the current thinking. So I thought you guys did a terrific job on that one.

So let's switch to Laura Meyer-Junco, who is a Clinical Assistant Professor at the University of Illinois Chicago, College of Pharmacy. I think Laura won the prize for the snappiest titles, although, Fudin certainly has given her a run for her money. So Laura, tell us about Life Hacks, to Teach Chronic Pain Patients.

Laura Meyer: Okay. So I developed the talk after I spent good portion of a year reading through self help books to teach patients with pain, self management strategies because I work in Rockford, Illinois. And so this is an area where we don't really have access to psychologists and cognitive behavioral therapy. So it was kind of my watered down approach to CBT and acceptance and commitment therapy.

And I think it went better than I expected. I was expected to have to have a psychologist in the audience, kind of raised their hand and school me on their subject area. But I think it went pretty well. And I think even just preparing it myself really helped me garner more skills in this area because, I work with geriatric patients and we're [inaudible 00:05:50] the word therapies, opioids around and then and [inaudible 00:05:53] says, and this type of thing because of their chronic co-morbidities and they're kind of frustrated. They're frustrated about their pain control. So I kind of felt helpless.

So I thought that by teaching myself self management strategies, I could empower patients to have some level of control over their own pain and to recognize how negative self talk, those negative comments we make to ourselves all day long can really work through the pain experience.

Lynn McPherson: What's your favorite hack that you talked about?

Laura Meyer: Well my favorite hack is probably the one that's probably the most obnoxious and it's called the Stop Technique. So when you're spiraling out of control and negative thoughts, you just slam your hands on your lap or the table and just yell, "Stop!"

Lynn McPherson: Ah,

Laura Meyer: So I think that might not be something most patients will like to do, at least in public. But I thought that one was funny because I mean it really does work.

Lynn McPherson: Yeah, that's a great one. That's a great one. Now I like your other topic too, Navigating the OTC Aisle, What a Pain in the Aspirin. Man, I wish I'd thought of that title. So tell us about that.

Laura Meyer: Okay, so this also came from a working with older adult patients again and they're always sneaky about their, over the counter use. A Lot of times they're not telling me about it. But after I asked the question 5,000 ways or look in their little bag on their walker, I recognize that they are taking these medications and there's so many brand extensions out there that we really can't talk to our patients in terms of brand name. For instance there's three different Excedrin products, two have the same ingredients, different instructions. The third doesn't contain aspirin at all. So it really was a session to increase awareness of really what's out there. It is kind of a jungle. I like the, the topical product, the trolamine 10%, but I can't call it just Aspercreme because Aspercreme makes a lot of topical products.

Lynn McPherson: Sure.

Laura Meyer: One called Aspercreme with lidocaine, but you would think that means trolamine with lidocaine but it doesn't have any trolamine at all.

Lynn McPherson: Got to love line extensions.

Laura Meyer: Yeah. And then also to kind of go through, what's the deal with these manufacturers coming out with these rapid release Tylenol formulations or these solubilized Ibuprofen, are they really fast acting and if they are, what's the deal with that? And so like I use Advil, a film coated tablets because from what I found there, the fastest acting and then literature suggests, in terms of acute pain, the faster they work, the better all over efficacy see they may have. And the last total analgesic use you may use. Which, as someone working in geriatric, I like less is more for sure.

Lynn McPherson: I was just talking to a physician but an hour ago and he said, "Have you seen the literature coming out that alternating Ibuprofen with acetaminophen, actually works better than oxycodone 5mg for certain types of pain." So I do think people are increasingly interested in the OTCs.

Laura Meyer: Exactly.

Lynn McPherson: Yeah. Well good job and awesome titles. Let's see, where should we go next? Let's go to Dr. Fudin. So I asked Dr. Fudin, how shall I introduce you? And we were all a little stumped. So somebody suggested that he is in the running with the Beer Man to be the Most Interesting Man in the World. So Dr. Fudin if anything you want to share about your background or what you do aside from wearing an adorable bow tie. You gave like 5,000 talks at Pain Week. Good grief. And to make it even more complicated, half of them, Dr. Fudin did with Dr. Gudin. So talk to us about this Manage Pain and Minimize Misuse, Abuse. How

About Abuse Deterrent Opioids to Enhance Patient Quality of Life? Are They Really Worth the Money?

- Jeff Fudin: That was a fun program. I can't remember whose company sponsored early a program. And I get in at seven o'clock, everyone was full. That was crazy. So I think that the abuse deterrent formulation is a pretty cool thing. The problem is nobody wants to pay for them.
- Lynn McPherson: Yeah. Well they're expensive and insurance doesn't cover them.
- Jeff Fudin: Insurance doesn't cover them. I mean some insurance do cover, some states require that HHS covers one abuse deterrent formulation or two abuse deterrent formulations, those doctors don't prescribe it. My experience is just honest to God, true. I've given lectures where we've had some [inaudible 00:10:29] folks in the audience, including substance abusers. Gosh if take a room full of physicians and pharmacists too, and put them in one room and say to them, "Okay, can you tell me what the differences are between these various formulations?" "What's the difference?" "Is there more than one way [inaudible 00:10:47] term formulations?" These substance abusers have a better handle on it than the people that prescribe the drugs.
- Lynn McPherson: I'm not surprised.
- Jeff Fudin: Oh, yeah. It's unreal because some of them are easier to overcome than others. Yeah. The FDA has guidelines now of how, what criteria you have to meet that you shouldn't be able to crush these things, if you do crush them that the time to peak is not drastically changed that the [inaudible 00:11:15] is not drastically changed. So they're pretty cool formulations but again the problem is that nobody really wants to pay for them.
- Lynn McPherson: Yeah. I'm sorry, did you, could you just speak again?
- Jeff Fudin: No, I have to say, the other thing is that unless every drug has abuse deterrent insurance companies are going to always favor the least expensive, the cheapest, least expensive products. So.
- Lynn McPherson: Of course.
- Jeff Fudin: Right. So in the, yeah.
- Lynn McPherson: Yeah, and plus it doesn't circumvent, I can still swallow 10 of them at one time.
- Jeff Fudin: That's right. Yeah. So you can die in six hours instead of one hour.

Lynn McPherson: Yeah. So obviously my favorite of your talks [inaudible 00:11:56] has got to be Maleficent Morphine Milligram Equivalents and Dosing Dilemma Disasters. It's a good thing I didn't drink my lunch today. Wow. What's that all about?

Jeff Fudin: So, yeah, I figured you must love that.

Lynn McPherson: I do.

Jeff Fudin: So the reason I chose maleficent is because I want to come up with a catchy title so the definition of that is intentional conduct that's wrongful or unlawful by public officials. Okay, well this is really perfect because really I think a lot of public officials have weaponized the CDC guidelines in terms of in milligram equivalents. And so I talked about that. I talked about, as you well know, the various laws in doing some of these conversions and I think that probably the most basic, the actual most basic of those laws is that morphine milligram equivalents was never intended to ascertain equivalent toxicity. It was intended to have equivalence in advocacy. What is the [inaudible 00:13:08] equivalent of these two drugs. So theoretically you could have a morphine equivalent to something that it's not even an opioid.

Lynn McPherson: Sure.

Jeff Fudin: It has to do with efficacy. So I talked about that concept and I talked about of course all the things that could affect morphine equivalency. The genetics for one thing, drug interactions. I mean there's just all sorts of things, weight, a disease state, the way that these drugs are metabolized. I mean, so all these things are important. If we try to convert, for example, oxycodone to morphine or back and forth, morphine, as you know does not [inaudible 00:13:55] the metabolism and oxycodone does. You could drastically overdose or underdose somebody based on other drugs that they're on or based on their phenotypes.

So talked a lot about that. And I also, what was really interesting, I didn't think it was going to get such a big laugh, but one of the things that drives me nuts is the laws and the CDC calculator. And it's really no secret. All you have to do is pull it up on your phone or the internet and use it. And it's dangerous, particularly with methadone. And so I pointed out that I did actually contact CDC, I asked them to meet with them so we could at least talk about it. They never got back to me. I've had people contact them on my behalf, and that didn't seem to matter. So myself and colleagues ended up publishing an article called Safety Concerns with the Centers for Disease Control Opioid Calculator.

Lynn McPherson: Yeah, but they don't want to hear that. They don't want to hear that at all. As a matter of fact, practitioners often don't want to hear that and I've had arguments until blue in the face that they should not use the CDC equivalency guidelines to calculate doses for patients for therapeutic purposes.

Jeff Fudin: Right.

Lynn McPherson: Yeah, no luck with that. Well, that's a wonderful presentation. I'm sure, that's an avenue of great interest to me too. And just so you know, Dr. Fudin did not sit on his rear end the rest of the week. He talked about Kratom, which of course we worry about liver disease, Deuces Wild, Arguing the Rules of the New Game and the Visible Few an Imperfect Burden on Patients and Providers. So you are a busy, busy boy at that meeting.

Let's see what else we have. I would say of the talks that I gave, one of my two favorites was of course Opioid Math Calculations, Conversions, Titrations and Breakthroughs. It's always a lot of fun and it's been interesting for me because the second edition of my book, Demystifying Opioid Conversion Calculations came out a year ago and I changed the chart a little bit based on more recent data from mostly from Dr. Akhila Reddy at MD Anderson showing when you go from IV hydromorphone to oral morphine, it's closer to one, to 11 and a half or 12 not one to 20 as the older guidelines has suggested. And to make the whole table work, I made the 10 milligrams of parenteral morphine equal to 25 of oral morphine because I can show you a data showing it's 10 to 20 and I can show you a data saying it's 10 to 30. So I felt like I was on as firm of ground as I could get by saying 10 to 25 so that the hydromorphone conversion would work.

Well you would think that I have just stuck the world in the eye with a needle. The way people have reacted. The biggest complaint I've got is people can't divide by two and a half in their head. I was like, Oh, for gosh sake, let's call it third grader so you can do the math. But it's been very interesting over the past year, seeing people acknowledge this new data and how the new table is stronger and much more accurate. But people sure do hate change. So it's interesting to see how this evolved.

And the other talk that I gave that I really liked because I live this everyday, is the Curbside Consult and Pain Management. I'm on call for hospices for doctors and nurses. They call me all day long for pain assistance and consults. And it makes me crazy when I feel like I'm on the game show 20 Questions. And I live in fear that I forgot to ask the 21st question, that I may be putting a patient at risk because I don't have all the information. So those were probably two of the favorite ones that I had done. Although I have to say, even though she's my daughter and even though she is expecting my first grandchild, I really enjoyed the heck out of debating with Dr. Alexander McPherson. Does Cannabis Reduce Opioid Death? And Does Gabapentin Increase It? Alex, who do you think won that debate?

Alex McPherson: Well, I think in my first debate I had somewhat of a leg to stand on. So, in the first debate I argued that cannabis does not in fact reduce opioid deaths. And what really sealed the deal for my side of the argument was a study that was recently published in the journal PNAF and contradicts a pretty widely cited study that was published back in JAMA in 2014. So basically the 2014 study found that between 1999 and 2010 states that had medical cannabis laws had a

nearly 25% lower average rate of opioid overdose deaths than states without such laws.

So in terms of legislation, obviously a lot has changed since 2010 so currently 33 states plus D.C. have legalized medical marijuana. And sadly, during that time, the number of opioid overdose deaths was six times higher in 2017 than it was back in 1999, so the researchers at Stanford University took that and decided to replicate the original study and expanded the analysis to include data through 2017. In doing so, they actually found that the association between medical marijuana laws and opioid overdose deaths reversed. So states with medical marijuana laws had average rates of opioid overdose stats that were nearly 23% higher than states without those laws. And that 2014 study has been cited in something like 350 scientific articles and is drawn significant public and media attention. So I think I definitely had a leg to stand on with that one. But I'll admit I had a harder time in our second debate and arguing the gabapentin does not increase opioid related deaths. So I'll let you take that one away.

Lynn McPherson: Yeah, I got you on that one. I'll grant you the cannabis one, but gabapentinoids have been shown to reduce minute volume. We've seen data where as monotherapy they have increased the risk of death. And certainly when combined with other the CNS depressants such as opioids, it absolutely heightens the risk. So, we're kind of in a tough spot now. We shouldn't use opioids. Okay, let's use the gabapentinoids. Uh oh, they cause an increased risk of death. The cannabis is not a safe bet that doesn't look like that to safe harbor. So it's a trying time for sure. And then Alex, we really went off road with our presentation on, You're Using What for Pain Management? Psilocybin, Ecstasy and Ketamine. What did you think, how that went?

Alex McPherson: And this was definitely a fun session and one I really enjoyed preparing for and surprisingly, at least to me initially, the research is really pretty compelling. So we know that psychedelics have been used in things like religious and healing ceremonies since ancient times, but it was really in the 1950s and 1960s that these drugs attracted a lot of interests from the psych and neuroscience field. And research really took off at that point and there were a lot of promising results starting to emerge, but everything pretty much came to a halt in the 1970s so a lot of this is just coming to light now with more research being done.

And as we continue to deal with the opioid crisis and complex patients that we see in our worlds of hospice and palliative medicine, we're always looking for alternatives and better ways to manage our patients. And the three drugs we discussed here psilocybin, MDMA, and ketamine are three potential options. So, the data when it comes to psilocybin is really quite compelling with regard to cancer related psychological distress, treatment resistant depression, and addiction. And we also discussed two other potential areas for use, obsessive compulsive disorder and cluster headaches. And then you took it away with MDMA or ecstasy.

Lynn McPherson: Which is said to be a kinder, gentler LSD. And I thought the group that was in attendance was really struck by that YouTube video that we pulled up showing a partial segment of a woman who was in a therapy session under the influence of MDMA for really dramatic situation that she'd experienced in her life. And it took three sessions, but she's a brand new kitty now. So I do agree this is very cutting edge and very interesting. So, stay tuned on that. And the last one you and I did Alex with the pre-con that was really well attended, Hitting the Bullseye in Pain Management Using All the Arrows in Your Quiver. We did two cases. The first was about pancreatic cancer, where we covered the waterfront, which really is an interesting cancer to pick because you've got sematic neuropathic visceral pain, you've got the whole gamut. We were able to talk about interventions such as a celiac plexus block, appropriate pharmacotherapy, a non-drug intervention. And then Alex, you talked about that really awful case or the poor guy with the BKA.

Alex McPherson: Yeah, we spent a lot of time discussing difficult to manage pain with regard to wound care. And I was really struck by the amount of personal experience and insight people had with regard to the use of compounding pharmacies and different creams and solutions that were being used for wound care. So a lot of great participation on that front.

Lynn McPherson: Absolutely. And then I know that Jessica, you've taught with Alex and I before on wound care. So back to you for one last talk, Spilled Beans and Hard Stops, How Legislation Guidelines and Reimbursement Policies Impact Patient Care. That sounds like a party right there. How was that session?

Jessica Geiger: It was a party. So this talk actually, and I'm going to have Jeff chime in to. The talk was born out of a guest blog post that I was able to collaborate with Jeff and some other pharmacists on about what we were seeing in real life. How are these guidelines affecting how we're able to take care of patients and what has happened when the guidelines got turned into laws and then the insurance companies jumped on board with that and wanted to have their own layer of rules and prior authorizations that just slow the ability for us to care for our patients.

So I was able to go over kind where we've been, what's been going on, and I gave the audience members a chance to just vent and share some of their struggles. And we also collaborated as a group on, I shared a little bit about what we do in my practice to overcome some of this. And they were all able to also chime in and share some things that they do as well to try and do the best we can for our patients when we have all of these layers of red tape that we have to cut through sometimes.

Lynn McPherson: Tough topic to be sure. And our last participant who's joined us is Dr. Maria Foy From Jefferson in Philly, outside Abington. Yes. Dr. Foy?

Maria Foy: Abington Jefferson. Actually we've merged.

Lynn McPherson: There you go. Put it all together. So you did two presentations with our buddy, Dr. Tanya Uritsky. The first was called Better with Age. What's that about? Wine? I don't know. What is it?

Maria Foy: Well wine gets better with age most of the time unless you'll let it sit out too long. But no, this was not about that. This was about pain management in our elderly patients. Where we're looking at different kinds of pain and how would pain affect elderly patients differently than maybe me and you. And because we're not the elderly yet, I'm getting there.

Lynn McPherson: We're 29 hey. 29 baby and holding.

Maria Foy: Right. So we're looking at that and looking at changes in the elderly that would maybe explain why we may need lower doses or would we maybe get away with different medications and what we have to watch out with based on co-morbidities that we're going to see more as we age. And we then talked about different therapies that we can use and some of the things that we came up with that I feel we're, our pointers here is we're seeing a lot more pain in our elderly patients. It's highly prevalent in the older adults just for the fact that we're aging, our bodies are wearing out.

We may be having more bone on bone arthritis, we may be seeing more obesity related pain or just people aren't moving around as much and becoming more stiffening up and things like that. But we have to really take into account the changes that are happening in our elderly. What is happening pharmacokinetically, what is happening pharmacodynamically that we have to worry about when we're choosing what would be the appropriate therapeutic options. We have to look and see what is causing that pain. And like I said, just tailor to the best thing we can use for that patient. I am fascinated where I see some of our patients come in with broken bones and they come in and they're over 80 into the hospital and they're getting away with a gram of Tylenol, acetaminophen every eight hours around the clock and barely need an opioid.

Lynn McPherson: Wow.

Maria Foy: That just blows me away because if I broke my arm, I would think that I would not, that acetaminophen is not going to be effective for me. And so we looked at different medications in the Beers Criteria when it relates to analgesia and what would be our best choices, and then we pushed a little bit more on multimodal analgesia. This way you can get away with lower doses of medications and maybe eliminate some of those side effects if you're only using one agent.

Lynn McPherson: That makes sense. How about your other one titled Doing Business or Risky Business? What's that all about?

Maria Foy: Well, that's talking about using benzos in our palliative care population with opioids. So I know that a lot of times the thought process is that we're just, it's no big deal. People have severe illnesses we should be using. It's no big deal if we use a benzo and an opioid, what's the big deal? So we looked at a lot of the evidence, what is the evidence out there for some of our common conditions like dyspnea, anxiety, insomnia, delirium, nausea and vomiting and how that relates to benzodiazepine use in addition to opioids and what would be better.

So for example, a lot of times with say anxiety, we think to go to a benzo right off the bat, where really that's not going to give you a longterm effect. You're going to build that tolerance up within a month. So after a while, the benzo may not be the best choice for you. And using something like an SSRI or a different SNRI to maybe prevent that anxiety from happening verses just treating it right then, then creating those realistic expectations with patients that we're going to use this as a bridge until your other medication kicks in and trying to get away just from the benzo use. So for dyspnea, there's an equal amount of people that use benzodiazepines for dyspnea versus opioids.

Lynn McPherson: That's crazy.

Maria Foy: Even though there's not a lot of literature out there to support that really. What you need is those opioids to decrease that work of breathing and the only time to consider a benzo second line would be if there is some associated anticipatory anxiety that is causing that dyspnea to worsen. And again, for insomnia, medications are not the greatest. You get I think five extra minutes of sleep time and maybe you fall asleep a little bit quicker. So insomnia, we want to use more sleep hygiene things and things like that to try to get people to sleep versus going to a pill. Now with delirium, you know we, benzos actually cause delirium.

Lynn McPherson: Sure.

Maria Foy: So unless patients truly at that terminal state of life, we should be using something more like haloperidol if needed or quetiapine not going to a benzodiazepine. I know my, my cute little 94 year old child when I gave her some clonazepam or doctor gave her some clonazepam at one point and it actually made her anxiety worse.

Lynn McPherson: Sure.

Maria Foy: And for nausea vomiting, we have so many more better medications that can work. Haloperidol, Lynn that's your favorite. Now my favorite. Some of the other medications ondansetron and things like that may work better than using a benzo for nausea and vomiting. Now again, if there's some anticipation maybe that benzo can be added on but would not be considered first line. So the jury came out that benzos maybe not the right thing to do despite the fact that

they're in palliative care and hospice, that we should be using more evidence based treatments.

Lynn McPherson: You guys are killing me, so now I can't use the opioids. I can't use the benzos. I can't use anti-psychotics and I can't use gabapentinoids. I guess we're all just going to have to think really happy thoughts. What do you think?

Maria Foy: I think so. Meditation for everyone.

Lynn McPherson: There you go. Well, I would.

Alex McPherson: Acetaminophen for everybody.

Lynn McPherson: Let's just put Tylenol in Public water. What do you think?

Well, I would like to thank all of my guests. I was so pleased to see how well pharmacy was represented at Pain Week, particularly the members of the Society of Pain and Palliative Care Pharmacists. I would urge everyone who's listening to this, you are welcome to purchase the recordings from Pain Week because there were so many awesome sessions going on at the same time. That was the most difficult part. I think they had a 140 hours of continuing education going on in that three or four days. So I'd like to thank Dr. Jeff Fudin, Dr. Jessica Geiger-Hayes, Dr. Laura Meyer-Junco, Dr. Alex McPherson, and Dr. Maria Foy, you all have done a fabulous, fabulous job and I hope everyone has an awesome day. So again, this is Dr. Lynn McPherson and this presentation is copyright 2019 University of Maryland. For more information on our completely online Master of Science and Graduate Certificate Program in Palliative Care or for permission regarding requests regarding this podcast, please visit [graduate.umaryland.edu/palliative](http://graduate.umaryland.edu/palliative). Thank you.