Addressing and Preventing Pain and Anxiety With IUD Placement Webinar Transcript 09/17/2024

Nicole Garcia:

Hopefully, everyone can see my screen. Hello everyone. Good afternoon and thank you for joining us today for our webinar titled Addressing and Preventing Pain and Anxiety with IUD Placement. We hope you all are doing well and staying safe. My name is Nicole Garcia and I'm a health educator for the family planning program at the California Prevention Training Center. The C-A-P-T-C, under contract with the California Department of Healthcare Services, is sponsoring today's event. All right, so for our go-to webinar before we get started with the webinar, we're going to go over some housekeeping slides for those of you who are not familiar with the GoToWebinar platform, first please check your audio and select your desired setting to join through your computer audio or to call in through your phone. If your internet connection is shaky, we'd highly recommend that you call in through your phone for the best possible sound.

Nicole Garcia:

Second, please check that you're able to see the viewer screen with the slides on the left and the GoToWebinar control panel on the right. This orange box with the white arrow is how you can hide or show your control panel if you don't want to see it or if you accidentally clicked it. This is how you can make it appear. Again, under that is the audio tab, where you can change your audio preference at any time. Third, please submit all your questions and comments via the questions box. Today's webinar will take about 90 minutes, and we'll include time at the end for our presenters to answer your questions. So please send in questions throughout the webinar and our speakers will address as many of them as possible. This webinar will be recorded and responses to questions not answered today by our presenters will be sent out to participants later. Along with the slides and the recording, there is an evaluation at the end, so please fill it out because your feedback is extremely important to us, and it helps guide us in developing our future content. This is also how we can track your participation for CME purposes.

Nicole Garcia:

I want to acknowledge that we are really excited to be working with the University of Nevada Reno School of Medicine to provide CMEs for today's event. This webinar qualifies for 1.5 CME credits and is only available to those who watched the entire webinar live today. Those who watched the recording afterward would not be eligible for the CME credits, and the link to access your CME certificate will be included in the follow-up email along with the recording slides and evaluation. For transparency, we want to state that our presenters have disclosed the following relationships with an ineligible entity.

Nicole Garcia:

We're super excited to have two speakers today. Our dynamic duo is back. Our first speaker is Joely Pritzker. She is a family nurse practitioner who specializes in reproductive and sexual health. She has worked in a variety of clinical settings and currently practices at an FQHC in Vista, California. In addition to her clinical work, she is a reproductive and sexual health consultant and trainer. She leads trainings for the National Clinical Training Center for Family Planning and Vision SRH and other organizations on the path framework of client-centered counseling IUD and implant placement and removal

contraceptive methods and patient self-advocacy. She is a contributing author for the 22nd edition of Contraceptive Technologies, and Joely is particularly passionate about finding ways to operationalize reproductive justice principles into clinical practices and is dedicated to helping providers, medical assistants, and other support staff develop their counseling skills and clinical knowledge. Our second speaker is Patty Cason.

Nicole Garcia:

Patty is a family nurse practitioner, trainer, and educator with a specialty in sexual and reproductive health. She has practiced for 40 years in a wide variety of clinical and academic settings and is an assistant clinical professor and guest lecturer at the UCLA School of Nursing. Her goal is to center patients with a positive, trauma-informed, and anti-racist lens. She has practiced for 40 years in a wide variety of clinical and academic settings and is a contracted consultant of training agencies, nonprofits, and state departments of health across the United States. Patty developed the PATH framework and the ASA Cycle for person-centered conversations and counseling. She serves on the board of directors for the American Society of Colposcopy and Cervical Pathology, the National Medicinal Committee for Planned Parenthood Federation of California, and several advisory boards including the Clinical Training Center for Family Planning, and she recently helped revise the CDC's five Ps in a guide to taking a sexual history and to make them more inclusive. Other publications include research and opinion pieces in peer-reviewed journals, national utilization, online learning courses, and textbook chapters; sorry about that. Textbook chapters, clinical protocols, job aids, and manuals. So, with that, thank you so much for joining us today, Joely and Patty and the mic is yours.

Patty Cason:

Thank you. So, I'm very happy to be with everybody today. I want to make a correction because the bio is a little bit out of date, and I am not on the advisory board for the clinical Training Center for Sexual and Reproductive Health, and I am the lead author of the 22nd edition of Contraceptive Technology and Joely and I wrote a chapter on essentially a lot of the stuff we're going to be talking about today. So here are our slides, and okay, so you already saw our disclosures. These are our objectives. List three non-pharmacologic interventions designed to help with pain and to reduce pain and anxiety with IUD placement. Demonstrate anticipatory guidance for vasovagal prevention. Something I've been talking about for, I don't know, 15, no almost 20 years. So, hopefully, the vast majority of you are already doing what we're going to be presenting today and describing the evidence for providing a cervical block to reduce pain with IUD placement. So, to sum up what we're going to be going through in some amount of detail, we'd like you to elicit and then address patient concerns. Use anticipatory guidance early and often be prepared, really critical hold the underlying principle that the patient is the expert on themselves and their experience.

Patty Cason:

We are really going to hammer home that blocks have been shown to work so we should be offering them and then finally be gentle in all ways. Voice, touch in all ways and go slower. So, Joely, if you can here,

Joely Pritzker:

Before I get into this slide, I just wanted to share a really brief paragraph from an op-ed that was in the New York Times last week written by Dr. Christine Hedberg. The title of the op-ed was "I'm a doctor. The

conversations about IUD pain are long overdue," and for those of you who have access to that media outlet, I highly recommend reading the full thing, but I wanted to read the last paragraph. I really do think it's going to ground the conversation that we're having today. So, the last paragraph is, by and large, I don't hear my patients asking for pain-free IUD insertions. I hear them asking for their voices to be heard and believed, and it's not only doctors, and I'd put in nurse practitioners, midwives, all of us who are doing these procedures who need to listen, but also insurers, administrators, and policymakers controlling the flow of healthcare dollars in this country.

Joely Pritzker:

How nice it would be if this were a problem that could be solved by a little bit of lidocaine but it's not. And so that's why while we are going to talk about blocks today, because obviously that is a big part of what came out of the new CDC guidance in the SPR, that is one piece of a much bigger puzzle of how we are making sure that we are appropriately addressing people's pain during IUD placements. So that's just something to think about as we begin this talk today. So, we know that there are some factors that are associated with increase the potential increase for pain with IUD placements and those are both physical factors, psychological and sociological factors. So folks who either have never been pregnant before or have fewer pregnancies if it's been more than a year since they've had a birth, if not, if they, they've had multiple cesarean sections, if they have a history of dysmenorrhea, if their periods are already heavy, crampy uncomfortable, if when we're sounding, and I would even say putting in placing the tenaculum too, if we notice that there's a lot of pain there, then the likelihood is that the rest of the procedure will probably continue to be quite painful and then if you were using some of the IUDs have slightly larger insertion tubes.

Joely Pritzker:

And then on the psychological and sociological side, if we have a presence of mood disorders, obviously if someone's experienced any sort of trauma or sexual trauma, if they've had previous negative experiences with vaginal exams, obviously if they've had this procedure before and it was painful, there is probably an anticipation of it being painful again. And then again that anticipation or expectation of pain and that one I just want to highlight a little bit because we will talk today about the counseling piece because we want to appropriately prepare people for what they might experience but not make it seem overly dramatic or scary because if we hype it up too much, that in and of itself can potentially lead to some increased pain and then there's some research that shows that younger clients have more pain with these procedures.

Patty Cason:

Next slide. Yeah.

Joely Pritzker:

One thing to note often in my own practice when I'm training providers or talking with my colleagues, some people think that either doing the procedure during someone's period or not doing it during someone's period can impact the client's experience of pain, but in the studies that we have, it's not been associated with any increased pain during the IUD placement whenever we're doing it during the cycle. And so now Patty's going to talk a little bit about what we want to do prior to the procedure itself to make sure that we're really setting the client up for success and doing as much as we can on our end to minimize that pain and anxiety.

Patty Cason:

And we've broken this up into the things you'd want to address prior to or do prior to the things that are more relevant to during the placement just because I think logically in terms of the time order of things, so the first thing that we're going to think about here is applying principles of trauma-informed care, having the room fully set up critically important. We're going to talk about anticipatory guidance about vasovagal prevention, what to expect, how much information does somebody want, what kind of communication are they interested in during the placement, both before and also during the placement. Do they want to just be told what's going to happen next in terms of you might feel something cold now or would they like to hear something more specific, or would they like not to talk about it at all? We are going to talk about NSAIDs and oral sedation as well.

Patty Cason:

So before you put somebody's IUD and you're going to talk to them and we'd like to think about that conversation happening in a way that is making it super clear to the patient that they're in control and that's not generally how we've been trained to have conversations with patients, but I think we're really trying to move in this direction as a field overall and specifically before somebody's going to be involved in a procedure that can be painful and anxiety provoking. So, this is the time to ask the person themselves, the individual about what their concerns are so that we can address them. You want to ask them; do you want to have really detailed information about the procedure and the instruments? Do you want to have just a quick overview? I don't think that there's a standard that you want to say with everyone. I think you want to use words when describing any part of the procedure, use words that aren't scary but that are accurate and that are words that they will know the meaning of, but how much you tell somebody and how much detail is very much dependent on who that person is.

Patty Cason:

You do want to always be sure to explain the potential complications. Again, using plain language words, they can understand that aren't overly scary and also pair each complication that you mentioned with its solution. This is a really important kind of close the loop on it so that it reduces the amount of anxiety somebody might experience thinking about it if you start to notice things that might indicate that you have an infection and then explain what those symptoms might be come in so that we can give you some antibiotics and this is really a good time to set up the expectation that you're there at their best. If they want you to stop, you will stop and that you make it quite clear to them that you will. Joely had mentioned,

Joely Pritzker:

Yeah, no, sorry, go-ahead Patty.

Patty Cason:

No, I'd like you to talk about it.

Joely Pritzker:

Yeah, I just wanted to point out a couple things about really setting that foundation with the client ahead of time. I have moved away from telling the client that they are in control during the procedure because I think that that is a little bit of a false promise. The reality is they do have to seed a certain

amount of control in order to have an IUD placed. They are not in full control during that process and so instead of telling them they're in control, I'm talking to them about what are the ways in which they can let me know either that they need to pause what's happening or they are done fully done. Some folks have moved towards using a, if they want to a pause to say stop and then everything stops, right? We just kind of take a pause, we check in, we take a little break and then regroup and if the client wants to move forward then we move forward and then out.

Joely Pritzker:

If the client just says out that means I am fully done with this procedure, I do not want to keep going and I would like all the instruments removed. And so that's one way that language has been introduced to help the client know what they can do during the procedure to reestablish full control if they are having an experience that either needs to be paused or stopped and clients may have their own language that they want to use, so check in with them, let them know how do you want to communicate to me that you need to pause or a break and what words you want to use to communicate to me that you are fully done with the procedure and no longer want to continue with it.

Patty Cason:

Yeah, I love the idea that we're going to be asking the person, obviously we're asking what their concerns and we're going to be addressing those. We're going to be asking the person what works for them. We're going to be also, I like the idea of asking them what language works for them to tell us to stop to tell us I'm done, and I do really appreciate that we are not telling someone they're in control, we are just demonstrating in the way that we interact with them, that they're being in control of the situation is our high priority.

Joely Pritzker:

Absolutely.

Patty Cason:

When we talk about medically medical language or something that isn't plain language, something that might be overly alarming, we could go on and on and we are interested in finding out perhaps if you all have some suggestions for a word or phrase that you use that you think is a wonderful word or phrase that is accurate and easy to know what the meaning of it is really easy to comprehend, but that is hopefully less scary rather than more scary. Obviously, we always use the word placement or place the IUD rather than inserting it. People refer to the tenaculum in many ways, grabbing or pinching, even stabilizing, which is a pretty big word we like to think about the idea of; sorry, I'm moving on holding the cervix, and people often will say my body rejected the IUD when they're referring to an expulsion. So, when we're describing it, it's a really good idea to think about it not being an expulsion, which is a pretty big word or the body rejecting it, which would often mean to the client they wouldn't really be a good candidate to have another, but instead saying the uterus pushed it out and that if they'd like we can place another one.

Patty Cason:

So, if the client has already shared that they have concerns about pain, then we want to start that conversation with using that as the jump off point and we like a phrase that, sorry I keep moving this. There we go. It's moving it right, it's right in the way. We like to give up some sort of an early kind of

script, something like to help with the pain during the placement of the IUD. We can put some numbing medicine in your cervix and many people say this feels a bit uncomfortable and like a strong pinch, but it is quick, and we would expect you to have less pain with the placement once we've placed the numbing medicine. Is that something you're interested in? This is just language that we've tried when we suggest your language needs to be something that you're super comfortable with coming out of your mouth but think about that each of the words is not over a fourth, or fifth grade reading level.

Patty Cason:

So, words everybody would know the meaning of and again that are not too scary. And then if the client is interested, perhaps you've heard Joely, and I talk about the ASA cycles which involve asking a follow-up question after you give information. It also involves affirming or acknowledging the person before you give information. But in this case if they're interested you want to follow up with something like what questions do you have about the numbing medicine? And that would be really as opposed to saying do you have any questions about it? Which would presume that the person did not have questions?

Joely Pritzker:

And I really think it's important to keep in mind when we're having these conversations about pain options, especially for younger clients who maybe are kind of accessing a lot of their information via social media, folks may already be coming in with a really clear idea of what they want for pain management and so that's where asking on a couple slides ago, it's like checking in with clients, what concerns do you have? What questions do you have? Because they may say, hey, I heard that I could get some numbing medicine to make this kind of hopefully feel less painful, and I'd like that. Then you're not needing to really talk about why someone might want it or not want it. It's really just acknowledging that the client has requested numbing medicine going over what that might be like. And we'll talk a little bit, there's some questions coming into the chat about specific questions about numbing medicine. We're going to get to all of that. So, I just want to that we will get there, and we will talk a little bit coming up about what do you do if you have not been currently signed off or trained yet on doing blocks for example and how to address that If a client's coming in for that

Patty Cason:

And we really like to in this initial conversation, ask the patient what works for them. Phrases like when you've had things that you've had done like a procedure or something that's been uncomfortable for you in the past, is there anything that's particularly worked well for you? And you can make suggestions, but I really hesitate to say that we should recommend to the patient a coping mechanism unless themselves have tried it, and it works for them. So, this really is the opportunity to give them prompts if you need to, but really ask an open-ended question about what might work for them. Has anything in the past helped you with something like this that was going to be difficult or was making you feel scared or whatever it is that they've said is their concern. Is there anything in the past that you've done that's helped with something like that that you could try again and here are some ideas?

Patty Cason:

We do know that people do use breathing and it's very effective. Obviously, we've done this with birth for a long, long time. Not all places have heating pads, but there actually is at least one trial saying that a heating pad actually does make it more comfortable. Lavender essential oils also doesn't change the

pain, but it can change the person's experience of the placement if the patient does not come up with using their cell phone, checking their social media, checking their mail, if they don't come up with that as an option, that is one that I would mention as an option. They don't always know that we would be fine with them being on their phone during a procedure and people have lots of different kinds of mindfulness and meditation that they use.

Joely Pritzker:

I did just want to mention someone brought up in the chat, which I think is a good point. Someone said sometimes I struggle with numbing medicine for the cervix because it's a very different sensation than numbing for dental work or a skin biopsy. It doesn't totally numb, and I think that especially when we're talking about paracervical and intra cervical blocks for example, we know it doesn't do a great job of getting all the way up to the fundus, right? So, it's not going to be that they won't feel anything. So, if numbing medicine, say numbing medicine doesn't feel comfortable for your medicine, that can help decrease the amount of pain that you might feel during the procedure. Again, figuring out language that feels comfortable for you, some people, someone won't put in. Having a support person can be helpful for some people. Absolutely. And that can either be someone that they've brought with them. Yes, I love that idea. We

Patty Cason:

Don't have it in slides but we're going to have it in them now.

Joely Pritzker:

Yes, and sometimes that can be another support staff in clinic who's able to come into the room and just be conversational with the client. So that's a really great one. Someone mentioned that they work somewhere where they can have a doula present like an IUD doula. Amazing. And then someone has heating pad during the procedure. Yes, just putting it on the low belly which can help with the cramping and is just also another way to shift the sensation. The client can focus on the warmth on their low belly as an alternative place to be feeling sensation in their body.

Patty Cason:

And this one seems really obvious as to prepare the room, but we've been around a while, Joan, I've been to a lot of sites and I will say that it's actually a rarity that somebody has every single thing they might need right there in the drawer and even a second set in case they were drop their tenaculum, they have another one ready to go. I think that the impact on a client is really underappreciated. We are in that environment with all of our tools and our instruments all around us all day long. We don't really necessarily put ourselves in that role of the patient where we're there on the table in a very vulnerable scary position. That is also potentially if you've got a speculum in not the most comfortable thing in the world for somebody to be moving around looking for something or worse and it's happened to all of us calling out to a medical assistant or sending a medical assistant out to bring an instrument back in.

Patty Cason:

These are all things that are very not patient centered. So, take the time to make sure that every single thing you might need is there at the ready and also backup for just the basics, the tenaculum and sound and just to have those a double kit ready for you when you are not a medical person looking at iodine can look like it's old blood and it can be pretty scary. The tip of a tenaculum can look pretty awful even

to medical people. So, any of the things that you're putting out onto the tray that you're going to be using for the placement cover them with a sterile cover, and make sure there's sufficient light. One of the things that's going to be the best solution when you're not able to get through an internal OZ is to have a better light source. Have the speculum be able to be opened wider so that you're able to see better and have lighter coming in. Sometimes the difficulty is really just because the light source is inadequate and making sure that you are comfortable because hopefully, you're going to be placing more than a couple of these in a day and you want to be able to be as comfortable as possible so that you can be fully present there for the patient.

Joely Pritzker:

And I love Patty that you mentioned us having adequate light, which is usually our own exam light, but then someone put in the chat also about having softer light in the room if possible. Great idea. And calming music if that's something either that they can listen to, or you have access to that.

Patty Cason:

I often, Joely and I talk about this and it's just really amazing to me that people will go to a spa situation or to a cosmetic dermatology situation and sometimes those places are quite lovely. They're very, very quiet and all you hear is some nice gentle sounds in the background and the lights are low and everything smells good and sometimes the stuff that you're having done there hurts a lot, but it feels very different when you are the one saying, I want this done and you're going in there and everything's so lovely, you're the customer. So not that we're going to turn our exam rooms into spas, but I think we want to kind of keep that as a picture in our mind really clearly that when someone goes to a spa situation, they are in a very different mindset. It's the opposite of anxious.

Patty Cason:

So, we'd like to try to bring as much of that as possible into their experience. And so, are they comfortable? I had an MRI on the weekend, and the person that was doing it, the tech, was so concerned with my comfort, and it mattered a lot to me. Not that the MRI was a problem, it really didn't matter at all, but it was really lovely to see how much he was concerned with my comfort and he brought me a warm blanket, which is the best. I've had many MRIs. That's the first time I ever got a warm blanket. So, these things matter. They matter to the experience of the patient and when the experience overall is one where the person feels cared about and taken care of their amount of anxiety by definition is going to be going down and that is very linked also to their perception of the pain that they may experience the temperature of the room.

Patty Cason:

We keep the rooms pretty cold and if we're going to do that, it would be good to give them a warm blanket or to be able in the procedure rooms at least to keep the temperature at a comfortable position for the person themselves. And I don't know, whatever happened to warm spec, they were something that I never put a cold speculum in for the first 20 years. And then with all of the changes with policy and OSHA and all the things around heating pads, all of a sudden now we're supposed to be using cold spec. I think that we could always turn the warm water on and just run it under warm water. Take that moment, somebody will see us just like we like to wash our hands in front of the patients so that they know we've done it before we see them. It's also really nice to run the water, have it been warm and have them see we are taking the minute to warm the speculum.

Joely Pritzker:

And even if you can't do that while you're chatting, you can put on a glove and hold the speculum in your hand so that it at least warms up a little bit and it's not just, yeah, chili. Someone said a quick tip for this, a makeshift heating pad, fill a glove with warm or hot water. So, if you don't have one, love that I work in an FQHC, we are not a super well-resourced setting and so I always love these little hacks for how to make do when sometimes you don't have a heating pad in the room, but what can we do to help as much as possible.

Patty Cason:

So, Jody is going to take it from here for a few minutes on medication?

Joely Pritzker:

Yes. All right. So, I imagine that many of you signed up for this because of the, and we already had a lot of people signing up, but then we really saw interest in this webinar explode after there was this new SPR recommendation for the provision of medication for IUD placements. What is interesting, though, and I was just wondering if any of you were at the National Reproductive Health Conference last week, we talked about this a bit. What's interesting is that there was always this in the 2016 guidelines. The only thing actually that's new in the 2024 guidelines is the topical piece that there was a recommendation before for paracervical blocks. So, it really, I think it is as much about updating the recommendations as it is about just drawing more attention to people's experiences of pain during these procedures. And I think some of these are these recommendations coming out as there has just been a lot being written in the last couple of years about people's experiences with IUD placements and knowing that we need to do better both with IUD placements and just in general gyn procedures in clinical settings.

Joely Pritzker:

So, a couple of key highlights from the updated SPR recommendations in case you haven't had a chance to look at them. Number one is just reinforcing that misoprostol is not recommended for routine use during IUD placements. The asterisk on that is that it might be useful in selected circumstances, like somebody came in and you were not able to sound, or you weren't able to place the IUD because of a really tight internal OS or external OS, for that matter. So, something to just help soften the cervix, but it is not recommended, and you may still be practicing with folks, or it might still be part of your practice to routinely give misoprostol to folks before the IUD placement, and that is not recommended to be very clear, on that.

Patty Cason:

It's not a nothing, it's not like you're just doing nothing. When you give misoprostol, the data are pretty clear in multiple trials that it's going to increase their side effects and their symptoms quite a bit because of the side effects from the misoprostol. So, it's not an overall just sort of, well I'm just doing this little thing and if it helps, it helps. It might not help but if it helps because it really does cause significant symptoms and there really was one good trial showing that in a failed placement situation when somebody came back to have a second attempt after having used misoprostol, there was a very slightly elevated chance that it was going to be a successful placement, but it was statistically significant. So it's not like it's a panacea at all, but it may be somewhat helpful but really only in the situation where somebody has already had a failed placement and hopefully as the clinical trial did, somebody who was

really expert had tried before having them come back that having somebody come back is never a great thing because a lot of people don't find the time or they cannot for whatever reason, they don't come back or they come back and they're pregnant, which has happened to all of us many times as clinicians.

Patty Cason:

So that's really the circumstance under which you'd want to do it not for somebody just because they were nous or because you thought that they seem to have a very tight os if you're able to get past it without having them come back, that is by far preferable.

Joely Pritzker:

Yes, absolutely. And then the other part of the updated recommendations is that lidocaine either administered via a paracervical block or a topical administration for IUD placement might be useful for reducing patient pain. Now we're going to get into the details on this a lot. There was a question already in there about I didn't think that numbing medicine worked. We're going to talk about the research, we're going to talk also about why the recommendation was made the way that it was. I had the opportunity to talk to Dr. Nguyen who was one of the authors of these recommendations and I said, Hey, I've looked at the research on topical administration and it doesn't seem like it's a slam dunk that it helps with IUD placement pain and she didn't disagree but that when they're making these, just something to keep in mind when they're making these recommendations, they're looking at the research in aggregate.

Joely Pritzker:

So, when you combine all the different potential ways you can administer lidocaine topically that there is enough evidence to support that it might be helpful but it's not differentiating between the different administrations between a 2% and a 10% administration. So, we're going to talk about that in a little bit more detail. The other thing that you might note is that in this recommendation it doesn't specifically call out intra cervical blocks which are increasingly being used for IUD pain. There was just not enough research to support that specific mode of administration in the recommendations. But that doesn't mean that it's not a potential if that's what you have the opportunity to get trained on and we'll talk about this, that's what you should get trained on. And there is some emerging data suggesting that intra cervical blocks are quite possibly both from just from a pain management perspective but also from a learning and training perspective that it may be a very worthwhile mode of administering lidocaine.

Patty Cason:

And it may be easier to learn for some people than a paracervical. And there are other studies in other context for procedures that are other than IUD placement such as endometrial biopsies and abortion where they have done a head-to-head with para and intra cervical blocks and they did look like they were equivalent in terms of how they work and Joely and I are going to sort of underline this a few times, but if you're not currently able to do blocks and you're going to be learning and we would strongly urge you if you are placing IUDs to learn how to do blocks so that you can offer them, you're going to be having somebody mentor you. It doesn't take a long kind of mentorship process. It's just that you'd want somebody to show you and then watch you do one or two or three I would say at most.

Patty Cason:

But each of the people that are mentoring has their own special sauce that they use when they do their blocks. So we're going to show you options later on, but the truth is that you're probably really going to be most attentive to the person that's going to be training you because if we show you how a para cervical block is traditionally done and then your mentor does it differently, you're going to really want to go with the way that your mentor is teaching you because there's not good evidence for one way is a whole lot better than another way. We're seeing a lot of studies showing that there's a lot of equivalence. It would be great if we could put 10 different techniques up against one another and see which one was the best, but we don't have those data.

Joely Pritzker:

I did just want to catch up on a few. I love that everyone is being so active in the questions. I am just going to say there are a few questions coming in that are a little bit; they're connected but a little bit separate from the topic at hand, and so we'll come back to those at the end if we have time or answer them afterward. So don't think we don't see 'em just kind of focusing on the questions that are a little bit more specific. Someone just mentioned, and I think it's important to point out that when we're talking, we mentioned at the beginning about trauma-informed care. That is totally, that is its own topic in and of itself, but I did like the idea of just to highlight that when we're counseling folks instead of saying you instead of, we measure your, instead of saying we measure your uterus, we measure the uterus and sometimes using the word discomfort instead of pain again to get away from. I'd say that one's, there's a lot of debate happening about that one because we don't want to minimize it, we don't want to overstate it. So, I just wanted to, that comment had come in, so I just wanted to mention that one trauma-informed care.

Patty Cason:

Would tell us that one of the most critical parts of providing care is doing whatever you can possibly do, whatever we can possibly do in that interaction for the patient to remain in control of what happens to them, what happens to their body, what positions they're in, whether they're draped or not. I did a whole course on this for Essential Health. Essential Health, I'm so sorry, essential Access health. So that's available and it's pretty comprehensive, but there's a lot of data out there and a lot of courses out there on trauma-informed care as it relates to IUD placement in particular, it really would come down to doing whatever we can do to keep them feeling in control because that's really their own resilience is the only thing really that's going to help them to move forward. So that's why I keep emphasizing what a critical piece that is. Don't uncover more body parts than are necessary, so only the parts that are absolutely necessary and have the patient move any clothing aside rather than you moving any clothing aside. So whenever possible have them positioning themselves, have them even putting in the speculum themselves for example.

Joely Pritzker:

A couple of questions have come in about what about intra-cervical lidocaine if we can't do a para. So if you can guess if that's what you have the option to do, like we mentioned, great, and same thing I mentioned at the beginning about if a client comes in and requests a pain management strategy that you are not able to provide, right? They are requesting a cervical block; they're requesting more sedation than you are able to provide knowing. I think the one thing that really this does highlight is it's important to know your resources. So if someone is really, really clear that they do not want to do the

IUD procedure without a particular type of pain management and you can't provide that, know who can within your practice, within your broader community so that you can refer, that is one thing that definitely came up at the conference when we were talking about this is that providers are feeling empowered to refer more out when appropriate so that people are getting the pain management that they feel like they need for this procedure.

Joely Pritzker:

So I just really want to highlight that, but let's say you are the only, let's say you are working in rural California and someone just drove three hours to see you and they really would like some numbing medicine and you don't have an option for, you have not yet been trained to do a paracervical or an intra cervical block, but you do have topical. I would absolutely offer that. I would say, you know what, I hear that you are wanting some numbing medicine. I personally am not able to provide the numbing medicine that goes fully in your cervix, but we do have an option for this other medication that could help reduce the pain, right? That's I think an absolute, and then it's up to the client to decide whether that's an acceptable pain management strategy for them. I just want to, that was coming up in the chat about what to do if you can't do one of the things and really one of my takeaways from the CDC guidance is this is all about having as much of a toolkit as you can and there's not a single way to address people's pain.

Patty Cason:

And the combination of lidocaine and prilocaine does have slightly better data. There are two studies showing that there was some benefit statistically significant as opposed to the lidocaine alone studies. Those are really early and not very large need to be replicated, but if you are going to choose, that might be the best choice. The other thing that's super important about topical anesthetic is that the lower part of the vagina can experience that as burning. It's acidic. It's something that people like when you spray lidocaine into the vagina and the entire vagina is coated in it, people can experience that as stinging, particularly if they have any kind of irritation or inflammation in their vagina whatsoever. And certainly, if you're just spraying willy-nilly from the outside, that means everything has been sprayed and potentially can sting, but also, it's cold, so you're basically spraying a cold, wet thing into the vagina. So, if you're going to use topical lidocaine or topical anesthetic, think about lidocaine procaine as the choice and really limiting it to the cervix, not on the vagina at all. Spare possibly.

Joely Pritzker:

Someone had mentioned in the chat about the self-administration of topical lidocaine, which I think we are, as a field, doing a great job of moving towards self-collection of things as much as possible. I think if you are going for that, like what Patty's saying, making sure you're giving really clear instructions on how the person should be administering the topical lidocaine internally so that again, avoiding as much of that vaginal irritation as possible.

Patty Cason:

And we do have one study that's showing that in a future slide, you'll see, I'm not going to the punchline.

Joely Pritzker:

So, there are a lot of questions in the chat right now about pre-medicating and so it's a perfect segue to this slide. So, what we know about medication other than what we've been talking about with the lidocaine medication, lidocaine administration, is that most of the, for example, the NSAIDs naproxen, if you have access to ibuprofen, the data is a little bit more mixed on that one. But if that's what you have, great. Most naproxen and tramadol have really been shown to help mostly with post-procedure cramping, which is important, right? It's important that we're addressing it; it's not just during the procedure itself. It's like what someone experiences immediately after they leave the clinic as they're going home. So certainly using, if you have access to naproxen sodium, using that for pre-procedure medication either before the client comes in or if you have it in the clinic, giving that to clients before the procedure. Certainly, a helpful thing but has not been shown to help significantly with the actual pain of the placement itself. So just something, one

Patty Cason:

Of the parts of that is that we, and we all do it right, every place I've ever worked, people who are going to have an IUD place universally we're offered some sort of NSAID, but a lot of the data that show that it isn't particularly helpful except for post-procedural cramping really are looking at administration. That happened pretty soon before the, so I know a lot of sites in Europe generally tend to tell the client to take that ibuprofen or that NSAID earlier in the day. So, if the person knows they're coming in for an IUD placement, then when they are talking to the person on the phone, they could recommend that they take an NSAID after eating some food well in advance of the visit.

Joely Pritzker:

Absolutely. And then this other piece of sedation, whether that's oral or light to moderate IV sedation or deeper anesthesia for clients who need it, I think has really been an underutilized piece of the puzzle. We don't have a lot of research on this specifically around IUDs, but somebody mentioned in the chat that this is something we routinely do when people are coming in for other types of procedures like a manual aspiration or a suction aspiration. We use it if people are going through different IUI or IVF procedures. So, at least for my work, we had to develop a really clear protocol on how we can administer and send those prescriptions in for clients if it's something that they want. Especially because as many of you probably know, if you're trying to send in both a benzo and an opioid at the same time, it can sometimes flag a lot of things.

Joely Pritzker:

So, for that reason I sometimes just go with a short acting benzodiazepine for clients and sending just that in to not raise a whole bunch of other flags. But if it's an option to send in a short acting benzo and something like Tylenol like T three, that combination can be quite helpful for people if you are working somewhere where you have access to light to moderate IV sedation because you're doing other types of procedures, considering whether that's something that can be extended to your IUD clients, if that's a possibility. And then I'm going to guess that most of you who are on this call do not have access to an anesthesiologist or a nurse anesthetist in your practice. But for clients that know that that is something either they've had previous experiences, they have significant trauma histories, and they really would like more deeper sedation for their IUD placement, figuring out what those resources are and not requiring clients to tough it out first, right? Well let's just see if you can do it right. So, if a client is

coming in and really is clear that in order to undergo this procedure, they need a deeper, deeper anesthesia, trust them and help them figure out how to access that.

Patty Cason:

This is especially helpful for clients with disabilities. I have an adult child who has a disability, and she had accessed the ability to have complete anesthesia for her placement and she did wonderfully and there is absolutely no way that anything else was going to work. And I am telling you about the personal experience because it was so positive. But the other part of this is it's really not that hard to be able to set it up from a provider's perspective. I was being the mom for a minute, now I'm going to be the provider. It's really not that hard to set up. You just need to give a reason to the insurance company about why this is necessary. There's also Planned Parenthood affiliates that are offering moderate or light sedation for IUD placements for an extra fee and it's really not a huge amount of money. So, for $35 or for $50, your patient may very much want to be not aware of what's going on and not remember that it happened afterwards. So that's another option to think about for your site, being able to offer that just for anybody, not even necessarily because they're coming in saying, oh, I'm so afraid. But just to have that as one of the things that we offer. I suspect that in future years offering sedation is going to be part of our usual care.

Joely Pritzker:

Just a couple questions that have come in just really clarifying in the studies that we have, ibuprofen Patty I'd mantra if you know more specifically than I do, but the ibuprofen has not been shown to be as effective as naproxen for managing the pain during or the post-procedure cramping.

Patty Cason:

But none of the trials really showed that they did very much so they were minimal benefits to the post-procedural cramping. What is important though is that as the days pass, some people have cramping and some people have pain and it's okay, it's normal, it's just that it's uncomfortable or painful for days afterwards. And so letting the patient know that they've used this NSAID before, but that they also really want to feel free to use it liberally afterwards for any post-procedural pain or cramping in general, we know that naproxen sodium from the minimum that we've seen, we know that naproxen sodium does a pretty great job with reducing bleeding from the copper IUD or from other things where there's excess prostaglandin in the uterus that's causing some bleeding or causing heavier bleeding. So, we know that naproxen works better for that. It would logically mean that it was probably the agent of choice for cramping as well, but I think this is pretty minimal data. So, if the person doesn't have, so this would be generic Aleve would be the brand name over the counter in naproxen sodium. So, if the person doesn't have access to that and they have ibuprofen in their medicine chest, I think that would be, I wouldn't tell them to go out and buy something else, but if they have both, I will say use the naproxen sodium.

Joely Pritzker:

Absolutely. Someone asked about consent if someone has taken a Benzo prior to the visit, which is great question, and thank you for bringing that up. Somebody needs to be consented prior to taking a benzo for the procedure. And so how that often works logistically is that obviously if someone's coming in and wasn't anticipating getting an IUD placed that day, they're not going to run out to the pharmacy to pick up a prescription before the IUD is placed. So often it's like if somebody, you're having a conversation with someone and they're expressing an interest in an IUD and they mention or you have a conversation

about different options and that's something that they want, then you would send that prescription in and schedule them to come in and consent them the day that they're there or you're doing a telehealth visit, I'm doing kind of a telehealth consent.

Joely Pritzker:

So yes, that's an important thing to point out that if somebody is planning on that, also making sure that they have a ride home if that's something you're going to be sending in. Similarly, sometimes folks have their own prescriptions for anxiety medications, and it is totally reasonable to, again, if you're talking to someone ahead of time and you've already consented them to advise them if you have medication that you know take for anxiety, it is okay to take that before the procedure because that's also a common occurrence that can come up. And then the last one on here is nitrous. There wasn't enough research to support it in the SPR guidelines. I will say if you are interested in diving deep into all of the different things that the CDC looked at in coming up with this recommendation, if you go to the SPR, there's an option, there's a link to go and it's a whole separate document that goes over all the studies that they looked at. What are the pain strategies that they didn't recommend and why they didn't recommend them or ones that they didn't recommend. Mostly just because we don't have enough research and nitrous fell into that category of, we just don't have enough research. But certainly, again, if you have access to it, this is something too where some clinics have access to it and are offering it for a small fee for clients.

Patty Cason:

And the difference also with the nitrous data are that there is one clearly significantly statistically significant improvement shown with one of the trials with use of nitrous, but there are in other trials. So, I think it has a little bit better data actually than topical lidocaine. But it's so difficult logistically to figure out if you're not a place that already has nitrous, you're obviously not going to be using nitrous anyway. I do also want to point out that I'm sure everyone knows this, but I think it bears repeating that if the person does take a NSAID, they could also still take acetaminophen or opiate benzo. All of these things can be taken concurrently and it's not a problem. It's not like you can't take acetaminophen because you have taken an NSAID, and I think many of our patients don't know this.

Joely Pritzker:

Alright, next slide.

Patty Cason:

So not probably everyone on this call knows, but NSAIDs decrease the bleeding and cramping that someone has with their period now when they're using a copper IUD. Now this isn't specifically about pain and anxiety related to the procedure itself, but this is something and it is about bleeding, and it will also actually help with any pain with the period any dysmenorrhea. So, I always tell patients that are going to get a cop IUD that they may have more bleeding than they had before and that their period could be heavier, they could be crampier, they could be longer. And that that's really the main side effect that many people see, and we have this thing we can do that will make that bleeding much, much less. So, if they are somebody, I first check to make sure they can tolerate NSAIDs, I make sure that they're clear that it needs to happen with food because we're using, I generally like better to use naproxen sodium for the reasons mentioned earlier.

Patty Cason:

That's also just BID dosing. So, I would tell them to take two of the pills twice a day instead of one twice a day, which is on the package and explain that that is the prescription strength dose. Or if you do have the ability to give the person a prescription that they potentially maybe their prescriptions are paid for, that would be lovely. Then I would give them anaprox ds, which is 550 milligrams. That's a generic and it will reduce their menstrual blood loss by up 70%, which is quite significant. And as I said, also will help with the cramping. Now I offer this to people and suggest they might consider doing it for the first three months. Then if they want to try, because as time goes on with a copper IUD, the bleeding does lessen with menses. So, if they try it for the first three months and everything's going well and they want to try it without, they know what they can do.

Patty Cason:

If it starts to be a heavier period, then they could use NSAIDs for that period, but it wouldn't necessarily help because it really is important to get that NSAID onboard prior to all the prostaglandin release that we see with the menses. But they should still probably try it. If they've gone three months and it's worked great their fourth month, they try without it and they have a heavier period and they don't like it. They could then take the NSAIDs wouldn't work quite as well as if they'd taken it before, but now they know that for future periods they're going to go ahead and use the NSAIDs each time.

Joely Pritzker:

And I did just want to mention when we go, we'll move on to the next slide in the interest of making sure we get through all of the information we do want to get through. We're going to pause on actively answering the questions just to make sure we're able to cover everything and a lot of the questions or content we're going to get to and then we'll come back to a lot of the questions towards the end.

Patty Cason:

I think that's a great idea.

Joely Pritzker:

Patty and I can talk for ages about all these different topics, so we want to make sure we cover all the good stuff. So, we mentioned this before, I'm going to go forward. Patty's not going to talk about the vasovagal, what we can do to help prevent vasovagal because nothing is more anxiety producing than having a vasovagal for the client feels terrible. I've vasovagal before. It's not a pleasant experience. And also, as a provider it's definitely not a great experience for your client.

Patty Cason:

So first let's talk a little bit about what a vasovagal reflex or reaction is. So, it's a reflex. It's very much like a Babinski or a patella reflex or any other reflex that we have that doesn't really make any sense. It just exists. So, it basically, it starts with pooling of blood in the extremities. So, it's got sort of a natural cycle that it normally will go through, and that cycle starts with pooling of blood in the extremities. Then that triggers a barrow reflex and the effect of that is to have both the pulse and the blood pressure come down at the same time when the pulse and blood pressure come down at the same time, the blood does not perfuse into the brain and the person will pass out. The nice thing about this is because it's a reflex, if you can abort the reflex, if you can stop it before it gets to the bowel reflex or before it

gets to syncope, then you've stopped the entire process though if as it turns out, if you tense the muscles in your hands, arms, feet, and legs when you're having a prodrome, this feeling that you get right before you're going to start to pass out, if you do that contraction of the hands, arms, feet and legs, it actually makes the reflex stop completely.

Patty Cason:

So, some of the signs and symptoms we all know, weakness, lightheadedness or dizziness, sweating, blurred vision, nausea, one that people don't think about is feeling suddenly warm or suddenly cold or suddenly needing to go to the bathroom. If you have somebody who's having a procedure done and they say, oh, is this going to take much longer, really need to go to the bathroom? And it sounds quite urgent, they probably are starting to vagal facial pallor. We all know that horrible sick, green, gray color and yawning is actually one of the prey signs and symptoms. I think that it's great to tell somebody beforehand to before they come in for their IUD placement to make sure that they're hydrated and that they've eaten. Because a lot of times people think they should be NPO. So that's really good to let people know and in general anticipatory about how to prevent that.

Patty Cason:

The syncope, once the vasovagal prodrome has started, I like to do right before the placement. So, this is part of that pre-placement conversation. So, it's going to be isometric contractions of the extremities intensely gripping all the muscles in the arm, the hand, the foot and the leg. And a lot of times people think this means you have to pump the hand, or you have to move it. It's really without moving one little bit. So, if everybody right now just tenses in the exact position, you're in, tense the muscles in your hands and tense the muscles in your arms really, really tight and in your hands, excuse me, in your feet and in your legs, tense the muscles as hard as you can. So, by now were you to have done that in the middle of a prodrome, you would have stopped the prodrome, it would've stopped it.

Patty Cason:

People do however tend to vagal. So, if that happened once, it could very well happen again two minutes later. So, the person should know that if they feel anything weird, start to contract their extremities once again. So, I like to do this as anticipatory guidance, as I said before the placement. So it would be something that takes we think on average about a minute and a half, maybe a minute, you could time it, but you would say to the client, many people having an IUD placed, and by the way you could also say this before, they're going to have any type of cervical manipulation or procedure any time before they're going to have a blood draw any time before they're going to get an injection. We know that the highest, the biggest symptom in terms of numbers from getting HPV vaccine is vasovagal and syncope. So, before they're going to have an injection, many people having an IUD placed will feel dizzy and can even faint.

Patty Cason:

If that happens, it can be really scary, but it's usually not indicating anything is wrong. And the good news is you can stop it from happening and if you start to feel and then just list a couple of things, if you start to feel lightheaded or nauseated or if you know what, if you just feel weird in any way, tense the muscles in your hands and your arms and your feet and your legs and it will stop it. And would you try now to practice? And I would generally like the person then to go ahead and do it. I can't even tell you how many orders of magnitude more effective it is for somebody to have practiced doing it prior to

needing it because when they start to have a vagal, they're very unlikely to remember unless they have actually done it and practiced it and thought about it and put that information into their hard drive in their brains. Now we're going to switch to during ID placement. I'm curious if there's anybody on the call who had never heard that before or who are doing it. I'm curious if people want to pitch in, if.

Joely Pritzker:

Somebody asked if it would work for any vasovagal response. And the answer is yes. It's not just for IUD placement.

Patty Cason:

Percent and the anticipatory guidance you would just to the patient. As with any anticipatory guidance, it's very important to individualize it, not to say anyone from anything, but to say for people who are getting this what you are having done. So, for people having their blood drawn, sometimes they can feel dizzy and even faint, fill in the blank with whatever the thing is that they're having.

Joely Pritzker:

So now we're going to talk a little bit about things we can do during the actual procedure itself. So, if you want to go to the next slide. So, we mentioned some of these already, but obviously we're asking for consent before we're moving forward with doing the procedure. We're going to talk specifically about blocks, about cervical blocks. I know many of your excited to talk about that. We've mentioned distraction, lidocaine. If you have aroma therapies, if you have access to an ultrasound and can do this under some ultrasound guidance, that is something that can be utilized because it can help us navigate through the os and to minimize some discomfort with that. And then we're going to talk about some techniques specifically related to the instruments that we're using to minimize pain.

Patty Cason:

And for instance, when you're going with ultrasound guidance from the os up to the fundus, you don't have to go tapping the fundus in with any kind of rigor, which is quite uncomfortable because you can see it on the ultrasound. So, you can just gently go right up to the fungus and then that's one pain point that you can omit. The consent to proceed is quite important, very new to people in my age range. We thought we were being super patient-centered by telling somebody that now you're going to feel me touching you. So now we're thinking in terms of allowing all of the information we have about trauma to inform our care. We know that one of the things that's very helpful is to actually make sure that the patient actually is in control of whether we proceed by giving their consent prior to proceeding to the next step. And I would say whenever you feel like it's reasonable because there's going to be some change and you're going to proceed to something different, it's a time to say, we're going to be doing this now is it all right with you if we proceed cervical anesthesia?

Joely Pritzker:

Yeah, there have been some questions coming in when we say paracervical block, when we say intra cervical block, what are we talking about? And really it just boils down to where we are giving the anesthetic. So when we're talking about a paracervical block, we're talking about giving and we have pictures that are going to show this in more detail, but we're really targeting those uterine ligaments that are more, we're going at the junction of the cervical vaginal junction When we're talking about an intra cervical block, we're talking about using a needle to give medication directly into the cervix. And

then someone had also mentioned that they are starting to do an intrauterine installation of lidocaine. Again, that was on the CDCs list of things that they did not have enough research yet to support it, but it will be interesting to see if that becomes part of our practice too. And then obviously

Patty Cason:

Just to point out that there have been trials done and they have been negative, they have not shown any benefit,

Joely Pritzker:

Right? Yes. So, this slide has an overview of some of the most recent data that informed the CDC'S recommendation. And so from a study by Mody, it was looking at giving a 20 milliliter buffered, 1% lidocaine paracervical block, and it did show to decrease pain and that even though the paracervical block itself can be painful, the client's perception of pain for the overall procedure was lower compared to no block. And I think for those of us who have not been doing blocks, because we were like, well, but the block is painful, and for a long time, that was the whole conversation. So much of this research is showing that, yes, clients do experience some amount of pain or discomfort with blocks, but that their overall experience of the procedure is less painful, and really, that's what we're looking at. There was also a study by Acres that looked at a 10-milliliter block, paracervical block, and this was specifically in adolescents and young adult women, and they compared that with a sham block, which again was shown to decrease pain.

Joely Pritzker:

Then there was also a study by de Oliveira, which looked at intra-cervical blocks and compared that to naproxen only, and that did show again reduced pain. And then the last one was a study that looked at an intra-cervical block, and it both decreased the pain, and it also provided a better overall experience. Now, one thing you might notice is there is no standard procedure how to numb. You've got 20 milliliters, you've got 10 paracervical blocks, you've got a 3.6 ml intra cervical block. Really that's why when Patty and I were saying at the beginning, we don't have enough research yet to say that one way of doing cervical anesthesia is better than another. And so that's why what you have access to is going to be the most important thing. As far as supplies go, you want to make sure that you either have a spinal needle or a 25 gauge one-and-a-half-inch needle with an extender because you need to get to the cervix. So, depending on what you have access to, either one is acceptable. There are mixed data regarding the benefit of buffering with sodium either at a five-to-one or a 10-to-one ratio. So again, do what you can learn and so that if the provider that you're training with buffers great. If they don't, great, there really isn't enough again to recommend one root or another. The key though is that whether you're using lidocaine 1% or 2%, it is without epinephrine, always without epinephrine.

Patty Cason:

And the benefit of buffering was looked at basically there was a meta-analysis, but looking at it with abortion and it was not shown to be of any benefit so that the arm of the study with and the arm of the study without had equivalent pain rates, but that was with abortion. So, to whatever extent that's transferable, you can decide that yourself, but we don't have good data on buffering with ID placements for placements of IUDs. Alright, so this is, yes, go ahead.

Joely Pritzker:

No, I was just going to say with tenaculum blocks at a bare minimum, if you can, if you're already placing IUDs, you certainly can do a tenaculum block, and Patty and I always say if you can do an IUD, you can certainly also do a paracervical or an intra cervical block. This skillset is, it's not any more difficult than what you're already doing but injecting a half to one cc of lidocaine if you're doing an anterior lip placement of lidocaine or if you're doing a posterior replacement at six o'clock prior to applying the tenaculum. We're going to talk a little bit more about other things regarding them. Someone asked a question about the newer tenaculum, the suction, and we'll talk about that, but definitely tenaculum blocks can be helpful for the pain of the tenaculum placement. So, Patty, do you want to talk about a paracervical block?

Patty Cason:

Yeah, sure. So we're going to be injecting right there at the reflection of where the cervix, the base of the cervix meets the vagina and you're trying to essentially get a bleb, not unlike A PPD, I mean it's not a PPD, you're not going into dermal like that, but it's going to cause a bleb that you'll see underneath the surface of the skin and the target is the uterosacral ligaments and that contains the cervical and uterine nerves, but not up to the fundus you want to use. Generally speaking. Now we saw different amounts and you'll notice that the smaller amounts were used for intra cervical, so generally for paracervical, we go for a larger volume of anesthetic, partially because one of the ways we think it works is by putting pressure on those nerves. So that's because there was a study looking at saline at 20 mils on each side and that also was beneficial.

Patty Cason:

So you want to use at least five, but generally a lot people's protocols go with 10 ccs of 1% lidocaine on each side with a submucosal injection, and in one study that was looking at various depths, they found that 1.5 centimeters was adequate, but we think about 1.5 to three centimeters not deeper because you really want to get that bleb. You really in general want to use as short of a speculum as you can because it'll allow for more movement with the use of the tenaculum. It'll allow the uterus to straighten more easily and allow it to descend more easily. But this is also true for when you're giving a paracervical block mixed data on how long to wait or if at all, that same head-to-head study, excuse me, that same meta-analysis that I referred to for abortion, which is the renter study, was finding that the standard waiting time of one to two minutes was not any different than not waiting at all.

Patty Cason:

Now, this was in a pregnant population because this was pre abortion and there may have been more blood supply, so it may have been taken up more quickly. We don't have these data for IUD placements for abortion care. The evidence is, again, same study showing that you don't need four injections, that two are plenty, but there are mixed data because some of the studies for the IUD specific use showed us the technique was with two sites and some were with four sites, so it wasn't that they were doing head to head and the data was mixed. Some of the studies did two and some did four. When we talk about, so the X at the top is where you've already put your lidocaine for the tenaculum and then the two places below here at eight o'clock and four o'clock are either this is the two injections locations and then there's four injections. It's two right next to each other at eight o'clock and four o'clock.

Joely Pritzker:

Now, I was going to say one thing to keep in mind that just again from a training, from a logistics perspective, if you're doing a paracervical block, you're giving the medication at the side of the tenaculum, then you're placing the tenaculum to be able to use the tenaculum to really get to the sites that you're wanting to get to administer that paracervical block. When you're doing an intra cervical block, you're giving the injections all at the same time. You can do all of them prior to placing the tenaculum just from a procedure standpoint. They're a little bit different in that way, and intra cervical blocks are targeting slightly different nerve bundles. In the cervix, they're targeting the paracervical nerve plexus and the studies that we've cited here, really the way that they were doing intra cervical blocks was giving one to two ccs of lidocaine without epinephrine again, in addition to the tenaculum site at 3, 6, and 9. So, this slide doesn't have the six o'clock site and you're giving it a little bit deeper because you're going, it's again that intra cervical injection about a centimeter and a half deep.

Patty Cason:

And you are going to want to pull back with when you've put the needle in, you want to pull back to make sure you're not in a vessel.

Joely Pritzker:

With both. Yes.

Patty Cason:

So you're going to want to inject in the correct spot obviously, and aspirate, as I just said, pull back, and it's not uncommon for somebody to have a little metallic taste, but if they start to have tongue paranesthesia or dizziness or certainly if they start to work into timidness and blurred vision, then that's the point at which you want to not give them any more lidocaine and observe. That might be signs that there's some amount of lidocaine that's been absorbed and they're starting to have more of a systemic reaction. Now you realize that just doing a block just all by itself can trigger vasovagal, but you've already given the person anticipatory guidance, so we're not concerned they can handle it more on this Joely.

Joely Pritzker:

No, just if you were concerned that you had injected intravascularly, that would be a more emergent situation to attend to, but that's why you're going to aspirate, and if you're aspirating and you don't draw blood, the likelihood that urine vessel is quite low. A lot of questions came into the chat about topical medication. A lot of different studies on this with varying amounts. Somebody asked in the chat about accessing the 10% lidocaine spray in the U.S.. I know it's been really difficult. Our clinics had a hard time accessing it, and so it may or may not be something that's accessible, but if you do have access to any of these, you want to at least wait a few minutes, about three plus minutes to make sure that the, probably even.

Patty Cason:

Better, by the way, I mean if you're taking anyway, you might as well just wait a little while and also be really careful, as I said earlier with the spray not to have it come down into the lower part of the vagina.

Joely Pritzker:

There was a study that looked at actually combining a topic, the prilocaine, it was like the lidocaine prior.

Patty Cason:

Yeah, those are the only positive data that we've ever seen for topical, and it's not the greatest study in the world truly.

Joely Pritzker:

And so, the studies on the 2%, some people are asking about the hurricane gels have not been shown to be effective. However, one thing that did come out of one of those studies is that clients were willing to extend the visit to extend the procedure, to be able to get some pain control. So, they didn't actually get the pain control, but they were open to the idea of waiting longer If it meant that they would get pain control.

Patty Cason:

And they were willing to do self-administration of a local anesthetic, which was acceptable. I think that is very important. Take home information. It was kind of a throwaway as part of the study, but I think on this slide probably that's why it's bolded. Probably the most important actual hard data that we have that are going to help us to inform practice going forward.

Joely Pritzker:

Next

Patty Cason:

Slide. So, we really want to think about the best thing above anything else would-be distraction, and that means by any means possible,

Joely Pritzker:

Whatever that's going to look like for somebody. Many of you have heard the term, but it's really, I like to think about it as therapeutic talking. So, keep the client talking about anything that they're interested in. Now, for some people, work or kids may be more stressful or anxiety-producing, but certainly asking about hobbies, if they did something fun the previous weekend, using a calm and soothing voice and then not starting to talk really fast and, oh, how are you doing? And because that again signals that there's some sort of time pressure or that you are feeling stressed. So as much as possible, especially for those of you who are newer to doing this procedure, even if you are feeling a certain amount of nervousness or anxiousness, figure out how you can self-modulate that so that at least vocally you're conveying a sense of calm to the client.

Patty Cason:

It's really important with IC and when you're having this conversation that's designed to distract someone that A, they want to have a conversation that you'll start to engage them in the conversation. And if they don't seem like they're interested in having a conversation about the fact that they're

learning to be a pilot or whatever it is that they love, I've had some really fascinating conversations with people, whether they're having their IUDs placed or their cervical, their services biopsied while they tell me about the wild things that they are doing, but they may not want to talk at all. So, this is really only for the person that's giving you a response indicating that they're open to a conversation and they may at a certain point, experience pain and stop talking and it's really helpful to say, yeah, we can. You can at that point say, we can pause for a second if you like. You can take that cue about what their voice is saying when they stop talking or if they slow down or if they sort of drift off a little bit. You might notice that they're starting to have a vasovagal reaction. So, there's keeping them in a conversation if they are open and willing is really helpful for a whole lot of reasons in addition to distraction, but only if they're open to it and willing to do that.

Patty Cason:

I really love that inhaled lavender. It reduces anxiety. I love that. It did not help with pain though, so I don't think that it's necessary for something to show significance for pain if it's going to improve the overall experience, and certainly if somebody's anxiety is reduced by any means, then that's going to be of benefit. Absolutely. So, we did mention ultrasound a little bit. I do want to say that in the US it is not standard of care in the US and many sites don't have an ultrasound at all. So, if you don't have an ultrasound in your office, please do not feel like you're providing subpar care because you don't have that available to you when you have an IUD that you're going to be placing. But in Europe, for example, many places in western Europe, they actually use ultrasound pretty routinely. Sometimes they use it instead of sounding, sometimes they use it instead of using a tenaculum, they'll see that the uterus is really, really axial and there's no evidence to think that there'd be any problem with the flexion or any kind of little kinks or curves.

Patty Cason:

So, it's something that's used differently in Europe, people actually use it instead of a bi-manual exam frequently. So, if you do have an ultrasound and you know how to use it and you have somebody in your practice who can be on the ultrasound while you're doing the placement, then it's a wonderful thing to do. It's also really helpful to look afterwards and make sure that the IUD looks like it's where you want it to be, which is also lovely for the patient to see that the IUD is sitting in their uterus. How reassuring is that? Definitely. However, it's not standard of care, but it's definitely helpful with a challenging placement. So, if you do have something that becomes challenging and you have access to an ultrasound, that would be the time to take a little break, get the ultrasound in the same room as the patient and then try doing it with ultrasound guidance. We do know that there in studies look like there are fewer malposition devices when ultrasound guidance is used. However, what we don't know is whether those malposition devices have any clinical impact whatsoever because a lot of devices are not in exactly the perfect position up at the fundus, but they don't have any problem associated with that.

Patty Cason:

Also, this is great for teaching by the way. For those of you in a teaching environment or who have people that are coming into your office as trainees or having preceptorships, then it's very helpful to be able to use an ultrasound in those cases. So how do we use instruments to be less painful? This is a really important piece of this. I know everybody's excited about blocks, but there's a lot of pain that we can avoid with just the way that we use instruments, and I feel like I've been talking about this for many years and I, as everybody probably knows both Joey and I have a lot of experience training people. So,

one of the things I've done a lot is being in the room with people who are placing IUDs. So, I'm the person observing essentially or mentoring or fill in the blank.

Patty Cason:

So, I've seen a lot of technique, and I will tell you that a lot of my suggestions that you're going to hear come directly from things I've observed and not once or twice, but pretty regularly. So, first of all, in terms of a speculum, we talked about you want the shortest one that you can get away with and still be able to have it give you the amount of visibility that you need. You don't need to have a long speculum, but if you need to have greater visibility, you can both go wider or you can use the thumbscrew and open the speculum that way because a long speculum will press against the top and bottom of the cervix and splinted in position. And so, if you try to use the tenaculum to bring down the cervix and align the cervical canal and the ute uterine body, then you won't be able to do that.

Patty Cason:

And it also may kink right at the back of the internal os, which could make it very difficult to get the sound through. So this is something to avoid use wider or shorter, and if you aren't able to view the cervix at all, but you can see maybe just a little part of it presenting itself, just a little piece sticking up, you can actually put the tenaculum on that piece of the cervix and bring it into view, which allows you to use a much smaller speculum than you would otherwise. We already talked about warm spec, but I thought I'd just put that in everywhere and just be aware when you are putting that speculum in from the moment it's in the vagina until the moment it comes out, your patient is gritting their teeth waiting for that to happen. We we're probably all aware of that, but sometimes we lose sight of it.

Joely Pritzker:

I also will say I love the handle screw. I think it's an absolutely underutilized part of the speculum, but I typically don't open it until after I've already cleansed sometimes until I really need that space. So again, thinking about how you're using the tool to have it be in its most expanded position, for example, for as little as possible,

Patty Cason:

And there's things that are considered atraumatic. One thing people do, especially with people that have been recently postpartum, is to use a ring forceps or other types of things that are called a traumatic 10 macula or Alice or none of these have been shown to decrease or have any different level of pain than a single tooth tenaculum. What does make a really big difference with tenaculum in addition to the other tips we're going to tell you in a minute is not spending any time trying to stop the bleeding. If the patient understands there may be some amount of light bleeding after the IUD placement or heavier bleeding, if they have their menses, then what we expect is that whatever little hole was caused or holes were caused by the single tooth tenaculum, that may cause some bleeding. Even if there's a little cut on there, it's still going to stop bleeding when the pressure of the vagina is against the cervix when you remove the speculum.

Patty Cason:

So while you're trying to sop up blood with scopes, or if some people even go to silver nitrate or mon cells, both of which can burn, they're both caustic agents really not to go down that path because there's not really, unless the person has a really, for some reason, a pulsatile blood coming out of the

cervix, maybe you've cut very deeply, this really isn't likely to happen, but let's say it did and you needed to put pressure on it to stop it, that would be, and let's say the person was anticoagulated. I mean that would be one of the only situations where you'd think about wanting to try to really stem that blood, but otherwise the blood's going to be minimal and eventually within a few minutes, not any at all. So that's a way to be patient centered is to get out of dodge when you're done and not try to just prevent any bleeding. Joely, I'm going to.

Joely Pritzker:

Yep, I just saw it.

Patty Cason:

And I haven't gotten mine yet.

Joely Pritzker:

I also just wonder, I know some of you we're approaching the 1:30 time spot, and so if some of you have to get back to clinic or anything like that, please know the rest of this is recorded. So, this is the new suction cervical stabilizer. This was my first time getting one. I got it at the National Reproductive Health Conference last week, pretty much it. So, it works by suction. You engage it like this.

Patty Cason:

Then I'm going to stop sharing my slides so we can see you better. Okay, there we go.

Joely Pritzker:

Yeah, so you pull it to engage it, then you push it up against, I'm going to use my thumb or my palm as if it's the cervix. And then you push on this to engage it. Now you can see that's obviously this is not a cervix, but then when you want to release it, you push the button back. They're single use, they're not able to be cleansed between clients. So, something just to be aware of. And Patty, if you want to bring back up the slides, we can just review. This was the data that we had at the time that we developed the slides. There is a little bit more emerging data on this. The issue was with the inserter itself that the devices, it was harder to use this slider and that doing more than one positioning attempt was necessary in about a quarter of cases. And in about a third of cases, the device spontaneously released, and people did have to switch to the tenaculum. There's newer data that Patty and I were just reviewing literally that we just got around this. That seems to be a little bit better from a use perspective, but one thing to notice is that there were lower pain scores with this device than with the tenaculum,

Patty Cason:

And that was in the next two studies as well. It was pretty across the studies. So that's reproducible and they have actually jiggered the device a little bit and the number of detachments were better in the more recent studies,

Joely Pritzker:

And it's the company is Care Vx. That was just somebody asked that in the chat,

Patty Cason:

But to make it hurt less, you want to have not a very large bite, one and a half centimeters, one centimeter deep, not too shallow because it'll tear through but not too deep because it will be painful. Make sure that when you close the ratchet, you do it silently. So, you lift off the tenaculum and close it without making any sound. Joely, I forgot to bring my tenaculum in here. I was going to make the sound for everybody, but it makes that sound, which is not a pleasant metallic sound for a patient to hear. So do that silently and then check your application once you have placed the tenaculum to be sure it's not too narrowly placed because it will tear through and if it tears through, it's not the end of the world, but it's uncomfortable to have to have a second tenaculum placed a second time. So, try to get a not too small, not too large bite and check your purchase. We talked about the anesthetic. You could also go exceedingly slowly, like just painfully slowly or have them cough as you're putting it on hold onto the speculum, so it doesn't fly out and have them cough first to practice so that they're not just making a little hit, little lame little cough. Let them know you really want them to give a real cough. And then right as they're coughing, you would place it and that would be done more quickly.

Patty Cason:

You want to keep your thumbs on the top and your fingers on the bottom so that you can see above your hand onto the cervix. Otherwise, your hand can be in the way, which means that you're going to be moving the tenaculum over to the side, which means the person will feel it every time you use that tenaculum. Every time you pull it, move it, the patient can feel it. So, you want a nice steady hold on it without moving it inadvertently. And then when you need to use it, really go ahead and use it to its fullest because it will be able to help make the procedure much easier, which will be easier on the patient.

Patty Cason:

Either. Sounds are fine. They're usually four millimeters, sometimes three. The plastic are often three millimeters. The metals are often four. But sometimes the reverse, the plastic sound may be less likely to perforate because there was one study that Dr. Ach did in the operating room after uterine had been removed from patients and he tried to perforate with the uterine sounds and tried to perforate with the inserters for all the IUDs. And the only thing he was able to perforate with was the metal sound. The endometrial sampler can be used as well, and that would be a thinner diameter in case you were having difficulty sounding or if you just wanted to spend the money for the endometrial biopsy pipes. So, in terms of preventing pain and perforation, so perforation is uncomfortable, perforation is also really anxiety provoking. It's just a bad outcome. So, it's not directly pain, but it is something that we would very much like to avoid. You want to carefully assess the uterine position with bimanual or in some situation’s ultrasound.

Patty Cason:

If using a metal sound only bend the distal six to eight centimeters to mimic the flexion that you have measured that you've assessed during your bimanual. And if it comes out of the autoclave with any kinks in it, straighten them out. You want your sound to look like the one in the top picture here and use enough traction with the tenaculum so that you're going to be able to have a good shot at passing through the internal loss on your first shot. Go slow, slow use wrist or finger action, not elbow or shoulder muscles. So, I'm just going to stop. So we're talking about this or this, not this, not elbow and not shoulder so that you don't have the momentum necessary to actually pass all the way through the

uterus, up to the uterine fundus all in one swoop and then potentially right through the fundus once you're passed through the internal os with the sound.

Patty Cason:

This is the biggest tip that I can say you should bring home to everyone in your site. Make sure everybody does this. First of all, don't push hard or use force. And when you go through the internal os progress through slowly and then once you've passed through, stop for a moment. Just take a beat, stop and then very intentionally proceed to the fundus in a controlled fashion. Just touch the fundus once without tapping it to make sure you're in position just once because it is painful and it's the momentum that we want to avoid. That's where we're concerned that perforations will happen. So, you want to avoid that momentum and instead stop after you've gone through the internal os, move slowly, move intentionally. When you move more quickly, it increases discomfort, also increases the risk of having some momentum. And when we talk about slowly, it's not that the entire procedure will take more than 30 seconds longer than it would've otherwise. It's really not going to add a lot of time. It's just a slow, intentional calm movement instead of something where it's going boom, boom, boom. We talked about the endometrial biopsy sampler as an option.

Joely Pritzker:

And Patty, I'm just wondering if we want to have time to do if we want to stop here and answer questions.

Patty Cason:

Yeah, so what I was going to say is these last two slides were extra. We weren't actually going to put them in, they were extra slides because they're not about pain and anxiety, it's about actually how gotten through when you're having difficulty passing through the office. So, you have these, and so we're just summarizing with saying elicit and address patient concerns. Use anticipatory guidance. Please, please have everything you need in the room. Remember that the patient's, the expert, the blocks work and to be gentle and slow in all ways. Alright, so I know that Nicole had said we could go over with questions, so if people want to stay on, we will stay here and answer more questions.

Joely Pritzker:

Absolutely. And Pat, you might be Patty, I'm not sure if you can see the questions too, but I'll kind of throw them out there and either of us can answer them. Someone asked if the new copper IUD inserter helps with pain or if it's simply for easier insertion.

Patty Cason:

Yeah, it's meant for easier insertion. But the thing is, here's something that's super important. Whenever the clinician is more comfortable or more relaxed or the clinician finds something to be easier to use, it will be better for the patient. There's less moving around that's not necessary. There's less delay, there's more confidence. The clinician can focus their attention on the person's experience rather than on the technique. And it does look like it is more like the other devices that are on the auto hormonal IUDs that are on the market in terms of the inserter and definitely providers who have been queried about it have said that it's faster, easier. Absolutely. I haven't one yet. They only mobile last week.

Joely Pritzker:

Somebody asked about, not sounding, but just placing devices and I think we really want to be clear that that is only considered a best practice if you are doing it under ultrasound guidance and that would not be recommended if you are not doing it under ultrasound guidance. You should always sound prior to placing the device. Just to be really clear on that,

Patty Cason:

The sound gives you a lot of information that will make it easier for you to place the IUD more gently without encountering the difficulty. You can anticipate the difficulty; you can know that the canal kinks a little bit to the side. So, to prepare for that when you're putting in the inserter, there's a lot of ways in which that'll really help with the discomfort as well.

Joely Pritzker:

Yes, somebody asked if there's any advantage to topical lidocaine prior to doing a paracervical block. I haven't seen any data on that specifically. I don't think we have anything to really guide us on that one. Just to,

Patty Cason:

Let's see, what else, what else?

The other thing I was going to say about a sound is if you sound with the device, I think that there are very few sites where they are going to claim a hundred percent success with placement. I mean the best you're going to do in the most experienced hands is high nineties, which means that at some point there will be a cervix that you are not able to pass through. And so, if you are using the inserter as a sound, you have just wasted that money and they're very expensive. So, if nothing else sound for the money.

Joely Pritzker:

Agreed. Someone asked if a tenaculum block is still recommended if you're using one of those atraumatic tenaculum. And I would say, I mean yes, because we know that there's not any difference in the client's experience of the pain depending on which device you're using. We don't know yet with this guy. I mean I would imagine we probably wouldn't need a block for this one, but we'll, to be determined, somebody asked specifically about working with trans clients who are looking for IUD placements. I mean certainly if somebody's been on testosterone for a while and has any amount of atrophy doing a topical estrogen prior to the procedure for a few weeks to help the vaginal mucosa be able to tolerate the whole speculum and all of that. And also, for the cervix as well because you can sometimes have a more stenotic os from the hormonal therapy. And then also just certainly engaging the client in a conversation about what's going to make the procedure the least uncomfortable for them and what their previous experiences have been like with pelvic exams. So just to mention on that one, we're going to

Patty Cason:

Use corollary data. It's not data on trans clients that are on testosterone, but for postmenopausal people that have had some thinning in the vagina, AKA atrophy, which I don't like to call vagina atrophy thinning, but topical anesthetic actually on the vaginal wall. So this is a time when you would put topical anesthetic in the vagina, but putting that in and then waiting some amount of time, 10, 15 minutes and

then putting the speculum in has been shown to be quite beneficial for people that have significant atrophic vaginitis or significant thinning that's causing pain with speculum placement.

Joely Pritzker:

A bunch of people have asked about but just have been coming in around the different, asking us to put back up the slides for the paracervical blocks. I think they will have access to the slides after this. So, you'll be able to re-review all the information that we covered.

Patty Cason:

Not only are you not just going to get the PDF; you can have the slides, and if you want to do an in-service on your site and use our slides, we would be very happy for you to do that. And if you need something, drop us a line and we'll see. We might have it for you in terms of if you want to train others.

Joely Pritzker:

Somebody. I think this is a really important question. Given everything we've talked about says between all the options for pain management, particularly to use blocks or not, how do you decide what to use, assuming all options are easily available? I think that is a really great question and I think where I have landed on it is that this is really a shared decision-making conversation that this is an if you have access to all the options, you can offer the different options to a client and then they get to decide what they think is going to work best for them. Different practices are taking different approaches. Some places are taking more of an opt-out model saying, because the research is very strong, especially for naus patients to say a routine part of this procedure is giving some numbing medicine to the cervix or some medicine and then saying, would you like that today?

Joely Pritzker:

So really making it so it's a routine part and that the clients can opt out of it if they're like, well no, I don't know that I want a shot or anything, whatever that is. Again, we're on a little bit of a new journey with this because up until a few months ago, really, we were not talking about this as something that should be a routine part of at least the offer of procedures. And I didn't say this at the beginning, but I just want to say this in case this resonates for any other kind of folks on the call. I have done lots and lots and lots of IED procedures and if you had asked me, I would've probably said most clients do just fine with it. And I do believe that because the place I work at was not routinely doing IUD was not routinely doing blocks, offering blocks.

Joely Pritzker:

And that was my experience. If you'd asked me, do most people need a block? I'd be like, I don't know if they do. Because again, anecdotally not based on research, it's like I think people do all right. And there is a practice of humility in this in saying just because I think clients were doing all right does not mean that their experience of it was that they were doing great, and they didn't experience significant amounts of pain and would've appreciated other pain management options. So especially for those of us on the call who have been in practice for a long time, who have been doing a lot of these procedures without blocks, and I think that it's really on us to reflect on that and to say even though this is how I've been doing it for a really long time, we know more now and we can do better now.

Patty Cason:

And I would say that if it were up to me as the patient, I would choose a block and I might, depending on what my mind was doing at the moment, want some sedation as well. And I would, if you're asking for ideal, right, because that's what the question was, but what my preferences would be are very different than what Joely's might be or what mine might've been when I had had a baby six months ago. So I think that I couldn't underline more the concept that this is a conversation with the client and that the important thing for us is to be able to be capable of offering all the options and be capable of having a competent conversation about it and then adhering to whatever the patient's choices are. But I think having in somebody who's anxious, at least a benzo in somebody who has really had an experience where there was a lot of pain before, really making sure, if possible, you can offer some amount of sedation would be helpful.

Joely Pritzker:

I did a couple people put in the chat, and I really, I want to uplift this that I was using language like gendered language to talk about the vagina when working with a trans client, especially like a trans man. And that was language in the context of talking about it amongst us. Absolutely. When I'm working with clients, I'm asking them what language they want to be using because as somebody mentioned that a lot of people are fine with the word vagina, but for some folks it can be dysphoria inducing. So just wanted to highlight that. I do

Patty Cason:

Think this is an important part though. We often think of IUDs as purely in the context of contraception. IUDs have very, very strong non contraceptive benefits, particularly for transmasculine folks. So, if somebody wants to stop their bleeding, this is one of the 52 milligram hormonal IUDs is going to be one of the best ways for them to do that. And this may or may not be something that they can use also or would have any benefit from for contraception because they may or may not be having sex with anybody with whom pregnancy could occur.

Joely Pritzker:

Absolutely. We are at 1:45. We have covered a lot of the questions, but not all of them. So, Patty and I will take a look at the questions, and we can answer anything we didn't get to that we're able to answer. I think what Nicole mentioned, we'll be able to send that out afterward.

Patty Cason:

And please do go train people at your site. This is what we want. We want you to use our slides and train people.

Nicole Garcia:

Thank you. So that concludes our webinar. Everyone, please fill out the survey that'll appear on the screen once this webinar ends. Your feedback is extremely valuable in guiding what kind of content we will provide. And again, the link to access the CME, their certificate, the recording, and the Q and A that'll come out. We'll all be sent in a follow-up email. Also, we'll include it was asked earlier if we can include the links that were shared to the article and to the contraception app. So, we'll also include those. I just want to thank you both so much for speaking today and for going over. You always give such

wonderful presentations, and our team really enjoys hosting you. We hope you enjoyed it. And thank you all for joining us today. We hope you stay safe and have a great rest of your week. So, thank you all.

Joely Pritzker:

Thanks, everybody, and thanks for all the great questions.

Patty Cason:

Thanks, everybody.