Opioids Are Cheap… Until They Aren't

Webinar Transcript

Krista: Good afternoon, and welcome to today's webinar, Opioids Aren't Cheap… Until they Aren't, hosted by Quality Insights Quality Innovation Network. We'll get started with today's program in just a few moments, but first a few housekeeping items. All participants entered today's webinar in a listen-only mode. Should you have a question during today's presentation, we ask that you please type it into either the chat or the Q&A box to the right of your screen. We'll answer all questions at the end of the presentation.

This program is being recorded. The recording and the slides you see today will both be available in My Quality Insights, in the Care Coordination and Medication Safety section soon. Following the conclusion of today's webinar, you'll be asked to complete a short evaluation. We thank you in advance for your completion of this evaluation as it helps us know how we did, and how we to shape future programs.

At this time I would like to turn the program over to the Care Coordination Project Coordinator from Louisiana, Donna Wascom. Donna?

Donna: Thank you, Krista. We're pleased to have today Bert and Ashley here to talk about the program that they've started and did at their hospital. I'd like to introduce them. Bert Lindsey is a physical therapist, he's the department head of rehab services and transfers for both acute and inpatient rehab services at St. Tammany Parish Hospital. He's been employed at the hospital for six years. He's self-described as player-coach, [inaudible 00:01:27] during the process of crafting new innovative ideas to the fruition of new service lines, such as non-pharmacological modalities. Continuously involved in direct patient care for 26 years, Bert was present when therapy's role in pain management was replaced by a new class of pain medications, and has observed the opioid epidemic that has followed. It has become a passion of this physical therapist to bring knowledge of the availability of these non-pharmacological modalities to the attention of anyone willing to listen.

Our other speaker today is Ashley Wilson. Ashley's a PharmD and has been employed as a Clinical Pharmacist at St. Tammany Parish Hospital for four years. With a strong focus on patient safety, Ashley is actively involved in medication safety, opioid stewardship, and HCAHPS pain domain and antibiotic stewardship committees. Serving as Project Coordinator for St. Tammany Parish Hospital's opioid stewardship and Society of Hospital Medicines reducing adverse drug events related to opioids, which is the RADEO committee. Ashley has spearheaded numerous components with a multi-faceted approach to opioid stewardship, including enhanced EPIC features, monitoring opioid patterns of prescribing and patient outcomes.

Without further ado, it's my pleasure to turn it over the Bert and Ashley to tell y'all the good things that's going on at their hospital.

Bert: Thank you very much Donna. Opioids Aren't Cheap, it's a tongue in cheek thing, but it's not really funny because we're in an epidemic. So when you look at where we are for the problem, our problems in our service areas, for a few years now, we've been number two in our state and our service area for deaths related to opioids. And we are number one in our service area for teen suicide. Some of these things tie together, so we sought out ways to address this as early as 2015.

It tied into our working in the pilot program for comprehensive care for joint replacement, and in that we got to become close with pharmacy, because it's physical therapy and pharmacy, and therefore we started working on teens and we started working with Dr. Sun Chaney, who was ... you have to have an awesome physician who's ready to spearhead the project, and she took on the opioid stewardship implementation, so things started to come together. Ashley was significant in getting us the Society of Hospital of Medicine's preceptship for the RADEO program, only one of 10 hospitals. Our administration gave us some tools necessary to trial some innovative treatments, and then we just started trying to work the program.

Team efforts obviously have to revolve around the patient. We have philanthropic foundation support who gave us a tiny E-Stim unit in 2018, that railroaded this whole thing and got it started, and we just kept moving with it, and it just kept gaining momentum. I'll let her talk to you about the side that helps medicine.

Ashley: Joe Watkins, our Clinical Coordinator actually found the Society of Hospital Medicine Reducing Adverse Drug Events Related to Opioids Program, and there is a booklet online on their website that you can look at their implementation guide. And we decided we applied for their mentorship, the Society of Hospital of Medicine mentorship, but at the same time said, "If we don't get in, this is an excellent book, we're going to do it anyway, and take it on ourselves."

What it is is there was different interventions that they wanted you to put in place, so we chose patient/family education, and developed opioid prescribing standards, and emphasized really that there is no pain free goal. We were noticing that patients would come in and they would assume that they would have this surgery and be pain free, but that's not really realistic. So we set those expectations up front, and then also told them that only one physician is going to actually manage their pain. So don't ask any consulting physicians or anything like that to prescribe duplicate medications, and then we also did patient brochures.

Then one of the things that we implemented on the nursing side is sedation assessment. We did the Pasero Opioid-induced Sedation Scale, and we added it to the MAR. That was where when they were documenting the pain scale, it was very easy for them to have this in addition. And the scale is actually right here. The good thing about this scale is that it is validated. In the trials where this has been validated, they have recommendations on how you proceed based on what they're ranking is and how the nurse scores that patient.

We also enhanced the electronic medial records with using an opiod risk tool, and then it was able to flag high risk opioid patients, so they could have a banner alerting people

that they were high risk, maybe consider a Narcan prescription for if you were to prescribe an opioid.

We did BPA's, like I said. We used the Prescription Monitoring Program. I know a majority of states do participate in this, but not all. But in Louisiana, it is our law that physicians must access and review that patients chart prior to dispensing, or writing that prescription. And we've implemented where there is single click access. So when they're doing their medication reconciliation, the can click, and everything from PMP is brought into EPIC, and that really has streamlined their process.

And then we've built an opioid order set. We're working with our Ochsner partners on this, for an opioid naïve versus an opioid tolerant patient population. Because as we all know, those 95 year old ladies that come in, never had an opioid, and start up on Percocet or oxycodone, usually have more adverse events compared to those who are tolerant.

One of the other things that we've done is also incorporated the PT section into this opioid naïve versus opioid tolerant order set, and that's a big part of where we're trying to go for the future.

We've also focused on staff education. So the picture is actually our Badge Buddies that we've made for all of our staff on the POSS scale and the Morphine Milli Equivalent.

Then we've also focused on appropriate prescribing. Looking at the Society of Hospital Medicine consensus statement, the CDC recommendations, and then focusing on multimodal analgesia as well. And it's really a change of culture. That's one of the big things that we tried to focus on. You don't need to use an opioid first. You can do other alternatives for pain.

Bert: In the Vizient 2016 opioid stewardship collaboration, which Pharmacy participated in, this old way of thinking was what we were dealing with pre-1996, but we weren't having short-acting opioids. This started coming after '96, and then people from short to extended, and then when they would get problems with dependency, they would start trying to wean off and reverse, and it got us set in a bad way, because before that, we were doing this. In '94, '93, '92, non-pharmacological modalities were first on the list. We didn't have regional pain blocks now. We do a lot of that here. But then we would move up the chain to whatever their short-acting opioid was at that time. It was then post '96 that this all came about, which got us in this situation. It was very prescient of Vizient when they came out in '16 with this to label the non-pharmacologicals, because in 2015, we were already working towards going this route.

There was a strong focus on patient education, especially the new way of thinking. We just borrowed that, took it on, we talked a lot about opioid induced hyperalgesia. We brought everything down to a level where we just talked about electricity. It goes on an iPad, the patients a captive audience when they're getting a treatment, and they have to run through the slides, and we just try to explain how opioid induced hyperalgesia happens, and how it can be corrected.

And then we went to the modality. So we had to divide these into two, traditional modalities were all the things we would have been doing pre-'96, maybe the technology's a lot better, but the innovative things that administration allowed us to trial would be the Kinesio-taping and the dry needling. As far as we know, we're the only hospital in the nation right now that's doing dry needling in acute, and it's worked very well for us here.

When we did present the data as we were collecting it to the Society of Hospital Medicine during our preceptorship, they acknowledged that what we were doing was groundbreaking. They couldn't tell us anything else, but keep on track. They were very supportive of how we were working the data, and how we were trying to incorporate the opioid naïve versus tolerant mindset when we were trying to decide on how to deal with these patients.

Now we really got affirmation when The Joint Commission came out with their [inaudible 00:10:28] report in 2017, where it said that specifically they're looking for non-pharmacological strategies. Now I bold acupuncture therapy because my lifelong journey now is to try to get that changed to dry needling. I do several lectures with physicians and administrators where we just point out the differences in the two. I'm actually reading a book on Western Clinical Acupuncture now where they make no delineation between that, then you have acupuncture therapy and dry needling, so that is a move in the right direction, because we all need to be on the same page.

The traditional studies, this is what we do, moist heat, ice, these have been around for millennial. But what we do here is we take the moist heat, we use a machine that only goes to 133 degrees, so nurses can put it on without fear of burning the patient. We do ice for a lot of people these are go-to modalities. To give you an example, we had a lady that came into our hospital with pain and fever, which was confirmed later to be typhoid because she had just gotten back from an overseas trip. And every day her dosage of hydromorphone and meperidine was increasing to the point where day four, physical therapy was consulted because this was a very small frame, petite lady, and she was what you would say opioid naïve, but because of her pain, she was taking massive doses of this. I did some studies really quickly, Googled Medline, and found that cervical neck splinting is a big, big problem with typhoid fever, so all I did was got permission to put heat on her. Talked to the hospitalist who added cyclobenzaprine and within 24 hours, that patient had meperidine discharge and was able to discharge the hospital.

And I bolded the fact that this was early in our study, and it gave a lot of physicians pause to say, "Day four was late in the game, we could try to get therapy in there for the appropriate patient."

Our go-to though is our primary non-invasive is E-Stim. We do a lot of E-Stim's, and the way that Medicare has it set up now, is if you document that electrical stimulation works for the patient, this is something we take from the outpatient venue, then our case managements can automatically translate that into a referral for that Home Tens Unit. I have that same unit at my house, I've had it for seven years. It works fine. And this way you're giving a patient something to carry on when they go home, before they

look for other alternatives for treatment. It's a good unit, it's a stop gap, and it does give you some good pain relief.

A opioid tolerant patient, this is what we started with, and this is where the RADEO portion we were focusing on, someone with that history of chronic back pain. He was getting increased dosages of lots of opioids, and his daily pain rating was a nine or a 10. So what we do in these situations is we try to interject our treatment between his scheduled meds, because his pain was always a nine. So if in the middle of his treatment from the hydrocodone, and hydromorphone, we were able to get him to a three or a five, and he could maintain that for three to six hours. And then we were able to reduce the amount of breakthrough pain medicines he was taking.

Now the good history about this, and this was really good about our program is we did a lot of follow-ups. We got this guy scheduled with a good neurosurgeon, and three months after this he was able to get a surgery that he had waited probably eight years of going through pain management and not being able to get a back surgery. He was able to get that surgery, and his life changed for the better after that.

We call this the flip the script patient because we had again focused on the chronic pain patients until this lady came in, who had a boating accident with pyelonephritis, and she had told the referring physician, who is part of our program Dr. Hill at the very beginning that they wanted avoidance of the opioids during their stay. And we've never had that come right across at admission. Her pain was a nine out of 10, and [inaudible 00:14:24] she was on the study did just the regular traditional modalities of moist heat, E-Stim and some soft tissue mobilization, and during that ladies three-day stay, she only took acetaminophen 650. So that really changed the tone for where we were going with this program, that maybe this was where we could get the most bang for our buck, so-to-speak.

We limited this study to 30 patients being offered the trial, because you got to remember at the same, we're also trying to work on competencies and develop a program, and then control how we get the education out to nurses and physicians, because nothing like this was offered before. And we started with primarily hospitals, but even at the end we knew we were on the right track when pain management physicians started trying to send us their patients. The average score reduction was 4.95 six hours post, and the big thing that we got out of it was 44% of those people agreed to an outpatient services referral, outside of pain management. That would either be our Ochsner counterparts pain management program in Covington, or one of our outpatient therapy service providers. It was pretty much equal mix of chronic and acute, if you will. And that was good. That was for the traditionals.

Now I'll let Ashley talk about the actual time for consultations for therapy.

Ashley: It was just interesting to see that for both acute and chronic patients, the time to consult was delayed. I would have thought maybe more on day one when they came in complaining with the pain is when the right to consult PT would be. If you look at their average length of stay or average for both groups is 14 days, so a little bit longer than

maybe if we could help these patients up front, it would also help get them out of the door quicker.

Bert: Yeah, and on that, it was at least halfway into the program when we started shifting towards the acute patients. But if you look at the ... and listen, when we do phase two of this we're going to do a much better job of how we collect data regarding the MME, the Morphine Milligram Equivalents, but if you look at the acute versus chronic, you could see the biggest drop off between the pre-therapy and the post-therapy, so those were good numbers all the way around.

Even more telling for us is we had a question that we collected data on when we started with this, which was willingness to participate, or willingness to learn. So if we attempted to educate people during evaluation process, and they didn't want to have anything to do with it, we just checked that off as it's an unwillingness to learn. If you see those people who did not accept the therapy because of that, their scores were markedly higher than those people in either category that allowed us to do therapy on them for non-traditional modalities.

When we go to innovative modalities, this is the second part, we started with K Tape. K Tape if you watched the '08 and '12 Olympics, they were trying to ban it for certain events. I took courses on it, didn't really understand it, but it really does work. It was created by a scientist/chiropractor in Japan, that really believes a lot in the third space and how it can affect swelling, and it normalizes tone. We joked about it when we first started doing it on who we would be able to use it for, but now, it's something that we do in our emergency department a lot.

When I got here six years ago we were casting people, putting posterior splints on sprains, and even though the materials weren't expensive, the time to cast was, so I moved us towards Cam boots, which we were getting for around $26.00 a boot, and now we can just put Rock Tape on a patient, $1.25 to $2.00 worth of Rock Tape, they're still able to mobilize, they go home, and they get the hematoma removal, and they get mobility at the same time. It's a quick fix, but it does a lot of good. And when the patients get it, and if you see them later, they just say, "I just can't believe that really worked, but it did."

A Rock Study Tape case, we call it Rock Tape because that's the kind of tape we use, Kinesio tape is the name brand, so Rock Tape's the name brand, so we had a guy that came in here from a ladder fall, and he had some serious transverse process, but he had a lot of ankle pain, and that was his primary complaint before PT was he just couldn't move around from his ankle. He was getting oxycodone, physical therapist went in there and applied the back brace and the Rock Tape, and he was able to ambulate. He was very complimentary about the tape, and his med usage just was strictly held to Acetaminophen. And considering he had two levels of transverse process fractures, that's saying a lot about the whole process, and we were very happy about that too.

Dry needling, it's a physician created modality practiced worldwide. I've been doing this a long time. I've never seen anything like this. It's just how it works is pretty awesome.

We do specific lectures on this question because it's the same thing that's asked by everybody, what's the difference between acupuncture and dry needling. And listen, dry needling owes a great debt of gratitude towards acupuncture. It's been here 3,500 years. It's been practiced millions and millions of times, but just think of dry needling as the Western medicine offshoot of that. Where acupuncture is still stuck in concepts of Yin & Yang, and Meridians, and things like that, we've moved on to a better study and understanding of neurobiology to come up with answers for why these things work. Actually, it was the work of several very instrumental physicians over the last 100 years who have pushed this forward.

Just to give you difference in the philosophies, if you take someone who would have what I would call epicondylitis, if you look at these areas between C7 and C8, you notice that there's an area in between the vertebral column and the inside border of the shoulder blade that corresponds to each of those myotomal segments. And that's based off of the embryonic evolution of the body. And so if someone had an elbow problem at C6 or C6, I in two or three treatments, or any physical therapist doing dry needling, would primarily work on the neck, the shoulder and that spot on the back, probably wouldn't even the touch the epicondylitis for the first one or two treatments, and by three treatments, he should have a lot of relief based off of the concept of what we're trying to effect.

Spoke to a licensed traditional Chines medicine acupuncturist and their meridians, or their lines that would correspond to what you would call a dermatomal pattern tie into organ functioning, because remember this is a technique that's 2,500 years old. So they believe if you had pain anywhere in that area, it's related to your small intestine, and they would have to reset all of your meridians to get that relief, and that relief could actually take between 18 and 24 visits. This is the difference. It's not that acupuncture couldn't work, it's you have three visits versus 18-24, and we know the environment that we're in and this is why we are moving in the direction towards dry needling.

Here's a case study. I have to tell you right now, I didn't take a pre-picture, I never did take pre-pictures. So I'm showing you that when you look at that erythemic response along T6, 7, this is a person who had diagnosed with herpes zoster during her first pregnancy, had resolution, after her second pregnancy was complete and during it she started having a large amount of pain without any kind of eruptions that you could see. She sought out three different opinions, and they put her on pregabalin, and she started thinking she was having psych issues because she just couldn't get her handle on what's happening. Now research shows that the varicella virus lives in a dorsal horn, never really goes away. I just took a specific article that was a publication from the Korean Journal of Anesthesia, and I followed it, just as it was on the ... obviously there was the translational difference, did the one treatment, and she was better. And in the Korean Journal of Anesthesia, they say in South Korea and in Japan, this is a primary treatment option of post-hepatic neuralgia.

I brought her back in two weeks after just to see could we get that erythemic response again, and we could not. And we talked to her about six weeks ago, and she was symptom free, and that had been 12 weeks. So the Korean Journal of Anesthesia's publication worked just like they said it would, and I was very skeptical, especially when

it talked about just the one treatment curing this problem, because post-hepatic neuralgia can be a major problem. The good thing is we have a researcher out of Oklahoma who wants us to get in contact with him this year and see if we can't try to do a replicative study for this here since we see a lot of people with that.

Another instance, and administrators love this because it's really good for everybody, we had a lady that was here, and it was a really sad situation because she had metastatic cancer, and she couldn't get out of here, and this all transpired across the weekend where Monday was a holiday. And she had truly intractable back pain that was sciatic in nature. We couldn't get a physician in here because of that until the Tuesday, so she allowed one of the therapists to do a dry needling session, and actually to be honest with you, our COO actually helped to go counsel her and get us the ability to try it on her, and we did it, and during the actual session, she fell asleep and even was snoring, and she discharged the same day, and went home, and she didn't have any pain for several days after that, and was actually transferred to hospice. So you save a three-day stay with a one-off treatment because dry needling is not something that you just do it one, maybe four or five days in one location.

The last study on that that we're going to share with you is we had a lady that came in here with a bacterial meningitis, so that's what they thought she had, and she had had a headache for six weeks, had all the signs, but she couldn't take anything because she had a idiopathic sinus tachycardia. Again this is a situation where they didn't really have any other possibilities, so they allowed us to do dry needling, and we did it following the whole, the upper traps, there is a specific protocol you can do that we followed for that, and she was migraine free within 24 hours. We discharged her to our outpatient clinic, and she went three visits, and she was still pain free, and they started her on some good postural work to continue that process on. So here's a situation where we were able to get her pain down, reduce her length of stay, and we ensured that she followed up with appropriate venues after.

We were able to trial 60 patients in this, and this is during, in our state between your certification period you can't bill for the service. There's a special waiver we have to sign, the patient has to understand this is for the purpose of education while we're doing our training, and of those we had 19 acute and 41 chronic. And you can see the three-day outscores. We had seven-day outscores, but I had to ditch those because a lot of acute pain could resolve in seven days, so we thought whatever their scores were at three days, we're much improved. 34% of compliance, which we verify with outpatient service for chronic pain.

What we did is if someone had a chronic problem, and we weren't able to get at least 40% reduction or improvement, because that's what we ask what your percentage of improvement for your ADL, we sent them automatically to outpatient, and they complied because they would see at least some pain relief, and that's an excellent stat to follow-up on because nationally that's way above the level. And I think a lot of it has to do with the education and the personal one-on-one contact that we give to the patient.

Let me say this too while we're here, we got involved in this process because the physicians would tell the patients, "I can't give you the dose of opioid that you think you need," and automatically there was a communicative breakdown between everybody else that dealt with that patient. We would see it when we were coming in just to do transfers, [inaudible 00:26:38] balance training with those people. Their whole attitude was shit. Once you're in their doing hands-on treatment, spending some times with the patient, educating them, and especially with the way we educate on opioid-induced hyperalgesia, we let those patients know that there's actually truly a physiological reason why you feel the need that you have to take 2 mil push of dilaudid just because you stumped your toe, but we also tell them that there is a future that you can get rid of that if we can just get you to some alternative treatments. I think that gives some patients the buy-in and I really do believe that helped the program to get its feet and they got us on the right path.

We've taken this a long ways. Locally we've done a lot of internal physician education, a lot of nurse education, some of the people with the face for television, that would not be me, have been on TV with the same program locally. And regionally we were invited by Ochsner to do their grand rounds at Monroe Hall, which was a big honor for me, because that's your peers. They also got to, some other people got to do the leadership council. We did a research forum at the Louisiana Physical Therapy Association and we got to do this lecture, which was an honor to Sharon Dunn, who's the President of APTA, ourselves. And she had just left DC for this same issue, and she said there's just no data out there, but we got to her like a week too late, because she didn't know about it.

Nationally we were blessed to be able to be one of 62 or 69 people that were able to present at the Vizient Deep Dive Summit, and out of those, we were one of six people to win the Brilliance Award. It was nice to see that because it showed us that we really were on the right direction, and we got to do a lot of national presentations through the Society of Hospital Medicine to physicians that are in the know and are trying to work this. We're also up for publication in the American Journal of Medical Quality that's coming out in the spring for reviving non-pharmacological modalities in the acute care setting.

So where are we going? That's really up to everybody that hears these calls. We've had a tool set that we're trying to bring out to get other people involved to try any or all this. We are working with Tyra Mitchell who is, I would call her the lead PT for all Ochsner's 28 or more facilities for inpatient. We're working together on a research protocol to take this traditional modality study and work it across several Ochsner's facilities. Our goal here is going to be to try to focus more on getting a contractual verbal agreement to fair it out, who wants to have reduced exposure to opioids at the onset. If we do that, and we can achieve some buy-in, we don't necessarily only have to treat the opioid naïve patients, but we can also work on anyone who wants to reduce their footprint or exposure, we can put the modalities in there in the interim. I think that's kind of going to help us in our future events to try to capture data, and I really do think that's where we are going for the future.

We're looking to get a CPT code for dry needling. There is not one nationally. 10 or 20 years ago there was only about 6,000 physicians, therapists, or chiropractors needling.

There's 60,000, and we predict in 10 years that'll probably be at least four or five times that amount, because it really does work.

We're working with CMS and Donna Wascom, she's been very helpful in guiding us in working this program. We're obviously always looking for grant funding. There's a lot of grant monies that are being focused on outpatient, and while that's very necessary, I do think it's somewhat short-sighted because dependency, or the exposure really occurs in the emergency rooms and in acute a lot of the time. And we've proven here we can take some of that direction and shift it off.

We're also working right now with our occupational therapist to come up with a cognitive behavioral component that we can work for those people who don't have a willingness to participate, or maybe a reduced willingness. We can try to start breaking down some of those barriers while they're inpatient and shift them to the right direction.

Obviously we would love to have American Physical Therapy Association assistance, and we're going to try to grow this program as much as we can for future publications, and the publications are only for the purpose of advancing the concept that this can be done in the acute care environment, with the goal of the continuum of care expanding well past that, and that's what we've done, and we're ready to answer any questions, if you have them. And we thank you for your time and letting us talk to you about this.

Krista: Thank you very much-

Ashley: And I just want to-

Krista: No, go ahead Ashley.

Ashley: I do just want to emphasize one thing, it really has been a team effort, and without PT being here, what he alluded to earlier with the stories, patients, for medical reasons, could not tolerate any more opioid medication, and so they felt like we were just taking something away, but PT was really able to step up and give something back to the patient to help them, to say, "Okay, you're not alone in this struggle. There is other alternatives that we can do." And so I think that really has helped make this program successful.

Bert: Yeah, and I will say this because we get asked this a lot. I am blessed to work at a hospital. It's not a big hospital, but it's an important hospital because if you have a trial or a program, or anything you think will help the patient in the realms of quality, safety, or innovation, they're all over it. And when we got the dry needling component, our COO gave us the amounts of money, a very small amount to try the part one, to trial it because she wasn't sure it would work, and we weren't sure it was going to work, but we were allowed to go through that process, hence the need to collect data to prove that it would work, or wouldn't work, and this then blossomed into expansion of the project. So you got to have support from physicians, you've got to have support from administration. And then as long as you got good teams like the pharmacy people we

have, and this includes nursing, and everybody in our hospital is really on the fly to help in any way, that's how these things happen. And that's all I'll say about that.

Krista: Thank you very much for that excellent presentation. Once again, if you have any questions for either one of our speakers, we invite you now to please type them into either the chat box, or the Q&A box on the right side of your screen. We do have a few questions that have been logged already. So we'll just go ahead and get started on those.

The first question that we have is what are the requirements for being able to administer dry needling, and how can someone become trained?

Bert: Currently there is 53 states

Jay: 43, 43.

Bert: Oh, I'm sorry, there's not even 53 states, I can't do math. There's seven states in the country that do not allow dry needling at this point in time, every other state has some aspect of that. If you're a physical therapist, you should contact your state board. Chiropractors have their board, physicians do their own thing. We go to courses with chiropractors and physicians. And then it just depends on your state. In the state of Louisiana you have to have so many hours of training, followed by so many hours of on-site practice, followed by another realm of hours to become certified with the State. And currently you have to be at a school in Louisiana three years, two years, excuse me.

I've been out 26 years, I didn't go to school for dry needling, I just got my certification last year, but the fact that I was wearing my hands out doing all these other manipulation modalities before that came out, and again, I don't buy in to anything until I check the research. And I woodshedded this once I went through a course. I reviewed every possible way of doing it, and everybody's special, philosophical approach.

But the seven states that don't have it, currently we're working towards that. A lot of that, there is friction because acupuncturists and physical therapists in the realm. I do think if the acupuncturists go the route of Western clinical acupuncture, maybe we can find some common ground to achieve both ends. But dry needling is structured from a neuro-biological standpoint. And that's how it works.

Ashley: But usually the course itself is about a year for the whole training, correct?

Bert: Yeah. In our state it's two 50-hour courses. So you go 50 hours and then you do some time, and you go back for another 50, and you have to do that in Louisiana within the period of 365 days.

Krista: Thank you very much. And we do have a question referencing an image that was on slide 23, and this person wanted to know if that was a portable Tens machine that the patient took home.

Bert: No, the slide on 23, if you're looking at the picture we're looking at, that's the E-Stim unit that we use here, that's a portable unit. I will tell you, with regards to E-Stim, we use one of four protocols that we got from Rick Proctor who's an electrophysiologist for Chattanooga Corporation. And we limited our study to the use of one of those four. You can almost dial one of those in in a Tens unit. That Tens unit we showed you on the other picture is just the unit we purchased. I didn't get mine from there, I got my unit, that unit right there, I go it off of E-Bay, actually. They used to rent them but now-

Jay: That's the unit Medicare provides.

Bert: Yeah, it's the Medicare ... they don't rent them anymore, they just purchase them. But we did send that man home with a Tens unit, and as importantly with that man, we really helped get him into the right venue, away from a strict old-school pain management program to a physician that could do his surgery for him, because that was his problem, he was stuck in that [inaudible 00:37:16].

Krista: I apologize, I believe it's the slide right before this one. Slide 22 is the portable Tens machine that was being referenced.

Bert: That's it. That's it. Yeah. That's the brand he went home with, which I don't even know if it's a brand. It's not a [inaudible 00:37:31] brand. That's the one that Medicare pays for at least in [inaudible 00:37:40].

Krista: All right, thank you. Our next question is, can you elaborate on the legalities of having PMP data entered in the patient chart because in Delaware providers are not permitted to do so.

Ashley: It's not located in the chart. Nobody can just come in ... it's based off of the provider's DA number. So if the provider has a DA number and a PMP account, they are the only one's who can do this one click access, to where it's in the background set up in EPIC, to where it automatically logs them in, and it pulls that data in. Nobody else has access except for that physician who is in that patients chart.

Krista: Thank you. Our next question is, has dry needling been tried with the diagnosis of RSV, currently called CRPS, or Chronic Regional Pain Syndrome?

Bert: No. Not that it shouldn't be. I have read some recent studies where people are using it for atrophy from stroke. It's not a neurological treatment. The short-term is that you're trying to take a chronic pain area, and you're trying to give it an acute pain response, so you place a needle in an area that's hypoxic, and I don't want to go into the sequelae of all that, but you can ascertain that the PH is low and it's hypoxic, you're actually taking, allowing through that interjection of the needle and that trauma, you're allowing an acute platelet aggregation to occur. Almost like a mini-perla therapy. That's why we can't needle more than five days apart.

There's people doing tons and tons of research. I read dozens and dozens of articles, of publications all across the country and all across the world every year, but I have not

seen anything for that, per se. I do know a lot of people are using for myofascial pain syndrome. I know people that's entire bread and butter is doing this on nothing but fibromyalgia and chronic [inaudible 00:39:48]. But there aren't any contra in the cases for any of that.

Krista: Great, thank you. Our next question is, what was the average pain scale reduction in the trial you mentioned with 60 patients?

Bert: It was between ... can you go back to that slide. I want to say-

Jay: We measured it on [inaudible 00:40:09].

Bert: Here's what we did though, on the dry needling we didn't use that. On the dry needling we specifically went to ... because a lot of these were well patients too, we went to the percentage of improvement because we're trying to figure out ... one of the problems we have in therapy in general is there's not one smoking gun functional outcome measure, and there's Rosetta Stone to take the dozens of trials, or functional outcomes that you have together. So we did a percentage of improvement.

What we would do is we did the treatment. We would text or call them the next day, and then do the three-day follow-up, and all we wanted to ask them was, "What is your perceived percentage of improvement?" And if they had it, that's what we wrote down. And the ones that didn't have it were the ones we considered chronic pain.

Krista: Great, thank you. Our next question is, when you present this idea of dry needling to other hospitals, are people open to the idea, and if not, how do you overcome resistance to this?

Bert: Well, that's go back to you got to find a physician champion, you've got to have some administrative rapport. The only concerns about dry needling are adverse events. The primary adverse event you can get is pneumothorax, you could actually, because you're going deep with some of these needles depending on the region you're in. So obviously you have to have good technique, you have to have a good waiver because it's an invasive procedure, and then you just have to trust that you're getting the right patients.

I think people are seeing dry needling research because the scientific method is coming through with this, and a lot of people are doing some excellent research, especially in the Asian continents. Your Thailand, your South Korea, your Taiwan, your Chinese people are doing a lot of dry needling research or acupuncture research with a Western neurobiological slant to try to figure out why acupuncture's worked for this long, that people want to look at this, especially now more than ever because of the opioid epidemic. I think if pre-2011 maybe, before people really realized we had an opioid problem, I would never be able to sell dry needling anywhere. But now it works, and you show people the data, and you just ask them not to bite off more than they can chew. If you want to try this at your hospital, get one person. We had three people that were able to dry needle, and so we just worked within that realm. I just lead them to the research, because the research is very, very good in this field.

Krista: Thank you. Our next question is, does your insurance cover the cost for a home Tens unit to take home?

Jay: Yeah. Yeah, so most of our insurances do. This is Jay, by the way. When we treat a patient, or when I treat a patient, it's specifically with the treatment of E-Stim, and I show that there's any sort of pain reduction with that patient, I document it in my chart, and under the home medical equipment recommendations, I'll put home Tens unit. The case manager then goes and gets a doctor order on discharge for home Tens unit. What's been great at our hospital is we've been able to get that home Tens unit before the patient discharges. So the last one to two treatment sessions with that unit is with their own unit, with a family member, and we're able to do family and patient education on how to use the unit, and give them a treatment plan for when they return home.

Bert: Yeah, our hospitals may be different than some. We stock all kinds of braces that we vend out for discharge. I mean, so we stock Tens units to give to people before they leave.

Krista: Thank you. And our next question is related, and it is, how effective are the home Tens units?

Bert: I think if you look at it as a transdermal modality, in the long run, it's not as effective as a long-term cure. I call it a bridging the gap solution, but if Tens works for people, people can get implantable E-Stim devices. What happens is your body starts to accommodate to the current. All you're trying to do is disrupt the signal going from the pain source to the brain. One of the things we try to tell everybody when we give them Tens units is, "This is not going to fix your pain problem," because some people will have enough reduction in pain where they may do things that can further cause them complications. We're just trying to explain to them, this is something that can release your own type of morphine derivative in your body to reduce your pain.

I don't even know what studies would say about implantable devices for the long term, although implantable devices have much better computer cores and they can change currents multiple times, and they don't have to use near as much current as a Tens unit because it's implanted, but we're just using the Tens unit to try to get them from home health to outpatient, and to show them that you have an option to reduce your amount of opioids, or any kind of narcotics, while you're out of here between the venues that you're following through with.

I use a Tens unit myself all the time. I have a lot of back problems, and I don't use it until it's really bad, and it gives me three or four days of relief, and I just take a Tylenol and an Advil and I'm good to go.

Krista: Thank you. Our next question is, have you used this approach to treat patients who have opioid abuse issues?

Bert: Yeah, in our study, if people were willing to participate in phase one, we did them. And we did have some people who had some issues, but out of the five people who refused,

four of those five were people who had an opioid tolerance issue. And those people, their primary fear was, "You're going to take my pain management physician away." The good thing is, and we're seeing this shift. It tells you an epidemic, a lot of pain management doctors, especially Louisiana, was inundated with them are backing out, and now people are like, in this haze, this twilight of, I know that my pain management doctor's not going to be with me forever, but I don't have any other solutions or alternatives to manage my pain, and I'm scared to death. So you catch those people at the right time, at least you're planting the seed. Sometimes they come back, you may be able to start working with them.

Ashley: And we had a couple who initially refused, but came around.

Bert: Yeah.

Krista: Thank you. Our next question is, is dry needling effective for hip pain/hip flexors?

Bert: Absolutely. If you see any of these 39 year old defensive ends playing professional football, they're spending $150,000 minimal a year, they're getting dry needled every day. Now they're making big bank, but any musculoskeletal problem can benefit, and I don't care if it's acute, chronic, it can benefit from dry needling. Because what you're doing is you're taking tissue, again, I wish I could just go into the physiology, I could talk about this stuff all day long, but you're finding the root of the problem, you're trying to work on both the dermatomal, the spinal segments, and following that all through the distribution to any areas that have trigger points, and those trigger points are definitively related to problems with vascularity and innovation, and it causes those people to have hypoxia, and that tissue starts to die.

There is actually a more advanced version of this that physicians do. We have a [inaudible 00:48:05] that does it here in Covington, called [Tenax 0:00:48:06], where they take a needle, it's a large bore needle, and they actually got into the tendon area and they start chewing away portions of the tendon. When that person leaves, they have a huge hematoma. I've seen it done to people with dead gluteus medius's, they'll chew that stuff away, and four weeks later that person's good as new because now you've taken that dead tissue, and you've made a huge hematoma of acute pain, and they go in there in a macro level, and it cleans itself up, and you don't have to do anything to that.

There's not a physical condition related to athletics or repetitive use that won't benefit from dry needling.

Krista: Thank you. Our next question is, are the insurance companies covering these modalities on an outpatient basis?

Bert: Yes. They were always covered on an outpatient basis. The problem is, we moved away ... we used to treat pain as physical therapists, now we treat function, and if pain impedes function, we treat pain. We're trying, in this study, especially in phase two, to get our outpatient facilities to allow people to come in first and foremost who have

pain, reduce the pain, and see what function follows, because that's a big problem. We're so focused on function, if pain affects function, we work on it. And I know people on this call with disagree with that, but we need to get to the point where we just see pain as pain, and try on some of these people who have a lot of it to see if we can't reduce that first without worrying about the functional outcome. And then once that pain level can drop significantly and steadily, then we can work on function. And I'm sure I was on a soapbox there for a second, but that's very strong on that point.

Krista: Thank you. Our next question is, why does dry needling work in so many fewer visits than acupuncture?

Bert: Okay, because this goes back to neurobiology. Just use that example that I told you about the epicondylitis. If I know where the epicondyl feeds, and it feeds C5 through C8 on your spinal segment, I dry needle both side of the multifidi for that muscle region because we go back to the problem spondylosis, which every human being has. They say five percent of people less that 25 have it, 95% of people over 65 have it. I've seen it thousands of times in imaging, and I used to always think, "Well it's just gravity working on your spine, shortening it," but really those muscles in that area get hypertrophied, they get hypoxic, and they start compressing the peripheral nerve root that leaves through C5 through C8. What I'm saying is, that person couldn't ever get that repetitive elbow issue, unless they had a decrease in vascularity, which is less likely, then a decrease in peripheral innervation. We work through all those segments and those muscles, and it's just amazing how quick people start to have a difference.

I just worked on a department head who had had radicular pain in his median nerve, which some people would say he could have probably been diagnosed of having a median nerve problem or carpal tunnel. He had it for seven months before he started working. I did one treatment. It took him four weeks, he just came back to me two days ago and said, "I don't know how it happened, but within that first treatment, within four weeks, it's been two weeks, and I've had no problem at all." That's the way we work because we're working off of the existing understanding of neurobiology and neuroanatomy.

The issue with traditional Chinese medicine is they're working off a concept that was created when no one had any understanding of physiology. I mean, they just had trial and error over 2,500 years to come up with that concept. So when their concept of meridians where you see that word small intestine, most of the meridians are named after certain organs, and they still believe in traditional Chinese medicine that they can effect disease and processes due to that, that's why.

And again, when you're in Western medicine in today's day and age, you don't have a whole lot of visits to get people better, so you got to come up with whatever works, and you got to have some good outcome measures to see that it is working.

Krista: Thank you. Our next question is, do you always use dry needling with electrical current? In the photos you showed the needles were attached to wires.

Bert: I use it every time. Again, the current only goes through the end of the needle to the very tip, it's a very small current obviously. But again, my goal is to flood that hypoxic area with positive ions throughout the whole treatment center. We make the current run [inaudible 00:53:02] initially, and then we have it run [inaudible 00:53:04] through the second half. I am trying to figure out how to make better research effort. I've just come up with that through a lot of education, self-education, and use of E-Stim before. I always use the same protocol, and it's always worked, so I'm not going to change.

Krista: Great. The nest question is, can you tell us more about the resources you obtained and/or used to implement this program?

Bert: At one point we had a tool kit. I need to revamp it. We had a tool kit that any hospital could take and just run with it. It has our, we have a specific competency for pain, that all PT's and OT's work, and our hospital OT's are also qualified to do all pain management, except dry needling. Actually we do taping here, and we actually have sent some people to cupping courses, and we're going to see if that has any benefit. The problem is with cupping is inside you're taking a person who came here with not skin integrity issues, and you're giving them a hematoma, so we're going to have to figure out how we work around that in an acute care environment.

We have those resources, and we've had this tool kit that we've put together that has the protocols for the E-Stim, the competency, the template for our evaluation, it has everything but the sign-off for the invasive dry needling, because you have to do that state specifically.

If I get specific people who are asking for those, if you send me the email, I will make that happen. But we are in the middle of revamping it, especially our education portion, which we try to get more [inaudible 00:54:40], because we have to do all that because we're trying to present this to Ochsner main campus so that our brothers and sisters can start this trial. And listen, if anybody wanted to get on the trial, I'm sure they would be okay with that too.

Krista: Thank you. Our next question is, what about dry needling therapy for dental pain in the ED, or TMJ chronic pain? Opioid abuse in dentistry is a big problem, and we should partner with physicians.

Bert: It is absolutely amazing in the use of TMJ, and I'm sad to report that I got TMJ because I wouldn't use a night guard for five years. So it's my fault. I didn't believe in TMJ by the way, but yes, that's absolutely true. It does work, I've had it done on myself. It can be very painful. You get into those pterygoids, it can be painful. I actually don't know, but I'm seeing that in the next five years people are going to come out with some subsets of education. The more people get dry needled, the more they're going to want to do treatments on dry needling. You're going to see my name out there eventually. Jay and I are going to start working on E-Stim courses for dry needling, but that would be an excellent suggestion because it really does work for TMJ.

Krista: Thank you. Our next question is, I understand the length of time and hours for training, but in your experience, how long after training does it take for a therapist to effectively administer the dry needling?

Bert: That's a great question. I've been doing this for 26 years, so I was ready, I've been waiting for dry needling for a long time. Jay Marange who's the lead on the study with us, he's been out of school I think for going on four. There was three of us that were able to work together, and we were able to practice, and practice, and practice, and practice, and use some good apps to make sure we know what we're doing. If you have outpatient people that are already dry needling, you can get them to help you. If you're a sole therapist doing this in your own in a hospital, or a SNIF, or something like that, it's going to be more difficult because you got to have people to give you feedback on it.

Again, hats off to our administration for having trust in us to make this work. But if you're a one-person operation, you got to make sure you get involved with some people that you can work on needling on the side. And if you have a state that had dry needling, your outpatient people are dry needling.

Krista: Thank you very much. Our next question is, can you explain, there was arrhythmia on the back of the pregnant patient case.

Bert: Yeah. No I can't. That's a joke, it is and it isn't. The Korean Journal of Anesthesia couldn't explain it. So you know that you're varicella virus lives in dorsal horn. We don't really understand how it affects that pattern, although it is following the same distinct pattern that erupted when you had herpes zoster. Post-hepatic neuralgia is an up regulation and down regulation problem, but it's also focal in that specific segment. This is one of the few cases outside of the norm where we were able to take what I would call a peripheral neuropathy and effect it. I mean, there's some people working on central sensitization. I do think that this would prove that dry needling could help with peripheral sensitization, I can't really explain the physiology of it, and hence that's why I didn't think about taking the picture beforehand.

The Korean Journal of Anesthesia didn't have any literature speaking to this in that publication, which I could forward to anybody that would like to see it. We don't really understand how that happened. I will tell you this, when that person saw this picture, she felt relieved immediately that, "Oh my God, I'm not crazy, there really is something going on there." And we were unaware that that was the exact segment. I'm just working off the area where her rib pain was, so that was T6/7. That's why we really want to see if we can do a follow-up on this. And if you're in an acute care environment, you'll see a lot of people have post-hepatic neuralgia.

And if you noticed, by the way, on that first study, I did put Stim on there, and it's not on there right there because I was just placing the needles, but she did get Stim.

Krista: Thank you. And our final question is related back to what we were talking about earlier about the use of electrical current with the dry needling, and the question is, is then the use of current more effective than only the dry needle alone?

Bert: If you're asking me, I'd say absolutely. Again, this is a time, a lot of therapists don't have a lot of time, they'll just drop one needle or two, maybe they know better where the locations are. I just got to do what I do. I've never tried it without because it just automatically started working. I know there are a lot of successful therapists that don't use E-Stim at all, but I also think there's a lot of dry needler's who just have never been exposed to that modality. And actually if we get dry needing as a CPT code, we really need to have dry needling with and without E-Stim.

And actually, we are in the process of acquiring a venous doppler ultrasound, because we want to start doing some guided needle placement for some real deep work. I think that's also a future. They're doing some of that in Germany right now, and Spain.

If you have a concern for that previous question, and you got that person a doppler, and they're not very expensive anymore, then you would verify for sure where that needle placement was at, and where it was located. But yeah, I needle everybody with the E-Stim because it just works.

Krista: Thank you very much. We have reached the end of our time together. I'm going to turn things over to the Care Coordination Network Task Lead from New Jersey, Dr. Andy Miller for some closing remarks. Dr. Miller?

Dr. Miller: These will be short closing remarks. Thank you, Krista. Bert and Ashley, and the rest of your team, thank you very much. We really appreciate the commitment and the enthusiasm that you bring to this, and something I think that many people on this call were probably not aware of as an effective treatment that's available as an option to pharmacological treatment. We appreciate your spending the time sharing it with us today.

Ashley: Thank you for having us.

Bert: Yeah. Thank you for having us.

Krista: And we thank all of you for joining us. We hope to see you again after the New Year for our next round of webinars, but for now we are going to say, good afternoon and have a happy holiday.

Bert: Thank you.

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