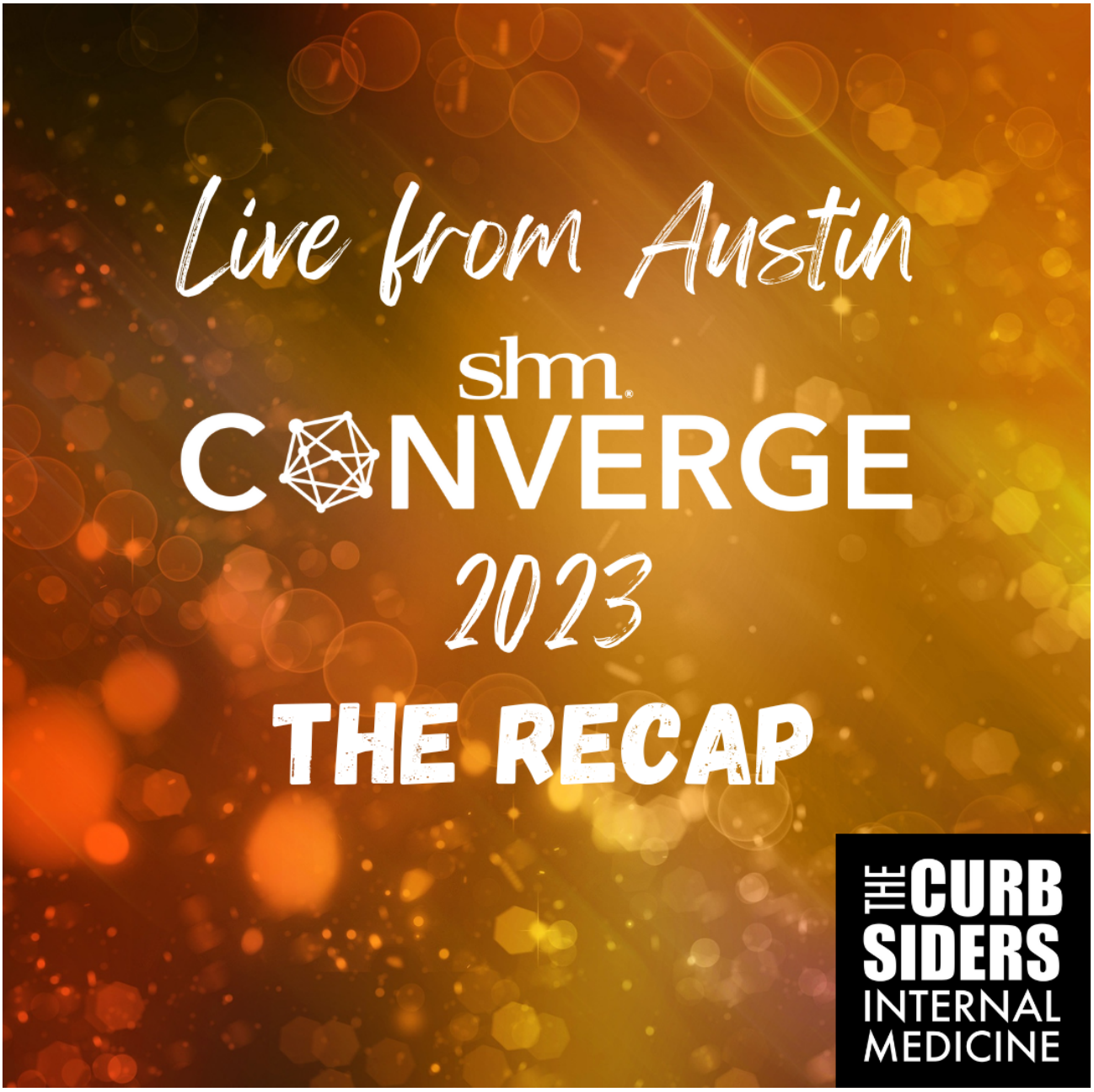
#389 Recap: SHM 2023 #Converge



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[The Curbsiders theme]

Monee: Welcome back to Curbsiders, but it's a little different, Meredith. Can you explain?

Meredith: No. JKLOL/ROFL.

Monee: [laughs]

Meredith: Yeah. So, we're here live at SHM. And by live, this will be recorded for everyone.

Monee: We're actually live from our hotel room.

Meredith: Yeah, they provided us this extra table, which was really nice, the extra table being an ironing board, so that we could also have this video recording for you all. We're live at SHM in Austin, Texas, which is homey for me. So, I'm pretty pumped to be here.

Monee: I'm pumped as it's the first time I've been here and already got to see the State Capitol, which is apparently I've been told by some people who may or may not be sitting across from me that it's one of the best Capitol buildings in the country.

Meredith: It's pretty much the largest. So, everything's bigger in Texas.

Monee: I'm aware of this fact.

Meredith: I'm glad that I got that in less than a minute.

Monee: Yeah. Well, long story short, we are at The Society of Hospital Medicine Annual Conference called Converge 2023, and we're just going to start with some clinical updates. This is day one and we've gotten through the morning session and learned a ton. So, we wanted to take a minute to just slow down and share some of those nuggets that we learned.

Meredith: Yeah. Before we jump into that, do you want to give anyone picks of your week from Austin?

Monee: Yes. Actually, it has not happened yet today. However, you knew that my first one had to be Torchy's Tacos. I love Torchy's. I've been going to it for years now every time I come to Dallas where my family lives. And yeah, I'm pretty excited. I'm a little sad that this morning I didn't wake up in time to go get a breakfast taco. However, we did get a breakfast taco at the conference.

Meredith: We did. It was spot on, much needed, and appreciated to be on theme for the conference. So, that was great. My pick of the week on-brand for me being a little sentimental and everything is got to see my family before I came here. So, that's been lovely. So, like Monee said before, we'll go ahead and jump into some of the stuff we learned during the morning sessions.

Monee: Okay. So, one of the first things that we got to see was a talk on syncope from Dan Dressler at Emory University. The differential for somebody to come in with syncopal episodes or suspected syncope, the seizure. One of the things I don't think I'd ever realized is just how specific tongue biting is for seizure. And so, if someone has tongue biting, much more likely to be a seizure than some sort of other syncopal etiology. And then another nugget from the history that I don't think I piece together well is that myoclonus can be from any really loss of conscious state, not just a seizure. I think that's a really big one, I think especially when we're going through these sorts of things with our learners on rounds and stuff.

Meredith: I think when you're trying to discern it from what patients and their families are saying, because well, the patient obviously doesn't remember what happened, but the family is always like, "Well, there was this jerking motion and gets very concerned about that being a seizure." But actually, that could also be the myoclonus from any other kind of loss of consciousness from any other syncopal event.

Monee: The last piece was that urinary incontinence occurs equally in seizure and other syncope. So, these are all things that I wish I would have known a little bit more solid before.

Meredith: Yeah, you learn something new every day.

Monee: Apparently. And then I think we would be remiss if we didn't talk about PEs when we talk about syncope. So, the PESIT trial, which everyone's probably familiar with, but just to run through it. Basically, they were able to create a protocol in emergency departments to determine if patients were lower or higher risk. So, if they were low risk just with syncopal symptoms, they got discharged home. And then anybody else that had suspected syncope, they were given a Wells score and a D-dimer and then based on that would receive a scan. About 17% of these patients had a clot and two thirds of those patients had a large vessel clot. So, presumably, that's the cohort that would be getting their syncopal symptoms from the clot, which I thought was interesting. That's a pretty big number.

Meredith: Yeah, and I think you and I were talking about this before we started recording. But the 17% from the trial, like I remembered, but until we were sitting in the talk didn't realize the two thirds of those were large vessel, which just makes more sense to me why those were associated with syncope. In my head, I think I was always like, "They're probably just a bunch of subsegmental PEs and we're overexaggerating some of this." But no, I think that there was some value to that. So, I thought that that was pretty interesting.

Monee: For sure. I think we're going to round it out with a little bit of talk of the Canadian Syncope Risk Score, which had been studied for a while and then validated actually just in the last year. Just to refresh people's memory or for the first time, talk about what is factored into the score. So, the most important are the ones that give you the highest amount of points are things related to your cardiac stuff. So, an elevated troponin, changes in your QRS either access or duration, or a prolonged QT interval, also if you're hypotensive with a systolic less than 90 or greater than 180, and then things like vasovagal symptoms and heart disease history also give you points. I don't know if I've really used it. Have you?

Meredith: I've never once used it.

Monee: Yeah, I'm actually not sure I even knew its name. Those will make sense, right? But again, cardiac component to the score is really what will get you over the hump and put you in a higher risk category.

Meredith: Yeah, and I think that with the scores, I always lose a little faith when it feels like there're a lot of subjective findings in it. But that one had just a long list of objective findings. So, it made sense to me that it was validated and everything.

Monee: Yep, and that is the Zimmermann study out of the annals of internal medicine from last year.

Meredith: Wonderful. So, should we switch gears a little bit?

Monee: Yes, I think it's time.

Meredith: All right. I'm going to go through some of what I picked up in the heart failure conversation with Dustin Smith also out of Emory, is a very Emory heavy morning, I guess.

Monee: Very much so.

Meredith: Because some of these were actually recently highlighted in one of our Hotcakes episode, I'm going to go through some of them quickly. We just talked on the Hotcakes episode about the Transform-Heart Failure. We're looking at torsemide versus furosemide, and really there's no difference between either of them at time of discharge for mortality benefit in patients, even though we all think torsemide sounds sexier for the bioavailability reason and what we all go to for learners.

Monee: I say it all the time.

Meredith: Yeah. So, I just think, even though we just recently talked about on Hotcakes, I just think it's worth mentioning again here. For lack of a better word, I just feel like it was a coming out party this last year for SGLT2s.

Monee: 100%.

Meredith: I was sitting during this talk being like, "We're going to reflect back on 2022, 2023," and that was the year of the SGLT2s.

Monee: Yeah. I mean, there should be T-shirts.

Meredith: But yeah, we talked a little bit about both for empagliflozin and DAPA for preserved EF and the approvals for those based on the EMPEROR-Preserved trials. I know we've also talked about these on Hotcakes before too. So, I won't go into too much detail about it. But really the benefit, while the composite benefit was mainly driven by heart failure, exacerbation, and hospitalizations, and everything. There is still enough benefit for number needed to treat to validate the approval for those for preserved EF as well as already proven like reduced EF. So, anyone, regardless of whether they have diabetes, if they have heart failure, the SGLT2s seem to be a good choice.

I think that the important thing that we talked about too was the fact that the medication itself is expensive, so that does play into kind of one of those downside effects of it. And then the genital infections, as well as being one of the adverse events as well dictating utility of them for some of your patients. So, that was the highlights that I found from the heart failure one.

Monee: Yeah. No, I think with the SGLT2s, we always talk a lot about this when we're working about, yes, these studies have shown really great benefit, but also just keeping in mind each patient individually, as opposed to just throwing these at everybody. But it's good to have data to back up and support what we're doing.

[music]

Welcome back, Curbsiders. We are finishing day two of SHM. So, we're live. If the sounds different, it's because we're in a different room because we have another member of the recap team today. Meredith, want to intro our recap guest?

Meredith: Yeah. I'm super excited to have a great friend and colleague at one time during training. One might say she taught me everything I know. So, Christina, do you want to intro yourself?

Christina: Sure. So, I would say mentor versus colleague. So, I was Meredith's residence, and my name is Christina Sensabaugh. I'm a physician. I trained with Meredith at GW. And I'm now working in a small Appalachia town called Cumberland where I'm from. So, I'm a hospitalist there.

Monee: Christina, really excited to have you. I think without getting too far off track, because we do that very easily these days, we're going to get into just some quick learning points from all the stuff that we've learned in the last day and a half. Meredith, you want to start?

Meredith: Yeah. So, actually, day two, I think it's been really, like, a lot of really great talks, especially for the clinical medicine and practical clinical medicine. I thought a lot of the talks were really good at pointing out high value care-type items that you can really use and be impactful for your patients. So, I know the first one I went to was Annie Massart from Emory University, did a talk today on kind of symptom management for both dyspnea and nausea, and spent about half the time talking about dyspnea and half on nausea. I think I'll start with the dyspnea part. The part that actually she was highlighting was, I think that those patients always end up on oxygen and from our lovely oxygen fairies in the hospital.

Even though, you don't necessarily have any documented hypoxia or anything that we've seen in the chart, and just like a gentle reminder that oxygen is still harmful to those patients. She provided some useful information on other tools that we can use to help get them off of the oxygen and reminding them that it is harmful. She actually referenced a study by Abernathy and The Lancet talking about like how giving patients, like, air was just as useful as putting them on oxygen when you're trying to treat the symptom. And so, there's actually some other good studies to just say, like, giving them a bedside fan to put in their face can actually alleviate the dyspnea pretty well as well.

Christina: I think what's really interesting for me is, it's always making sure that the patients understand why we're doing what we're doing. It makes sense to them, "Oh, I feel short of breath, so I should get more oxygen." But she really made a good point of saying, here's how you explain that to them. So, it's not that, "I'm taking this away from you. I don't want you to feel good." This could actually harm you. Having that conversation with the patient, but then also offering them something that is pretty benign, but can still make them feel better, I think is such a great option. I have so many patients who want to go home on oxygen. I truly don't always know what to tell them other than, "Oh, I can't get it for you, right?"

So, she talked about blaming those pesky insurance companies, but this is something that means more to patients to say, "Hey, I want to make you better. I don't want to hurt you. So, let's figure out a way to make you feel better, but also not hurt you in the process."

Meredith: Yeah, and I think she also talked about pulmonary rehab being important and how we are a little bit better about thinking about cardiac rehab after like ACS or PEs or things like that. But that pulmonary rehab is actually pretty important and something that we can still refer people to on discharge as like another nonpharmacologic therapy that we're using for patients.

Christina: I think the other thing and you're probably going to get to this that I really liked is talking about using opioids in lung disease. I think all of us or particularly myself have such a worry about giving a patient something that may make them feel better but could harm them, harkening back to that oxygen argument. She was really compelling and I'm sure you're going to name the studies because my brain isn't that great with that. But she made a good point of, if you use low-dose opioids, you can still make them feel better but not hurt them at the same time.

Meredith: Yeah, and I think this was someone at the end asked the question about at that point where you're starting opiate therapy for dyspnea, should you be having goals of care conversation? And the answer is yes. So, I think starting that conversation early just so that they can start at least, even if they're not ready to completely process that on that first time,

they may be more accepting of therapy later when it's been multiple hospitalizations or whatever is the trigger later.

The studies are actually pretty low dose for total daily dose of morphine milliequivalents. If we think about for patients who were giving oxycodone 5 q.6, you get to 20 milligrams of oxy. It's close to like 30 morphine milliequivalents, if I did the math right in my head just now. And the study she referenced was by Currow et al. and talking about how actually, on average, they only need about 14 milligrams of morphine per day, which is about half of what we're usually prescribing. So, it's interesting that I think we're so afraid of it for dyspnea, but we're actually probably need less than we do for pain as a palliative measure.

Christina: It's all about what you're comfortable with, truthfully. And so, it's always a good reminder to say, what's the evidence behind this? Am I doing the right thing or is this something I'm used to doing? To go back to the palliative conversation, so many patients live with COPD for so long that I think it's not always conveyed to them appropriately that this is an end-stage disease. And so, it's going to be progressive and it may take your life if something else doesn't. I think I always realize that my patients don't really always know that and it's really helpful when you see them in the hospital to not say, "Hey, you're going to die tomorrow, but you have a disease that I can't fix." We can, at best, try to lessen the progression, but this is something you need to know that is going to unfortunately get worse throughout your life. So, I think that was a great point too.

Meredith: Yeah. She also brought up benzos, because I think that's the other one that comes up in the same conversation and how benzos may beneficial, if you think it's really anxiety-driven dyspnea, but otherwise it really shouldn't be first line for dyspnea alone, and can actually potentially worsen the dyspnea if it's not anxiety driven. So, I just think that's worth mentioning.

I think we'll go ahead just for time. The other part that I thought was really fun actually was in her nausea part, the isopropyl alcohol. So, spoiler alert. We all talk about like Zofran and which I shouldn't say, ondansetron and all of the other ones that we use. She talked a lot about thinking about the pathways and how you can best maximize the pathways that might be contributing to the patient's nausea, but actually talked a little bit about the isopropyl alcohol. So, do you want to talk a little bit about it?

Christina: Sure. I can't wait to use this trick. I'm so excited. So, essentially, if you have the isopropyl alcohol wipes, you can use those. The patient can essentially open up the package and sniff those, huff, if you will, and it should make their nausea improve. She put some compelling evidence there. In particular, I think this is really helpful for a couple of different ways. One, I'm going to feel so awesome on the wards when I do this. But the other thing is that I think, Meredith actually pointed this out at the time. It puts the patient in charge of their own medication and their symptoms. As someone who recently was in the hospital myself, that's really tough to have to sit there and wait and you can only get certain things.

So, I think it really gives them back some body autonomy that you really miss out on in the hospital. But also, it can be a good temporizing measure until the nurse can come with whatever you've ordered. And so, that was my favorite part, I think, of the day today was that pearl that I'm going to take and use and be super impressive on the wards now.

Meredith: Yeah, I think the way Annie described it in her talk was like, you go from before you use the trick, have your hand on the button calling the nurse because the patient's actively vomiting across the room, and you have no control over what's happening and you are like, "I can't get into the Pyxis, and I can't get you any medications, and I will just stand here and feel bad for you, but you continue to feel bad."

Christina: It's just like, "There there [unintelligible [00:18:34], sir. I am a doctor. I promise."

Meredith: Then now, with isopropyl alcohol, now you're a real healer because you can pull this out of your pocket and save a life.

Monee: I'm really bummed that I missed that talk for sure. But the other talk that I think both Christina and I made it to was a combo of dyspnea-related diseases, not just symptoms, COPD and pneumonia. The COPD one, half was given by Dr. Dan Dressler, who we also referenced in our recap about syncope as he's wonderful, and also, again from Emory. So, the COPD section was broken down into basically two different sections. So, there was testing that we should or shouldn't be doing, and then there were interventions that may or may not be helpful. So, in the testing part, I found it interesting. There was a study from Watkins et al in November of 2022. I cannot recall the journal at this point.

But talking about the VBG-ABG controversy, and basically this study looked at a bunch of other studies, about 22 other studies, and it found that based on all of that pH is generally a good approximation when you're comparing a VBG to an ABG, but much less consistently so in the pCO2 category. And so, the mathematical corrections that we have for pH are fairly accurate, but for pCO2, not so much. So, maybe you should not be using that fully to guide everything that you're doing when you're thinking about just how sick a COPD exacerbation patient is.

Christina: I think that was one of the most disappointing things today, because probably in most places in my hospital, VBGs are much easier to obtain. But I will argue to some degree and it's not to say that the CO2 isn't important, but the pH really does drive my decision making too. And so, if a patient, even if their CO2 is maybe a little bit higher than I might catch on the VBG, I care more about that pH and their overall clinical picture. So, while I do think it's good to know that it's maybe not the approximation we thought, I'm happy to know that the pH is still going to help me say, "Okay, this is time for maybe some BiPAP therapy or CPAP therapy or whatever we need to do versus, "Oh, there's no way that pH correlates, so I'm going to have to try to get an ABG." That sometimes takes lots of negotiation and some prayers if you're a religious in my institution. So, I was happy to at least see the pH correlates.

Monee: Yeah. And then the other two, we can talk maybe about one of the two. So, procalc s always fun to talk about in every setting, which we'll probably even come back to in pneumonia. But what were your thoughts on what we talked about? The study was Chen 2020.

Christina: I didn't get procalc a ton in training. And then I think through COVID, it felt like there was nothing I could do or help with. So, we started getting procalc to say, "Hey, should we do antibiotics? Should we stop antibiotics?" I think it was probably more of a helplessness reaction than it was evidence-based medicine and clearly, it's not evidence based. I think one of the things that I took away from this talk today was that I really need to stop using procalc. They're not really helpful and they may even be hurting patients if we're using them inappropriately to take off antibiotics or such. So, I'm not surprised by that, but I do feel a little like, "Ah, fine, I'll stop getting this lab," because it doesn't seem to really help in COPD or pneumonia truthfully.

Monee: Yeah, the length of stay was the same. In terms of using it to de-escalate antibiotics or stopping them early really didn't change that nor did it really change any clinical outcomes. So, like you said, like, "Why are we doing this?"

Christina: Right. I think at the end of the day what I always try to teach folks that I'm teaching med students and such is that when we get a test, we want to make sure that it changes our clinical reasoning or it changes what we're going to do next. If we're getting procalc, then if we're using them falsely, that's very dangerous. But then if we're really not going to change our management, then it's a worthless test and we just exsanguinate the patient more. So, I think there's maybe some discussion that in a very prolonged antibiotic course, like, multiple weeks, maybe there's some use for it. They didn't really get into it today.

Monee: No.

Christina: So, it doesn't sound like at least in terms of COPD or pneumonia with relatively shorter antibiotic courses, they're just not helpful.

Monee: Yeah, and the little last section of the part was interventions and the one that I-- It's not that currents from 2017, but the NIPPV piece, which I don't think I really thought about, but Dr. Dressler made a good point. It's probably one of the most underutilized interventions that we have in our toolkit for COPD. The number needed to treat in this particular study was like 12 to reduce one death. That's crazy, given that it's not even on my radar. And they use pH and pCO2 to drive that decision making in that study.

Christina: It's interesting because I think Meredith and I were just talking about this, where we trained. We didn't do a lot of BiPAP-CPAP on the floor, but then my institution where I am now does, and then COVID also we really ramped that up. And so, that's something that actually we use a decent amount for COPD. So, I was happy to see that that's appropriate. So, I'll get rid of the procalc, but I guess I'll keep the noninvasive therapy for COPD.

Monee: Yeah. The intubations number needed to treat was five and then on average decreased length of stay by three days.

Christina: It's huge.

Monee: I can't believe I don't think about this more.

Meredith: Did they say how long they were using the interventions?

Monee: They probably did. I did not write it down. I can't remember at this particular moment in time.

Christina: I think the big thing and this actually hearkens back to something earlier this week is just when you put someone on BiPAP or CPAP, you just have to be so careful about how they're doing right after that and making sure that you are repeating blood gases because people can get more somnolent or they're not getting better. But truthfully, I've seen patients wake up in an hour and you're just like, "This is amazing." That's much like pulling out the alcohol wipes, you feel like, "I'm a real doctor. It's nice. It feels good."

Monee: [giggles] I think that's a good place to switch over to pneumonia and then we can move on to some other symptoms other than dyspnea. Again, nothing brand new in terms of the last two years, but fairly recent guidelines from IDSA for 2019 in terms of pneumonia. The biggest point, I think, that Dr. Bonsall from Emory University made was, just taking into account how sick a patient is when you're thinking about treating their pneumonia and whether or not what you're covering in terms of antibiotics and stuff really needs to be driven by just how sick they are and what their risk factors are, which seems like common sense, but I think a lot of times we get really focused on jetting past that part and just start everything or nothing or something in between.

I think in terms of what I found to be interesting is, if someone is not really high risk for MRSA or gram-negative rods, then you don't really need blood or sputum cultures. And then the other piece that I always find to be interesting and I just had this discussion with my team when I was just on service about the MRSA nasal swab, if you recall. So, they talk about how, like, if it's negative, then you can feel fairly confident. You don't need to be treating in pneumonia, big caveat for MRSA. But if it's positive, it's not actually very helpful, [giggles] which--

Christina: I love getting that test and it's negative, and I'm like, "Ah, great, I can stop the stupid stuff." And then when it's positive, I'm like, "Well, I still probably don't think it's MRSA pneumonia. So, thanks swab." But I think the interesting thing for me is, once again, stop, not doing tests and it's a hard pill to swallow to not want to get blood cultures when someone comes in with pneumonia and you're putting them on antibiotics, and not to get sputum cultures. But there is pretty good evidence that doesn't really do anything, particularly if they're not septic or very sick or they don't have risk factors for MRSA or gram-negative rods. I think her point too about, she had a question that said, would you give this patient ceftriaxone, azithromycin versus cefepime and vanc and it was a woman who was pretty ill and who came in from a nursing home. It's funny in my brain sometimes I think, "Well, here's the answer I should give and here's what I'll do in practice." I think it's sort of saying, "Okay, but do I really need to give this patient cefepime and vanc?"

I think particularly for me and in COVID, we were probably overordering antibiotics. I think that's been addressed. Hospitals overorder antibiotics. But it's hard, it's hard to look at someone sick and say, "I shouldn't do these really strong antibiotics." But if they don't have the risk factors, then at the end of the day, that also could be harm. You could be creating this milieu that they're going to become resistant to something in the future. So, I think it's always a good reminder of treat them and be very careful, and if she gets worse, then certainly, maybe change practice. But there is no HCAP anymore. We have to think more about that patient's particular comorbidities and what's going on in your community and where they're coming from.

Monee: Yeah and Dr. Bonsall made the point like, "Be familiar with your own community and what's there."

Christina: Right. I think that's a huge part of it.

Monee: Yeah, because where she practices definitely MRSA is a much higher risk factor for where patients come from. And then just because we haven't crapped on procal enough, I would like to close it out with, we have better information than a procal when we're treating CAP, specifically POCUS and CT.

Christina: Ah, POCUS. I am on the POCUS train after this couple of days.

Monee: Yeah, the study in clinical infectious disease from 2019 by COMET at all just wanted to make the point that, like, we've got much better information that's not a procal that we could be using when we're making these decisions. I just felt like we needed to round out our procal discussion.

Christina: Poor procal. Bad day for procals.

Meredith: But they had their moment in the little limelight.

Monee: They really did.

Meredith: Yeah.

Monee: Yeah.

Meredith: So, the next one I went to was sickle cell pain management. Actually, we don't take care of a whole lot of sickle cell. I don't think any of us do just as a product of the places that we practice, but I think it's important to talk about because I do think there's a number of people who both listen to the show and practice in an environment that has to take care of a lot of sickle cell. The talk was given specifically for sickle cell pain management, not all sickle cell care, and it's given by Nirmish Shah from Duke.

I'm going to highlight like three things. The first that I thought was interesting is that there's a lot of stigma that goes with sickle cell. One of the things he said is that, in the patients that you would "label as frequent flyers or high utilizers," that's really a product of them having more severe disease. That might mean that we need to be a little bit more cognizant of the care that we're providing to them, improve the communication that we're using to make sure that we're really reaching good goals and plans for those patients, which I just again near and dear to my heart. So, have to mention.

Christina: I feel like I raised you well.

Meredith: I know. [giggles] The other thing that he said that I don't think about a lot, distraction therapy, especially when they first come in in crisis is actually recommended oftentimes by their outpatient sickle cell provider. And so, just because you see the patient earbuds in, listening to music trying to get up and walk around, that could be part of their distraction therapy. It doesn't necessarily mean that they're comfortable for someone who has been dealing with the illness since birth really being cleared communicating, like, how does this feel different and all of that. I thought it was pretty interesting and something that I haven't thought about and something he had mentioned is something he has to educate his nursing staff about at times too.

The last thing I'll just highlight from it is that the guidelines aren't backed by the most fantastic of studies for a variety of reasons. And so, it's not like any recommendation has the most strong of evidence along the way, which unfortunately then I think is what causes a lot of stress for the hospitalist, because you don't have the clearest guidelines to go off of and it ends up meaning that you need a lot of help. So, the other thing that I think is just worth mentioning here is that, really he emphasized getting their outpatient provider involved early. I think we talk about this sometimes in our transitions of care, parts of like our episodes, but we often think about reaching out to primary care or whatever specialist at time of discharge. But he really recommended reaching out to that specialist early, like, even at time of admission, because they can really help.

They have a relationship with that patient, have probably had that relationship for a long time, and have had several conversations, communicating expectations, or whatever goals they had and whatever their pain plan had been for their next crisis. And so, it can actually offer you a lot of help and guidance, so you don't feel like you're starting from scratch. And so, I just thought that was really helpful to make sure you're framing everything right. I think it emphasizes the need for really good communication, which ends up being probably the most important part of pain management.

So, I think it's a good segue though into the last talk that you and I went to, which was pain management in the acute setting, going through different scenarios with different types of patients that might be coming in with acute pain. So, patient who has an acute pain issue like pancreatitis, but may not have any other underlying chronic conditions, all the way to someone who comes in with acute on chronic pain because they have chronic back pain they have, might be on some long-term opiate and now comes in with pneumonia, and then

plus opioid use disorder complicating the picture as well. That was given by Dr. Park and Dr. Vettese, also from Emory.

I think that if I had to pick one of my highlights from it, they reference the open portal or whatever you want to call it. But essentially, they've taken studies that surgeons have done looking at what would be optimal amounts of opiate therapy someone might need after a particular procedure. I just think this is so helpful because how many times do you discharge a patient and you're like, "I don't want to overprescribe you, but I don't really have a good frame of reference for how many pills is that." I just think that's so helpful to be able to reference something and say like, "Hey, for the C-section, most of the time, they need somewhere between zero and 20. I'm going to assess how much they're using now and then make a best taper plan with the patient in front of me."

Christina: I think it ties into your sickle cell conversation too. Pain is so hard. I think pain is one of the hardest things to learn as any type of practitioner. I think it's one of the hardest things to learn in residency and even going forward. It's to your point, you never want to overdose someone, like, even acutely, that can obviously cause death. Even in the longer term, you don't want to send someone out on too much to put that in this. And she makes this point to put it in circulation for a community. But you also don't want to underdose. You do want to treat people's pain.

One of my takeaways from that seems really simple. But I think that in training and then in practice, I've really gotten away of using NSAIDs, and I think it was a good reminder that even low-dose NSAIDs really do provide pain relief. Depending on your patient, of course, it can be used safely even in patients with some CKD up to stage 3 or if you use depending on the manner that you use them, or if you use them with Protonix, GI prophylaxis, really can be used safely, particularly in an acute setting. And then hopefully you won't have to use an opioid in a particular subset of patients. I think that was a good reminder for me, because I jump to opioids thinking, "Oh, I don't want to use NSAIDs. They have all these complications." It's not to minimize those, but I think evidence wise, you can use them safely at lower doses.

Meredith: Yeah. One of the reasons I really like pain management is because the number needed to treat is actually so low to reduce pain level, so it just feels very satisfying. So, I know you were impressed by your number needed to treat of like 12, but we're talking about number needed to treat of like 1.5 to 2.

Christina: Boom.

Meredith: So, it's just super satisfying.

Monee: I'm feeling very ganged up on right now.

Christina: [laughs] As you should.

Meredith: So, yeah, I agree. I think they had the data for even an ibuprofen of 200 milligrams having the ability to have a number needed to treat around two, which was to decrease pain levels by 50% in the hospital. So, it's not insignificant. If someone is like, "Hey, you've decreased them to a 4." So, it's not nothing. I'd be pretty satisfied with a 4 in my patient, maybe not for myself [crosstalk].

Then I think the other point that I want to highlight from that is, in your patients who come in with concomitant like opioid use disorder, who might still be either actively using injecting drugs or even if they're just buying whatever off the street, it doesn't really matter. One, everything these days is contaminated with fentanyl. So, they're probably on much higher

doses, essentially of the opiate than we even had to deal with five years ago. But also, just to remember, treat them for their opioid use disorder, you will have one much more comfortable patient not trying to get up and leave the hospital before they're medically ready, and they'll be more comfortable and be, I think, a little bit more trusting too of the healthcare system, so just framing that and making sure that we're doing that. So, if that's with low-dose methadone, that can be a great option and not just doing some baby tramadol.

Christina: That was the favorite part of the talk for me. I come from an area because I'm an Appalachian, and our opioid use disorder population is unfortunately increasing. So, I see a ton of that. I see so many patients who come in who are using drugs and using opioids before they come into the hospital. They have some acute illness and maybe they're going through withdrawal, and they also may be in pain from whatever brought them in. And so, you can't ignore this other disease just because it's difficult or you don't like it or whatever your personal feelings are.

To your point, those patients leave against medical advice. It's safest for them to go through withdrawal and also to treat whatever pain they may have on top of that and their disease state. Even that's better for everyone. So, I think it's a good reminder that these patients can certainly be challenging, but there are ways to tackle this, to treat them for more than just whatever acute problem they have, because there's so much else going on. It's so important to do all of those things for them.

Meredith: Yeah. And then I'll just shoutout for Curbsiders Addiction Medicine, they have their series, which had a lot of great information, talking about a lot of both opioid use disorder as well as everything else.

Monee: Yep. Okay, well, I think that's good for day two, ladies. Any other things we want to talk about before we close it for today? Day three is upon us, yeah?

Meredith: Yeah.

Monee: All right, we'll see you then.

All right, Curbsiders, we are back with the last recap of SHM, the third day. We have learned so much. My brain is feeling nearly fried, but not fried enough to where we can't deliver an update.

Meredith: One might say we're delirious.

Monee: Oh, wow. What a segue, Meredith Trubitt.

Meredith: I know. I'm surprised I could come up with that right now.

Monee: [laughs]

Meredith: Yeah, so we have just last day is sort of a half day. So, we have just like a few talks that went to update about. I'll start, I guess, on the segue of delirium.

Monee: Yeah.

Meredith: This talk was so good. It was given by Ethan Cumbler out of the University of Colorado. It was super engaging talk and he actually designed the whole talk around how historically we used to blood-let patients and how that also helped their delirium, because that would make them unconscious at times. And so, sedate them-

Monee: Oh.

Meredith: -and then use that into his segue talking a little bit about other medications and things that we use that actually really don't have any evidence either now. But we want them to because we all have stories of the patient who is delirious at 02:00 AM on haloperidol. That patient got the dose and does better throughout the night. But really there's no good evidence for any of the medications that we use and did a good job, I think, at explaining that there's no evidence for that, we shouldn't be using them and all of those things. But I think he did acknowledge that what sometimes you have to do from a practical standpoint because safety becomes an issue, it might end up being a different conversation, and that's really outside the scope of guidelines or studies or anything like that.

Obviously, what you have to do on a patient-by-patient basis is a decision you have to make with an N of 1 going forward, which I appreciated. And then he also talked a little bit about the 3D-CAM scoring system to determine if patients are delirious. I think at some point, I knew this. I just forgot. He was like, "This has a sensitivity of 95% and specificity of 94% for delirium," which is largely-- also the score is based off of the DSM criteria. So, it makes sense that works that way.

Monee: Yeah, for sure.

Meredith: So, I just thought that was interesting as well. And then one other study he talked about, which we'll include in the show notes, was of early mobility to improve delirium outcomes. 30% of elderly patients have initial orders for bed rest, so you're really not promoting early mobilization. And then the other common one that we all do as hospitalists is ad lib, a bad lib.

Monee: All right, I'll be honest. I probably at some point knew exactly what that meant.

Meredith: Well, he told us it's at one's pleasure. They actually did this study where they put GPS monitors on elderly patients who have that as their activity order to see how much they were up and about. It was a total of 43 minutes a day. So, that meant that 97% of their time they were immobile. So, not really the order probably doesn't mean as much as maybe other low-cost interventions that people could be doing. So, I thought all of that was interesting. I know you went to the geriatrics updates and I'm sure there's some overlap.

Monee: Yeah, there's a fair amount. I think always going back through the CAM stuff is helpful, because especially, when you're talking with residents and stuff and they're trying to figure out if somebody is acutely sick versus delirious. I still remember the first time I dealt with delirium as an intern on night float and was very terrified and realized, "Oh, this is what delirium is." Yes, I need to be concerned, but I also don't need to think they're dying.

So, one of the things that was a big take home from Dr. Sara Bradley's talk out of Northwestern for Geriatrics update is that the Beers Criteria got some updates in 2022. Most of the updates are really just having stronger recommendations than they previously had and stronger language. For example, using caution in rivaroxaban in patients over other DOACs for long-term treatment, because it's got a higher bleeding risk. Avoid warfarin as initial therapy for VTE and non-valvular AFib, also a higher bleeding risk.

One of the language changes that's impressive is avoiding sulfonylureas as a whole more class driven than it is. They used to just name specific ones, and now they're basically giving a class recommendation against using them. Then for limiting the use of long-term PPIs, which I feel came up in multiple talks this conference, they added language specifically in the rationale. So, the biggest complications we worry about are pneumonia, C. diff, fractures, and renal impairment. Again, pneumonia creeps back up. Actually, this is going to come out

before what I'm referring to, but it'll come up in one of the updates episodes that we do with Rahul Ganatra and Heather and I.

Yeah, those are the biggest ones. Then I found it interesting that the United States Preventive Task Force also put up some new recommendations in 2022 around things that I think elderly patients really will probably be a little irritated with, because they really want patients to decrease supplementation intake. I know how a lot of elderly patients, they love their supplements, so they recommended against beta-carotene or vitamin E for the prevention of cardiovascular disease or cancer and they said that there's insufficient evidence to support multivitamins in prevention of cancer and cardiovascular disease. So, the grandmas are going to be upset. No more Centrum Silver.

Meredith: But that's just for prevention-

Monee: Yeah.

Meredith: -like malnourished or anything else wouldn't fall on top.

Monee: Right. Yeah, I think there's a fair amount of patients that probably-- [crosstalk]

Meredith: Save some money though.

Monee: Yeah, for sure. Those are the things I really wanted to highlight out of the Jerry talk. What else did you learn today, Meredith?

Meredith: The next one that I went to was Electrolyte Management by Brad Sharpe. Talked a little bit about potassium, magnesium, phosphorus, and calcium. Just going to highlight some of the things that I found interesting. So, on the hypokalemia part, he talked a little bit about some quality improvement measures that he's done at his hospital. It looked like he pulled the audience. It looked like some other hospitals have done this, but for shifting with insulin and glucose. He said that there's been studies done that about 12% of patients will actually get hypoglycemic during that and I think that's something we've all seen.

The quality improvement thing that they've done is actually include a specific order set that accompanies the insulin glucose shifting, so that you're able to titrate how much dextrose they should get based on their pre-intervention blood sugars and then same for the insulin. Just thought that was interesting. Something I've actually never thought about that much. I'm always just like, "Here's some extra dextrose you can take and hope for the best." But it is, I think, a nice high yield, probably quality improvement option out there.

Then on the hyperkalemic side, he talked a little bit about sodium polystyrene and how-- Because of the bowel necrosis conversation, we've started to move away from that, especially with the introduction of some of the newer agents. But there's really not like that great evidence for the bowel necrosis. And so, you really have someone who is admitted and has hyperkalemia, but really doesn't have other abdominal complaints or anything that it's probably still a great option in the sense of high value care for just like the cost differential between that in the newer agents.

Monee: Yeah. The other ones, I think, probably are a little more effective from just anecdotally I've heard, but definitely they're very expensive.

Meredith: Yeah. So, there's no head-to-head studies comparing any of them. So, you don't know that one is more effective than the other either.

Monee: Yeah.

Meredith: So, I think that there is value and we've used that agent for a long time. It's somewhat predictable in that way. So, we probably shouldn't be swinging the pendulum quite so far to go away from it just because we have these newer agents, which is just something I think is always a good reminder for all of us. Then the other thing I just going to highlight that was across the board for all of them was just along those lines, like, when you are thinking about repletion, oral is always going to be a better option because of the price differential and the gut does pretty well with absorbing a lot of these electrolytes. And so, unless there's some reason that the patient can't take PO to really consider oral electrolyte repletion.

I think sometimes when they're in the hospital, we jump to IV just because it's there. We are thinking it's easier, but sometimes, it's not as comfortable and the cost is literally cents to $20 to $40 per infusion. Specifically for potassium, you're giving 10 mEqs in 100. So, he also brought up that, by the time you've done 40, you've almost given them a half liter bolus. And so, a volume is also an issue. Sometimes, that should be playing into our consideration. I know more than I think about it. So, that's the stuff I wanted to highlight from that one.

Monee: Yeah. We had another great talk from Scott Katz at Henry Ford. He's a hospitalist who just loves anticoagulation, and the peri-op stuff, and did a great job of running through a lot of current studies or newer studies about this stuff. I'll just highlight a couple of things that I found to be interesting as someone who probably doesn't do as much peri-op as some other hospitalists. But one thing that he pointed out from the 2022 CHEST guidelines was patients on mechanical valves with AFib, and the bridging conversation always comes up. The guidelines say, "No. However, they also give you some considerations for patients that are high risk. So, basically, any CHA2DS2-VASc risk factors are risk factors that you should consider as patients that are high risk, and those are ones you should consider bridging, which I think we all have moved towards anyway, but it was nice to see that this is being put in formal guidelines, because this is something that comes up later on in our episodes that we've done so far. Then always fun DOACs in dialysis, the level iteration, as Meredith knows.

The study from Cohen in 2022, one was not particularly helpful, I would think, because they talked about CKD patients and that there was less bleeding in apixaban than warfarin patients, but they didn't use INRs to drive any of the warfarin patients. So, I think it's hard to know what to do with that information. Then in general, the shift with patients that have AFib and CKD and meet criteria to be on anticoagulation. It's taken a while for them to get any data really to support DOACs, but it seems that the data is moving in that direction. Maybe not quite to the point where it's going to be formal guidelines, but the data does seem to be moving that way, which is helpful, I know, because we all have been on the DOAC train for everything else for a long time. Those nephrologists, they take some while to get to places sometimes.

I think the last one I wanted to highlight was, I think it's relevant to people even who don't do peri-op more like as a consultant for surgeons or neurologists. So, the RENO-EXTEND trial, basically, they were looking at patients that are on any sort of anticoagulation that have AFib and then have a stroke, and basically their intervention was, do you change what they're on or do you not change. The answer is there really wasn't a lot of difference. So, changing it probably doesn't really help. And then to note, adding aspirin to whatever they were on increased your bleeding risk. So, don't do that. They can say that fairly confidently. So, those were the antique peri-op anticoagulation related things I wanted to highlight. I think that we're planning on doing a full episode at some point, so be on the lookout for that.

Meredith: So, I think the other one we missed from actually day one was [unintelligible [00:52:27] stewardship with Lenny Feldman gave the talk, longtime friend of the Curbsiders.

Monee: Yep.

Meredith: I'm actually just going to highlight, I think, two things from this. It was a lot about in general, like peri-op anemia. But I think the two things that I just don't think a whole lot about is and probably because, like you said, you and I don't do a ton of peri-op, but just remembering that repleting nutritional deficiencies in your anemic patients can be fairly helpful to optimize them preoperatively. So, including like, iron, B12, and folate, but also repleting zinc and copper, I don't usually think about those other two. And so, I just thought that optimizing that had shown mortality risk benefit in the peri-op stage.

Then the other thing that I think blew everyone's mind at the end was, we were talking about FFPs and IR everyone's favorite topic. But what was surprising to me is through training for me, through everything I've always read FFP administration when their INR is between 1.5 and 2.0, there's not going to be much change from a practical standpoint. You're just giving them extra fluid. But pragmatically in the hospital, I've never been able to convince someone to do something. They're the ones doing the procedure. And so, I don't feel like I have much leg to stand on for some of these more invasive procedures. However, Lenny had actually brought up that the interventional radiology guidelines have a cut off of 2 also.

Monee: Oh, the plot thickens.

Meredith: [crosstalk] 1.5, which I think he pulled the entire room and he was like, "Does anyone have an IR department that does this?" And no one raised their hand.

Monee: Yeah.

Meredith: I don't know that it's practice changing at the moment, but it's interesting that it's literally in their guidelines too for some of these more invasive procedures. Then I think it came up also in Suchita's talk and stuff that we should not be looking at INRs for diagnostic paras and those things too.

Monee: Yeah.

Meredith: So, I just think that's a good reminder for most hospitalists out there.

Monee: Yeah.

Meredith: The last one I went today, so coming back to day three was severe infections in patients who inject IV drugs. This was a joint talk given by Tracy Vettese out of Emory, and David Serota, who actually was the guest for us on our endocarditis episode, which is a great episode. So, I recommend everyone go back and listen to that if they're interested. It goes into a little bit more detail, specifically for the endocarditis part than this talk did, but he's at the University of Miami. Really, I'm just going to summarize the talk. I don't know that this is so much new information if you've listened to the Addiction Medicine series. But in general, please treat opioid use disorder concomitantly with their underlying infection that they may have come in with and make sure that you're coming up with a plan of action that you as the provider, any consultants, but most importantly the patient is on board with to increase likelihood for treatment.

Then I just wanted to mention this other part. I think this came up, I don't remember if it was like during our recap part yesterday, but just again highlighting transitions of care a little bit. They mentioned a study from Lewer and Eastwood from 2021 talking about mortality in patients who leave the hospital with infection from their injection drug use. If they had a planned discharge, they have a four times as likely rate of mortality in the first one to two days, just because no matter what we do to treat, you're decreasing their tolerance that they

were at before. And that doubles to eight times the risk if it's a patient directed discharge. So, what some of us might say, like, against medical advice or before medically advised, whatever your preference for phrasing is. I like patient directed discharge though.

Monee: That one seems like a winner.

Meredith: Yeah. And then still just doubled risk for mortality through 14 days post discharge, regardless of other reasons. So, I just think that this population is like high risk and we just need to be mindful of that. And then went through a great recap of harm reduction techniques and recommended the *harmreduction.org* website to both help find linkage of care and other resources in your local communities to help these patients.

Monee: Great. We'll round it out with some GI. Dr. Dawn Sears gave great updates in GI. Some of these are going to come up between the episode we do for the updates in hospital medicine and then also the great episode we recorded with Dr. Sadun from Duke. But I'll just highlight a few. So, the WATERFALL study basically looked at moderate versus aggressive hydration or fluid repletion in patients with pancreatitis. Something I think a lot of hospitals suspected came to fruition, which is aggressive volume repletion leads to increase in volume overload. It was actually stopped because of the harm that it was doing to patients, which is pretty rare. Another thing that's coming down the pipeline is called elastography, and it's a modality to help you decide, does everybody really need to have an EGD for variceal bleed assessment or variceal development in patients with cirrhosis, in addition to the pressure, the kilopascals, which I have not thought about since basic science?

The other thing that we did not get to highlight in our liver episode was just like looking at platelet counts actually is a good marker of portal hypertension potentially. So, basically, less than 150 inpatients in general and then NASH patients specifically, less than 110 platelet count is something to consider for portal hypertension and those are kind of criteria to use in determining if someone really needs that EGD.

Then one of the take homes that the speaker really wanted us to take into account was not maybe like study driven necessarily for liver disease and alcohol consumption, but since the pandemic started, alcohol consumption has skyrocketed and has really led to all the bad things that come with that including an increase of 179% of mortality in care for alcohol-related issues for women specifically and really just encouraging us to think about building community as opposed to what alcohol tends to be used for, especially in hard times. I know it's not the most study driven or data driven, but I did think it was a point worth noting that there are always interventions that aren't medical or whatever the help with the stressors and stuff that we're dealing with.

Then I'm going to bring it home with a shoutout to our own things we do for no-reason episode, because she rounded out with that too, which is NPO at midnight does not need to happen, okay. In patients that are low risk procedures, there's eight hours for a big meal, six hours for less big meal, and then two hours before for clear liquids. It was heartening to hear a gastroenterologist say this-

Meredith: Yeah, I bet.

Monee: -because it's generally us hospitalists that are having that conversation without the support of our subspecialists at times. And so, it was really heartening to hear.

Meredith: I think that's all the updates I got, I guess, because this is the end. Just wanted to shoutout SHM. I think you and I had a really good time this week. It's a great conference. They put together a really great lineup of speakers and we mainly focused on clinical

updates for the show, but they had a good mix of some other talks too that looked interesting. And so, just had a really great time.

[music]

This has been another episode of The Curbsiders bringing you a little knowledge food for your brain hole.

Monee: Yummy.

Meredith: It sounds like tacos. Get show notes at *thecurbsiders.com* and sign up for our mailing list to get our weekly show notes in your inbox, plus twice each month, you'll get our new Curbsiders Digest recapping the latest practice changing articles, guidelines, and news in Internal Medicine.

Monee: And as Curbsiders, we're committed to providing you with high value practice changing knowledge. And to do that, we need your feedback. So, please subscribe, rate, and review our show on Apple Podcasts or contact us at *thecurbsiders@gmail.com*. Meredith, it's been a great time, the two of us hanging out, learning a bunch of stuff. We produced and wrote this episode, but as usual, we can't do this without Pod Paste, who are in charge of all of our editing needs--

Meredith: Including this episode.

Monee: Just everyone involved. So, until next time, I've been Monee Amin.

Meredith: And I've been Meredith Trubitt.

Monee: Thank you and good night.

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