Welcome to ASA's Central Line, the official podcast series of the American Society of Anesthesiologists, edited by Dr. Adam Striker.

(SOUNDBITE OF MUSIC)

DR. DR. ZACH DEUTCH:

Hello, everyone. Welcome to the Central Line podcast. I have the honor of being your host for this week. My name is Zach Deutch. In this Inside the Monitor episode, we’re going to be speaking with Dr. Barbara Rogers. She is our guest editor for the May issue of the Monitor, and she is going to talk with us about trends in OB anesthesia, which is, of course, the topic of the main monitor and will be the topic of this episode. So we're going to dive into a little detail about some of the important issues in that subject, which is probably near and dear to most of us. Thank you, Dr. Rogers, for coming here and talking with us.

DR. BARBARA ROGERS:

Thank you.

DR. DEUTCH:

And it's great to have you. Before we start in talking about this topic, can you tell us a little bit about your professional background and your current position?

DR. ROGERS:

Sure. I am a professor of anesthesiology at the Ohio State Wexner Medical Center in Columbus, Ohio. I am an active member of our neuro anesthesia team, plus the medical director of our preoperative assessment center. And I rotate up on obstetrics also. And I've experienced obstetric anesthesia in both a large hospital tertiary setting like I'm in now, which I've spent most of my career, but also have done obstetric anesthesia in a
small hospital where I served as the chief of anesthesia and had to reorganize, standardize, and update their OB care.

DR. DEUTCH:

Now, to get into that subject matter, we've had discussions in the medical community and worldwide about morbidity, mortality in the developed world and the non-developed world. And one of the things that's come up is, is the problems with increasing maternal morbidity mortality, which in the US, though we consider ourselves of course a very developed society, have been increasing. Can you comment about the treatment of high-risk patients in this country in the maternal setting? What can we do better to manage their comorbidities? How can we reverse these statistical trends? What role can we play in anesthesiology to get a better public health situation in terms of labor and delivery?

DR. ROGERS:

Yeah. So interestingly enough, there is a nice article put out by Blue Cross Blue Shield that talked about and examined 1.8 million pregnancies between the year 2014 2018 among commercially insured women. And there's some interesting outcomes that they found. One is that there's an increased rate of what we call advanced maternal age, and this percentage had increased by 9% between 2014 and 2018. In general, OB patients are bringing with them their co-morbidities of all ages, and our population in general can be getting sicker or getting more diabetes, more hypertension, more issues, and that's a whole general population. But these patients also, if they're female, are bringing that to OB with them. And that causes some issues for us because pregnancy has its own physiological changes. And when you add in some other issues such as hypertension, diabetes, obesity, anxiety, depression, substance abuse, it can complicate the pregnancy and the delivery. So it's really important for us as anesthesiologists to be aware of all these things and be up to date on how to treat all these things up on the OB ward.

DR. DEUTCH:

We all know colloquially, either from our personal lives or medical lives that, you know, if you're over the age of 35, advanced maternal age and all that thing, it creates a whole host of other issues for women. Are you basically saying is there kind of a correlation between that and overall true morbidity mortality from from our standpoint, from anesthesiology?

DR. ROGERS:
Well, the study didn't say that, particularly, that the older women having births are having more complications. But in general, in the population, we are having an increased number of older women that are having babies. But in general, we're bringing more people into the OB ward that have underlying conditions and these underlying conditions are going to increase their morbidity and mortality, not necessarily just the age, but that is of interest that older women are coming and having more babies.

DR. DEUTCH:

That makes sense because who among us hasn't heard, All our patients are getting sicker all the time and it doesn't matter the setting, of course. Right. So I understand what you're saying. We touched on, you know, morbidity, mortality and complication rates. Are there screening tools that you can identify that have come to the forefront more recently that can help us identify patients who might be at higher risk, whether or not they have preexisting illness, any sort of systems we can rely on to try to help us stratify patients when we work on labor and delivery.

DR. ROGERS:

So because the ward is going to be a mix of patients that we know are coming in with underlying problems, you know, whatever that might be -- hypertension, diabetes, obesity, et cetera. There's also a number of patients who we don't know are bringing these things in with them. And because of the dynamic nature of the OB ward, having some type of screening tool to quickly identify these patients would be very helpful. So there is some interest in trying to identify people that have something called SMM, or severe maternal morbidity, or will develop these complications. So one score that has been utilized at admission is called the obstetric comorbidity index OB-CMI score. And this is kind of a score that the obstetrician and the anesthesiologist can go through and see if patients in general have any of these scores. Because if you have an elevated score on this, for example, if your score is nine or more on this scoring grid, you have almost a 20% increased risk of having something not good happen to you, basically. So it also shows an increased risk of maybe having to have general anesthesia for you delivery, instead of a neuraxial block. So, yes, that is just one tool that's kind of been thrown out there as possibly being helpful and trying to find these patients beforehand.

But there's other issues that you might run into. How do you find out that a patient up on the OB ward might be in some sort of early sepsis or something of this nature? Because their physiologic changes of pregnancy sometimes mimic some of these other things that happen. And sometimes it's hard to kind of decide which is which. So there is some maternal, it's called maternal early warning system grid, which
some centers are using also. That is a questionnaire where you go through and look at their diastolic pressures, heart rate, respiratory rate, oxygen saturation, urine output. And from that kind of decide, they have a point system, you can decide if that is possibly the patients may be developing some sort of adverse event early on.

So those are just two ways that a scoring system or a risk assessment can be used up in OB. Another one that has been used by some groups is called the Sequential Organ Failure Assessment or SOFA Score. And this, along with a high index of suspicion, might be able to identify people that are starting to get organ dysfunction up on the floor and that can maybe help catch these patients early also.

**DR. DEUTCH:**

Correct me if I'm wrong. The number one cause of our maternal mortality worldwide and a very high cause of mortality here in the US is hemorrhage, is that correct?

**DR. ROGERS:**

Yeah, unfortunately, that is that is correct.

**DR. DEUTCH:**

And of course, all of us are intimately familiar with the bleeding patient on labor and delivery, unfortunately. We all sort of are familiar with crisis management and things like that for working with patients that are bleeding. What about testing options at point of care? Is there anything in our armamentarium that would help us on the OB floor in addition to our usual massive transfusion protocols and all those other things that we're familiar with?

**DR. ROGERS:**

Yes, there are some centers that are starting to use more point of care testing if their hospital allows them to use that up in the OB section. So point of care testing, that is VISCO elastic testing, which there's at least two types of visco elastic testing systems. There's one that's called the Thromboelastography or TEG, and another one called Rotational Thromboelastometry or Rotam. They're both user friendly and they both can give a graphical representation of hemostasis, but they're not exactly the same. But they're both available if a hospital system wishes to get them. Some hospitals are using them on different floors, but OB is one that it can really help us out. Rotem may offer some advantages to TEG because it actually provides users with like five different assays which can specifically assess different arms of the coagulation cascade. And
also it shows the effects of anti thrombolytics and the effect of heparin. So if you got the
the heparin assay off of this, which is called heptane, it contains a heparinase. It
neutralizes the effect of heparin. So if you are trying to figure out when's the best time to
do a neuraxial block, perhaps on a patient that you know had been on heparin, you
could use this to kind of help you decide when to place the block. It also might kind of
reassure you if you want, just that you can put a block on one of these patients who'd
been on heparin. Now, the other one, the TEG, is kind of a snapshot of whole blood,
hemostasis and clot breakdown. So either one of them can be helpful to kind of decide
where a patient is. If they look like they are starting to get some sort of bleeding
Diathesis.

DR. DEUTCH:

Okay, I've used the TEG, but not the Rotem. It sounds like it gives a lot of additional
information.

DR. ROGERS:

Yeah, it does and either one is useful. I think it comes down to which one a person's
hospital wishes to put money into and which one that particular group of
anesthesiologist feels is the easiest for them to use up on a busy ward. Also, I think
those are both reasonable considerations.

DR. DEUTCH:

Another hot topic we have, we've touched on some topics, obviously, that are very big
and in public health in the United States, which is morbidity and mortality. You know,
hemorrhage is big and not just in obstetrical patients. And another issue which is really
big in the media and in all types of health care settings is opioid use, opioid use, abuse.
We all know what this is about. So this is also prevalent in pregnant women across all
different types of racial and economic groups. So how have you seen this play out in the
maternal patient and how have you in your experience or the experience of others that
you know of tried to address this problem specifically in the parturient.

DR. ROGERS:

Yeah. So we're all very aware of the opioid crisis and just the devastation it's caused
throughout our country, really all over the world. But, you know, the United States is
certainly no different and the OB ward is no different. So according to the Centers of
Disease Control and Prevention, the national prevalence of opioid use disorder between
1999 and 2014 increased by 333%, which is unbelievable. And then from 1.5 cases per
1000 in delivery ward. So it's pretty scary actually. And the review of over 57 million American women admitted to obstetric deliveries in a nationwide inpatient sample. The prevalence of this opioid use disorder and dependence doubled between 1998 and 2011. So it's out there. If a person is thinking, oh, it's not in my hospital, it's in your hospital, you may or may not be aware of it, but it's there. Patients a lot of times aren't going to tell you because they're embarrassed. They have family there when they're delivering maybe mom and dad and they don't want them to know that they're on, you know, dependent on whatever opioid that they are dependent on. So you may not even know necessarily that a patient is dependent on something because they may not tell you, they may have not told their OB. Hopefully that's becoming less stigmatized and people are going to be able to be a little more open about that. But that's another thing just to remember, right? If someone seems a little jittery and a little, you know, like you have a suspicion, you might have to ask them privately when no one's around, hey, you know, tell me about this or tell me about that, because they may not be really willing to disclose it, but it's definitely out there.

DR. DEUTCH:

Kind of like we were taught when we were medical students. Whenever you interview teenagers, they'll never give you an honest answer with anybody else around. You might get it if they're alone, but not if anybody else is around.

DR. ROGERS:

Right. And I think that's something. Yeah. And I think that's something we just have to remember with certain conditions and this one in particular, because they're going to have a lot of family there probably, and you just have to be cognizant of that, I think of their privacy, but you need the information.

DR. DEUTCH:

Out of curiosity, have you had patients that come to you? Because I do get this from time to time, both on labor and delivery and outside of labor and delivery that come and say, you know, I'm a recovering opioid abuser. I don't want anything of any nature of that. And if you do get those patients, how do you tend to manage those?

DR. ROGERS:

Yeah, I think we do get that. And I think the best way to deal with it or to really to follow their wishes is, number one, to explain all the options, especially an OB, right? No one has to have an epidural. They're not required. I always tell people that it's an option and
the amount of opioid in an epidural is really not enough to make. I mean, it's not going to make you high. It just goes to the nerves involved. And so say, you know, it's really a good option if you want pain control during delivery, it's not like we're giving you IV narcotics. And I think that's kind of just the best way is to kind of educate the patients about what we're doing for you, because that is pretty standard in most OB suites is epidurals, but no one has to have one. I mean, if they just don't want it, then that that's fine. That's kind of how I approach it up in OB anyways, is trying to just really be quite honest about the amount of narcotic that is in that. Or you can even have the pharmacy make one that has no narcotic and you can just have local. I mean, that's an option too, right? So I think that being honest about what we can offer them is the best way to ease people's fears about getting addicted again while they're in the hospital.

DR. DEUTCH:

And since you brought it up, what is your epidural rate at the unit that you work on?

DR. ROGERS:

Oh, honestly, it's probably up there in 90%. Most of our patients do get epidurals, I'll be quite honest. Yeah, there's very few that don't. And and the patients that say, Hey, I don't want one, which is fine. I mean, everyone should be able to deliver in the way they feel that they want to. I'm really a strong proponent of that. A lot of them do come back later on in the day and say, Yeah, I can't do this. I really would like an epidural, which is fine too, right?

DR. DEUTCH:

Yeah, certainly. We've all seen that. Right? When we were talking about getting really basic true history from people about their substance use or other things about, quote, people in the room. So we have frequently in the environment of childbirth, we have people in the room who are called doulas. Who who aren't necessarily medically trained and usually aren't family members. And, you know, during COVID, of course, we banned pretty much everyone and anyone and everyone from the hospital, whether it was an obstetrical unit or not. And these people really weren't around. And now, of course, everybody's starting to filter back, including them. Can you comment about your experience with the use of doulas, how patients reacted to not having access to this resource and kind of like how it's viewed in your facility at the present time?

DR. ROGERS:
Yes, I would love to. So basically a doula, this term was actually coined by a medical anthropologist back in like 1969. And then the first Organization for Doulas was formed in 1992 called Doulas of North America, or DONA. And the organization defines the role and limitations of doulas. So a doula is a person who does not perform any kind of clinical or medical tests, so they don't measure blood pressure, they don't take temperatures, they're not going to monitor fetal heart rate. They don't diagnose, they don't treat anything. Their function is a patient advocate, the advocate for the patient between all the multiple people that are going to be in the room -- anesthesia, OB nurses, all these different people that come in contact with this mother who's going to have a baby soon. And so this model, the doula model, is it's improved their childbirth experience for the moms, it's decreased C-sections. And it's really it's really helpful because it's not a person that's actually a personal care giver. It's not the husband or the the significant other. It's a it's another person. So it takes some strain off of the actual family members. I think it helps the nurses to have someone who's just an actual just a support person. That's all they're there for, advocating and being supportive. So yeah, during COVID, unfortunately, because of all the people that were banned from the hospital, basically everybody was banned from the hospital. Doulas are also banned. And so I feel that that was very unfortunate. But now that we've opened up after COVID, they're back in the hospital, they're back advocating and helping participants and it's really good. So actually it's so good that there's been some bills that Medicaid related bills to help pay for some of these doulas in the hopes that we're going to decrease health disparities while improving maternal and fetal outcomes. At least ten states right now are allowing doula coverage in both Medicaid and private insurance plans, which I think is very good.

DR. DEUTCH:

I have not heard that.

DR. ROGERS:

Yes, actually, it's California, Michigan, Florida, Maryland, Minnesota, New Jersey, Nevada, Oregon, Virginia, Rhode Island. So ....

DR. DEUTCH:

Wow. Quite the spread there.

DR. ROGERS:
Yeah. Yeah. And so it's becoming more popular. So, yes, we have them at our hospital. The interesting thing is sometimes you don't realize who they are necessarily because you go in and you might do your epidural and go and you go in and out and you may think they actually are a family member, you know, unless you ask. But I will say that they are very supportive and patients that have them are very, very appreciative just to have an extra person there that's literally just for them, like just for their emotional support and their advocacy. I think that's huge, actually.

DR. DEUTCH:

Yeah, I have the similar experience that they are not uncommon where I work, but I often don't really recognize them except as the behaviors take place. Like they'll quietly explain something after I've explained it. Like I'm just thinking, Oh, it's just another family member. But you then see the person who's taking a position of not authority, but of, you know, sort of translating the information. And for us at least, it's tended to be positive. I haven't found any trouble in terms of, you know, clashing with them in any way, which is good.

DR. ROGERS:

I agree. I think the time that we've realized that they weren't doulas or we thought there some sort of like aid or something because when you ask them to do something, they're like, Yeah, I can't do that. You're like, Oh, okay, you're the doula. But yes, I think I've been actually pretty impressed with the ones we have at our medical center. They've been quite helpful. People are very, very happy with them.

DR. DEUTCH:

I want to talk with you a little bit more about some innovative things we're seeing in the ORs on obstetrics. But let's take a short break for our patient safety message.

(SOUNDBITE OF MUSIC)

DR. JONATHAN COHEN:

Hi, this is Dr. Jonathan Cohen with the Patient Safety Editorial Board. One of the health care professionals most crucial skills is that of communication with patients and other professionals. Barriers include misinterpretation of context and nonverbal cues, as well as differences in language, culture and health care literacy. Several techniques that are simple to employ have been shown to overcome these barriers and improve communication. One of the most difficult conversations to have with a patient or
involved health care professional is when an adverse event has occurred. Approaching these important discussions using evidence-based strategies has been shown to strengthen the relationship between the patient and health care professional, decrease malpractice litigation, and diminish the psychological trauma that health care professionals feel after being involved in an adverse event.

VOICE OVER:

For more information on patient safety visit asahq.org/patientsafety22.

DR. DEUTCH:

So, you know, we've talked about having patients, whether it's cause of maternal age or because of other conditions or whatever it is under the sun, or patients being much more challenging and complex in the obstetrical setting. And obviously, these patients are going to filter to a place like Ohio State more commonly because that's the place that can handle, quote, these problems. So you have trainees working in this environment. You have experienced people, you know, experienced attendings. Many of them are all of them may be fellowship trained, but then you have the trainees. So how do you how do you manage to manage these patients with a mixture of people that may not have the expertise and are being faced with not just learning how to put an epidural or a spinal, but how to manage a complex patient.

DR. ROGERS:

The OB floor during the day when most of the learners are up there, of course, or if they're a night too. But most of them are up there during the day. We have two attendings up there. They split the roles so they have somebody who does the OR part and someone who does the epidural part. They have a whole system of of going through seeing all the patients, updating their charts, getting any kind of consent early on. Even if someone doesn't want any type of anesthesia involved, we try to get consent in case something emergent were to happen. And that's explained to the patient. Look, we're not trying to force anything on you, but if something happens, we would like to have a consent so we don't take time away from saving you and your baby to get a consent. So they go through and have a very organized way of seeing the patients, triaging the patients, going out in the Antepartum floor. You know, people are coming in, in preterm labor, that kind of thing. All those roles and all those jobs are very organized into a daily kind of schedule of how they do things. They also have a white board that has, you know, any kind of alarming kind of patient like a patient with something that, you know, a cardiac patient, a patient, a patient that's out in the heart hospital, a patient that's out in the ICU, because we do have that, too. And we have to follow those
patients also. So the two anesthesiologists of the day kind of organize between themselves and all the people that are up there for the day. To be sure, all the things are organized and covered in different white boards have different information, plus a list of phone numbers and huge print in the office where the OB team sit. So at any moment, if you have to get ahold of somebody, you you can get ahold of somebody. Plus we have some overhead pages for emergencies also. But that's basically kind of how how it's done. The learners are very supervised. I think that's the key.

DR. DEUTCH:

Are you able to fit didactics into that or is it just too, too hectic?

DR. ROGERS:

No, the didactics occur. So the night person during the week stays till seven in the morning. The night person during the weekend stays till eight. So during the week they have didactics that usually start about six in the morning. So they're required to come in on certain days earlier than their shift starts. Basically the residents shift start. So the attending will basically sign up to give these lectures usually once a week could be more than that depending on what they're doing. But at least once a week that they come in at 6:00 for like an hour lecture. And then I believe there's usually a smaller kind of like a more of a in-service type thing during the during the day, maybe only 15 minutes where they're going to sit down and say, hey, we're in a real quickly, talk about topic of X, Y, Z. And then they keep a list of that, too. It's very organized. They have the name, what the topic is, and they kind of rotate through the same topics every month. So every resident gets a chance to hear the lecture. Plus the fellows also will jump in and do some of this mid day teaching also.

DR. DEUTCH:

There was some talk about 3D printers being used in the obstetrical unit to improve the patient experiences. Can you tell me what that's about?

DR. ROGERS:

Yeah. So there's evidently a group in Boston at Tufts that in their desire to kind of make things easier for the patient because, you know, patients come to delivery C-section room with cameras and cell phones and all sorts of stuff, sometimes religious artifacts that they want to carry with them or specific things, you know, that they feel like they have to have, you know, for whatever reason, good luck or whatever. And so they actually have come up with and designed this 3D printed phone holder that they have
made that can be attached to an IV pole and the patient's accessible to the patient and their support person. It's disposable. You know, it can go with the patient or you can throw it away. And they, anecdotally I guess, have seen that patients just really like it because they have somewhere they can put their phone, they can see it, it's not somewhere, hopefully won't get splashed with products or blood or whatever. And so that is kind of very innovative. And I, they're the only place I know currently that's doing this, but I think it's kind of a cool wave of innovation and quality improvement for patients that are in the OB suite or those in the particularly having a C-section. So, you know, the anesthesia provider isn't, you know, putting the phone somewhere. It falls off and who knows what happens to it.

DR. DEUTCH:

That's interesting. I mean, it's quality improvement for me personally because I'm often asked to take pictures and I usually do a very bad job and I feel guilty like they're going to get home, be like, I can't believe what a terrible job this guy did.

So there's another issue that comes up, which I think is it's a little different now because, you know, there's just so many chaotic forces at work in our labor market for anesthesiology. But I frequently get this question working in academic setting, and I'd love to hear what your thoughts are. Do I need to do a fellowship in OB? It could be coming from any perspective. I love OB. I hate OB. I'm neutral about OB. I want to take a job. I want to be successful. Do I need to do a fellowship? If I'm really interested in OB, If I go to an academic center, will it hurt me if I want to work on a unit occasionally? Like how should residents approach this issue of whether or not to do a fellowship, if they have interest in OB or if they're concerned that it might stunt their career in some way if they want to maintain it as a competency.

DR. ROGERS:

Yeah. Well think obstetric training and OB really currently. Maybe we need to do kind of a little bit of a, you know, examining what we're doing, especially as the patients are getting sicker and coming to OB with all sorts of issues that maybe they weren't coming in with 20 years ago. You know, currently to be competent, our residents not fellowship trained residents, but just our general residents are supposed to do about like 40 that would be involved in like 40 vaginal deliveries, 20 C-sections, 40 epidurals, 40 spinals. And depending on where someone trains, that may be hard to get. Somewhere else it may be, you know, the numbers are way beyond that because they're so busy. They're three times those numbers because every day they're doing multiple, multiple, multiple. So I think it's a good question. Are we training our residents enough to just go out and practice OB anesthesia? Of course, it depends on where they're going to go. Are they
going to be somewhere that's going to have a lot of OB going on, or are they, you know, a very low it's all healthy people. But I think it's a good question. Basically, our residents have 48 months of anesthesia training and only two of those months are dedicated to OB. So are they actually getting proficient? And is there anything we can do actually to make it better?

One option that has come up has possibly been for residents to be involved in more kind of simulation training, which is getting more popular across the anesthesia and medicine in general to kind of prepare people for those events that aren't common but are life threatening. And you need to be prepared and kind of know what to do in these situations. So that is one idea that's kind of come up, is that maybe our residents, our residents should be involved in more educational simulation training to improve their knowledge performance communication, behavioral skills and basically overall preparedness for different critical clinical events and scenarios. Right now, that isn't necessarily something that everybody does, although the intraoperative simulation participation for residents is now in the ACGME. But that's not necessarily for OB, it's just in residency in general.

Another thing that might help our residents is for them to be more versed in point of care ultrasonography or POCUS. This may be something to help them anesthesia in general, but also maybe on the OB ward. There's been some studies that have shown that it's helped with first pass placement of epidurals and obstetric patients and enables the anesthesiologist to effectively deliver goal directed therapy very quickly, especially if the mother is clinically unstable and needs an urgent delivery. So these are other things that may be worth looking into in our education programs for our residents. And this is just for residents that are in general residency programs, not even for fellows.

DR. DEUTCH:

Right. And you bring up a really good point because when you look at the, you know, the required number of certain tasks that they need to perform that some of them don't really seem to correlate with clinical proficiency. And the hospital where I trained, I think we did, they were doing 10,000 deliveries a year. So, you know, people people got more OB than they wanted. But that's not every program. And it doesn't mean. Those programs are necessarily deficient overall, but there's just so many different settings out there.

That brings me to one other question that I wanted to touch on with you, which is, you know, what I always see is the biggest problem is in OB is you could work at a tertiary center that that can do cardiac surgery and a C-section at the same time. They can handle patients that are simultaneously in you. They're doing all these sorts of things,
DR. ROGERS:

Yeah, I think that's the kind of the terror of OB. You know, there's, there's a lot of satisfaction being an OB and making people very comfortable for delivery and they're very happy, high satisfaction. But also there's, I think that's the terror, why some people don't want to be working OB. Because you truly don't know what's going to come. And even if something you seem like, oh, it's a very calm day, the patient that you thought was doing fine, something abruptly happens. You know, there's an abruption, there's a cord, there's all sorts of things can happen. So that is just the nature of the beast. But I think, yes, in large centers, we have so many people around to help. Not that it makes it less terrifying, but I think education, communication, having protocols and having communication beforehand, if you're in a smaller hospital, is really important. Having things in place for that 1 in 1,000,000 thing that might happen is very critical. So if you're at a smaller hospital, I think knowing what the plan is beforehand so everyone on the team, all the nurses, all the OB-GYNs, everyone knows what the plan will be if something really large happens that is more than that hospital can handle in place beforehand is probably the best way to deal with that. I know when I was at the smaller hospital that I was head of anesthesia. That's basically what we did. We kind of had to cultivate where we're sending people. Everyone knew what the drill would be and luckily we never had to use it. But but it was there, right? It's there in case you do have to use it and everyone's aware of it.

DR. DEUTCH:

Yeah. So what I'm hearing and we do some of this too, it's the idea of multidisciplinary and servicing and whether it's formal simulation or not. It's discussion. How do we do this? How do we do that? Where is this located? Who does what when it's not just run of the mill, everyone smiling and taking those pictures with the 3D printer, but someone's actually very ill. That goes a long way when you're not in a setting that has. Seven people on call because certainly many of us don't practice in those environments.

DR. ROGERS:

Exactly. No, I think that's that's exactly it. Yeah. Having a plan and training with that plan and everyone's on board with the plan is, is key.
DR. DEUTCH:

Well, I've had you for a little while here. It's been great talking with you. I really appreciate you coming on the Central Line here. And we also really appreciate, of course your agreeing to guest editor, an edition of the Monitor, which is just so great for the readers. Is there anything else you want to share with members or readers of that particular issue before we sign off?

DR. ROGERS:

Well, I just want to throw out there that I think that OB anesthesia is really going to have a lot of changes in the future, and they're all pretty much going to be good changes. I think that our inquisitive and educated anesthesiologists out there are coming up with all sorts of new ways to participate in the care of the patient. And it's going to be a really exciting future.

DR. DEUTCH:

That's good to hear. Thanks so much for being with us. And thank you, everyone, for listening in to this episode.

DR. ROGERS:

Thank you.

DR. DEUTCH:

And listeners, remember to read more about the issues we touched on today with Dr. Rogers at asamonitor.org. And of course, join us back here for the next Central Line podcast.

(SOUNDBITE OF MUSIC)

VOICE OVER:

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