Welcome to AIM for Safer Birth. I'm Veronica Gillispie-Bell.

And Christie Allen. On this podcast, we dive deeper into the rising severe maternal morbidity and maternal mortality rates in the United States through a data-driven quality improvement lens.

And in this episode, we're talking about measuring equity and the barriers. We know that maternal child health data is a little bit difficult to measure, not quite where we would love it to be just in the way that we capture the data. And so we're going to talk about just some of the details around that, understanding that it's still work that we need to do, and there's still an upside to measuring the data through maternal child health and looking at equity. But we also want to acknowledge some of those barriers.

Yeah, so I think one of the most common questions I get in my role at ACOG with quality and safety more broadly, as well as in the AEM program, is about how do we show that we're providing equitable care or how do we measure equity? And I think everyone assumes that someone else has a robust system and is doing this well and that's unlikely to be the reality. I think to really understand that, a lot of quality professionals who might listen to this will already know this, but I think we have to acknowledge that the roots of the problem go back to how we provide healthcare in the United States. It is somewhat fragmented. It can be siloed, that's one of our favorite words, but things are existing in their own spaces. And then also the way that we typically measure quality improvement and quality metrics comes out of an electronic medical record or an EMR and it is usually gathered based on ICD-10 or billing codes. EMRs were basically made for billing. That is their primary role. And I think we try to use them in a number of really smart ways. I think we gather really important information from them, but they are being used for something they weren't intended for. So then when you layer on maternal child health as a specialty or as an area, it gets more complicated, like you mentioned. Some of the complexity I've encountered, both in my own work and then more broadly across the United States, is that people don't seek care in one place. For those of you who seek medical care out in the world, you know you might have one or two or three or four patient portals you work through. So your data is in more than one place. There's not a comprehensive medical record anywhere. And even with the rise of certain EMRs that will remain nameless, but are the leading one and most common, often they don't, again, big air quotes, talk to each other, they're computers. They may or may not be interconnected. Some of the interconnectedness is even problematic when duplicates present or inaccurate information might make its way into a chart. I think that our healthcare professionals do an amazing job with the resources available to them, but there are real limitations. I think the other big piece is that even within a fragmented system, there are smaller fragments. You might get your care in pregnancy or prior to pregnancy in a different place than you deliver. The EMRs may not be interactive. You may not have the connection for postpartum. And then you may seek care from a primary care provider after your obstetric care that doesn't have the awareness of what you've experienced. So we really rely on patient expertise to talk through it, but we don't always equip patients in a way. And then pulling data on outcomes is very complicated. Add in the fact that there's often two patients as a result of this care. And their charts may not be linked. So lots of disconnects just to speak to the underlying. And I think maybe the whole theme of this episode is going to be, it's hard, we should still do it. But we need to acknowledge the complexity and then maybe save the next episode to talk about what we have for vision and what does and doesn't work in that space.

And I think you've really described the issues that we have specifically with outcome measures and having to rely on ICD-10s. And that really is the main way we look at outcome measures. We've talked about the importance of measurement in previous episodes. And when I think about that Donabadian model of structures, processes, and outcomes, I think processes are so important. And I think it is the place where you can really determine if you are delivering equitable care. If you look at, for example, a timely treatment of hypertension and your numbers are different by race. Probably have a problem in equity in how you are delivering that care. But it's also very complicated to get those process measures or abstract those process measures from the electronic medical record. And data does become sometimes, I hate to say the word burden because we need it, but it becomes a lot of chart review
when we're specifically looking at process measures. And it takes some digging into the chart. And when you're doing quality improvement, it really takes having a dedicated person. To be able to abstract that data. But again, if you're not looking at those processes and only looking at the outcome, then you don't really know where you need to improve.

Christie - 00:05:18:

Thank you for bringing up the different kinds of success measurement, basically, is a little bit of what we're talking about. So the AEM program, for folks who don't know, measures three types of measures. And I think ultimately, what we really want to be saying is we're decreasing maternal morbidity and mortality that is preventable in the United States. That is the end-end goal. But there is a whole spectrum of successes and move towards quality and equity in that space. So we primarily look at three kinds of measures in AEM. There's structure measures. Those are more concrete, and they tend to be yes and no's, or at least a Likert scale. We're moving towards it. We're almost there. Agree, strongly disagree. That kind of scale is what I'm talking about. And that's things like we have a hemorrhage cart. We have all of our meds bundled. We have, you know, they're tangible, truly structural measures. Process measures like you're describing are like, how are we doing the thing? And how are we doing it doing the thing? And it needs to be filtered through the right context and lens, but to me, process measures are the successes in AIM, but that's a hard sell because what we want to hear is better patient outcomes. I believe, and it's well evidenced, that if we move through the process measures and improve those, the outcomes follow. But that brings me to another barrier around data, which is outcome data tends to be incredibly delayed in the United States. There are states in particular that we work with who are incredibly high functioning, who do robust process improvement. They're just, they're doing an amazing job. Their data is delayed by 12 months, three years at times. And then you add in public health events like the COVID-19 pandemic or evacuations and emergencies with weather and climate change conditions, more experiencing fires, floods, hurricanes, things like that that are unprecedented in how healthcare responds. And then you don't have somebody to sit and abstract data in a meaningful way. So there are very real delays in those outcome data. We have to find other ways to measure what we're doing in the interim. So we still want to lean into all three of those measurement types, but I think it's really important to consider the complexity. The other piece about outcome data, at least what I've experienced hearing from folks on the ground especially, is that what is a desirable outcome? It's very clear, did you die or did you not die? We get more tricky as we move into morbidity and mortality and how we define that, which is a whole podcast series in and of itself and might be the next series we do. And then you also have what is the outcome for chronic conditions. Substance use disorder is a chronic condition. Often perinatal mental health conditions are more of a chronic or longer term condition. Sometimes cardiac conditions that arise in pregnancy are a chronic condition. So what is the outcome? We don't know yet how to prevent those things. So to me, true outcome success in, for instance, supporting somebody who has opioid use disorder in pregnancy is making sure that they are connected to the resources they need, that they are safe, that they are housed, that they have access to food, that they have consistent medication that helps manage their opioid use disorder and that they have access to the professionals they need. Those sound like not really wins, depending on how we define a win, but those are life-saving and prevent accidental overdose in the postpartum period, which we know is one of the leading causes of maternal mortality in the United States.

Veronica - 00:08:42:

Yeah, I think you bring out some really good points. And the biggest question I get from my hospital teams when we look at those outcome measures is, well, how do I get that? How do I follow that? And so as we think about as a country, and we think about those in leadership that have any power or any decision making process overall. What outcomes we're looking at, I think those are things to consider. Everybody wants to know if we're making it better. Everybody wants to know. And I don't know that what we're using right now, severe maternal morbidity, is the way to make that distinction. And as you mentioned, from the mortality side as well, first of all, mortality is the tip of the iceberg and should not be our ultimate goal. And there are thousands of cases of morbidity for every one case of mortality. But I can say this as also the medical director of our state MMRC, that data is also delayed in the time, because it is still relying on administrative data on death certificates and in the process of verifying and confirming and then all of those things, that data is delayed as well. And so we do need more real time outcome data to be able to say if we are making it better or not. And really that comes from looking at the medical record and looking at the chart.

Christie - 00:10:01:
So I'm going to ask you a question and I'm pretty sure I know the answer, but I want to hear a little bit about your experience through the lens of your quality expertise, which is, can we measure equity in an EMR? We've already talked about the barriers, so I think we know the answer, but talk to me about it if you can.

Veronica - 00:10:21:

Can we measure it in an EMR? I would say yes and no. I would say 80% no, I'll say it that way. You know, when we think about equity, when we think about discrimination, we think about bias. That's not something somebody's generally gonna write in a medical record, I was racist. So to say we can rely just on the medical record to determine those things, I think is not. I think it's a fallacy. I don't think we can. I can say that we have tried through our MMRC to develop a tool called the Labor's Tool, the Louisiana Biosphere Discrimination Tool for us to look at when we're abstracting data from the EMR to meet that question in the Maria form. For those that are listening, the Maria form is the standardized form that we use to do maternal mortality review through the CDC funded MMRCs. A couple of years ago, they added a bias or discrimination checkbox so that we can start thinking about did bias or discrimination impact this outcome? But again, that's really hard to look at a medical record to determine that. So we did create a tool where we're able to look for certain things in the medical record for at least us to start having that conversation as a committee, but it's still not necessarily a way we can measure equity. We can look at process measures and we can see if there are differences in our process measures and that will tell us that there's a difference in how we are delivering care. And so that's why my 20% is a yes, but my 80% is no. We really need other things. I can tell you from on out, from the perspective of the maternal mortality review that other thing that we are starting to do in the next year or two is to add an informant interview to that maternal mortality review where we have someone that's a clinical social worker, that's trauma informed, trained, that is actually gonna reach out to the families of the decedent to ask about that experience that that person had prior to death, not just in the healthcare system, but also just in any interactions that they may have had. So we can find out more about this equity bias and discrimination part.

Christie - 00:12:42:

So I think we're gonna talk more about contextualization of the data, which is what I think you're talking about and getting to there in the next episode when we talk about sort of what helps, but as you can hear, it isn't a lost cause, right? We're working and innovating. I think about the contextualization of the data more broadly, not just in a singular case or in a review of cases of maternal mortality. There is a study that I have had eyes on, I believe it's being published if it hasn't been already. And so I'm gonna not mention what the state is, but a state team implemented the hypertension bundle. And I was looking through the data and I was like, wait a minute, this math isn't mapping. Not because they're wrong, but they looked at timely treatment of hypertension across the hospitals they were working with. And interestingly, they disaggregated by race and ethnicity, which again, we're gonna talk about more in the next talk, but they actually found that black women and black birthing people were receiving more timely care. And I was like, that doesn't add up with my understanding of disparities. So here was the context that I found after I dug in, which was the hospitals that made the most improvement were the most resourced because this was also in the time of COVID. And the hospitals that implemented and adopted most rapidly were level one trauma centers, perinatal regional centers that were the bigger hospitals. You're level three or four maternal care if you follow the levels of medical care. So they implemented and adopted faster and those were typically in urban areas where in that state, the population was much more people of color and particularly black. So the smaller hospitals struggled with adoption and implementation. And I think that's very common, less resources, sometimes lacking a clinical champion or turnover staff and other pieces that we can definitely talk to down the road. But I think that the context of who was seeking care and where was incredibly important. And had they not disaggregated data, I don't know if you really could have measured between the facilities and the way that that did. So I think to your point, the context we add, it can't be numbers. I wish I could provide you with a robust report that shows exactly the outcomes that result from implementing AIM, but AIM is a tool and it is implemented in a broader landscape of tools by variable bodies of people. And people in groups have to work very hard and it's always complicated, whether it's quality, whether it's a group project, whether it's, quality is kind of the ultimate group project, including the patient as part of that group. So there's a lot of complexity, but there is contextualization. And I think that that's what I wanna lean into a little as we talk, maybe what the individual clinician can look at for data or maybe what they can do to improve it before we talk about some of those levers in the next episode.

Veronica - 00:15:33:

Yeah, that's very interesting. And now I want to go back and look at our state data because we actually found the same, our timely treatment of hypertension. Improved at a greater rate for our Black women. And I was wondering if it
was the Hawthorne effect, or, and for those that don't know, you improve when you know somebody's watching. But now I need to go back and look at it in some different contexts to see exactly why that happened.

Christie - 00:16:00:

It was interesting because the discussion of the study didn't go there, but I'm always a skeptic because I've been through the five stages of data grief that we've discussed earlier more times. But that's the intellectual curiosity I think we have to bring to the data. We want the outcomes, I desperately want the outcomes just as much as everyone listening to this episode. But I also recognize that I wanna see and understand the problems as they rise and fall. And for instance, we may see a decrease in maternal mortality, I would expect we'd see an increase in severe maternal morbidity or SMM that you'll hear us say sometimes because more people are surviving, which is fantastic. But at what cost. And so I think that you have to remain, even with the best, most timely, most amazing data, just really curious.

Veronica - 00:16:46:

Well, absolutely. If you don't, you don't know if that improvement is really because of something you did or if it's happenstance. You have to look at the context behind it.

Christie - 00:16:56:

I call them tendrils or tentacles. They seem to like expand into everything. And I think you have to contextualize too, the care and the numbers and the pieces you can do through the social and structural drivers patients are experiencing. There are other resources that are being done. I frankly never want AIM to be the only process in quality improvement anybody's doing. It's a tool in the process and we need to use all the tools at our disposal. So it's important that we offer that context as well as we look for improvements and changes in our numbers.

Veronica - 00:17:27:

And I think that's an important point because I think. Those individuals or those organizations that are looking at maternal morbidity and maternal mortality and understanding that this is a public health crisis, as you mentioned, they, of course, we all want it to be better, but they're all looking for that one answer. Like, what is the one thing that we can do? And it's not a one thing. Even from, if we can break it down into improving clinical quality care, improving access, improving social determinants of health, and even if we look at just that lens of improving clinical quality of care, there's not a one thing. It's a multiple, as you mentioned, multiple tools that need to be integrated to be able to improve that clinical quality of care. And I also see those three things as a Venn diagram. Again, you can't improve clinical quality of care if you're not looking at social determinants of health. You can't improve social determinants of health if you're not looking at the systems of care. And so there is never gonna be just a one answer.

Christie - 00:18:28:

Yeah, no, I completely agree. I think I am asked a fair amount as somebody who's really immersed in the work, does this work, does this work, should we try this? So many organizations and institutions and agencies are looking to make an impact, which is phenomenal. Everyone wants the new shiny thing. CQI is not exciting that way. Continuous quality improvement and equity work are not shiny. They require practice. They require continuous, the continuous quality improvement, continuous approaches. That can sound really depressing or it can sound like a true opportunity at many, many different points to make impact and improvement. And I do think we have to think in innovative models, but I also think that some of the innovative models being rolled out may perpetuate some of the issues we see. We know that we didn't get here because of one factor. We know that the outcomes we see are not single factor. So we have to take a multi-pronged approach to addressing them, but we also have to be cognizant of what pulling one lever might do to another issue.

Veronica - 00:19:32:

Yeah, and I think, again, as you just said, just to reiterate, I think they're, you know, on the, I'll say from the PQC side. We understand there are a lot of things driving maternal mortality. And so there's always this desire to do the next
project. Oh, we did hemorrhage. Let's move to hypertension. Let's move to SUD. And that's not how it works. That's
not how continuous quality improvement works yet. And, and I can say for RPQC, I think we've done a very good job
of sustaining the gain and thinking of ways to sustain the improvement. When we do move from one initiative to
another, we started with reducing maternal morbidity, focus on hemorrhage and hypertension. And as that initiative
ended, which I even hate, I hate to say that word ended. I can't, when it was in sustainability mode.

Christie - 00:20:21:

We moved into sustainability.

Veronica - 00:20:22:

We moved into sustainability.

Christie - 00:20:23:

We will also move into sustainability in this conversation coming up. Yeah, please.

Veronica - 00:20:27:

Yeah. So as we moved into sustainability for hemorrhage and hypertension and started moving into lowering the
NTSVC section rate, we developed a designation process to help with that sustainability of hemorrhage and
hypertension, because you can't do in quality improvement work and then put it on a shelf. If you do, let me tell you
what's going to happen when you come back to that shelf. Everybody is going to go back to what they were doing
before you just implemented all of your new processes because yes, you freeze, but you can unfreeze again. And we
by nature are going to want to go back to what is comfortable and what is, what is ingrained. And so you can't put it
on a shelf and leave it alone. You have to continue to improve and follow the improvement.

Christie - 00:21:09:

Yeah. I really want to, I think in the next episode, I think we should really dig into sustainability because sustaining the
change means the change worked for lack of a better term. As I hear you talking about it, I think it speaks back to the
people wanting new things or shiny things. I also want to pause for a second and acknowledge we used an acronym
and I don't want to assume everyone knows what it is. It's going to come up again because it is one of the easier
things for us to measure in a clinical care. We're talking about NTSV caesarian. So NTSV stands for Nullip. I'm not
going to say it right.

Veronica - 00:21:43:

You are. Nulliparous.

Christie - 00:21:44:

Nulliparous, Term, Singleton, and Vertex. So basically somebody who is having a birth that we believe should most
likely result in a vaginal delivery. The baby is, it's a first time parent giving birth. The baby is full term. The baby is only
one baby, not multiples. And vertex meaning head down. So NTSV is something we work on a lot in quality
improvement. And I kind of love it because you can measure if it happened or didn't happen, which is a lot harder to
do with hemorrhage and sometimes with hypertension. It's less measurable. Some of the other bundles we work on.
But NTSV in and of itself requires, as we've been alluding to repeatedly, continuous quality improvement.

Veronica - 00:22:27:
You mentioned, and I do know some hospital or even some states, some aim states that chose to start with NTSV because it is such an easy outcome measure. You know, as you mentioned, you had a C-section or you didn't have a C-section. We're not relying on ICDTNs. Now the process measures, that may be a little bit, as all process measures are, it requires data abstraction. I can say that is one that requires a lot of education for clinicians because, again, as we talked about before, The reason that we do continuous quality improvement are part of the reason the definitions change, the way we manage things change. What we now define as active labor is very different than when I was trained. And so the process measures are maybe a little bit more intricate, but the outcome measure is one that's much easier to determine.

Christie - 00:23:24:

I think you also speak to the tools we're using. I've mentioned previously during this season that there is updates that happen to the inpatient safety bundles. And it's typically for two primary drivers. One is clinical change. Clinical change is not a bad thing. It doesn't mean even we were doing it wrong. It means we're integrating new information, which is also what we do in quality improvement. The other thing is also drivers of equity that we want ingrained. Sort of back to that as a central focus of data, the measurement of that for an easier, and again, I'm making air quotes here, but the actual integration of disaggregation by race and ethnicity, as particularly in NTSV measurement, is maybe a little more straightforward. And again, very real barriers to that, but also different levers. And I don't think you can homogeneously approach anything in quality improvement. But one thing that I do think is a benefit for especially around data, for AIM or any process improvement, is previous successes build on, when you've had previous successes, you can build on those. So you build skills on your team, or you build strategies for data collection, whether it's you're using a different platform, or you have RedCap data, or you have data visualization with AIM, or you're using, you build on those. So when you do that with HimRidge, and then you do hypertension, you're not starting at ground zero. The bundles aren't meant to be fully separated, and they're meant to be done and then move on, which we'll talk more about. But I think that you build overlapping skill sets.

Veronica - 00:24:57:

I think that's so true. It's been one of the big things I have pushed for our PQC and our birthing facilities is building their quality improvement capacity, as well as their equity improvement capacity all built in together. Because as I've told them, yes, today we work on hemorrhage and hypertension. In 10 years, it may be a different thing that we need to work on. It doesn't matter. When you have the basics for how you do quality improvement, I hate to say plug and play, but it is a little bit of, okay, we have this process. This is what we do. We're just now educating and doing a different work process, but the process of quality improvement is already ingrained. And there's so many things around that that I could say, because it's not when you establish that culture around quality improvement, it's not just the process of improvement, but it's also establishing a culture around safety. And some of those things that we talk about, like psychological safety, where you feel comfortable saying that things are, that I feel like something's not right, or having that just culture where we don't blame. That's all that culture is part of that quality improvement process. And so I think overall, it just helps to improve your outcomes, no matter what you're focusing on.

Christie - 00:26:20:

I mean, the bottom line is it builds on itself. But the other bottom line is people don't believe something is possible until they see that somebody else did it. And I think that's a huge factor in continuous quality. And sometimes it's even seeing that we already did it, right? Well, we did do that one thing that was super successful, whether it's decreasing infection or improving treatment times or managing a hemorrhage more effectively, so less blood loss, hemorrhages are gonna happen. How do we minimize that? How do we reduce the harm and how do we improve our processes? You do one, you build on those successes, whether it's culture, resources, or even just understanding it's possible.

Veronica - 00:27:56:

Yeah, that understanding is possible is, and we talked about this in earlier episode, that's the joy. That's the joy that comes with quality improvement, understanding that it's possible.
Did you ever think data could leave you to your own?

Veronica - 00:27:09:
Not when I first started looking at it, I did not.

Christie - 00:27:12:
So take it from us. It actually can lead to joy. Thank you for tuning in to AIM for Safer Birth. If you like the show, be sure to follow wherever you get your podcasts so you don't miss an episode.

Veronica - 00:27:29:
And to learn more about the Alliance for Innovation on Maternal Health, visit saferbirth.org. I'm Veronica Gillispie-Bell.

Christie - 00:27:37:
And I'm Christie Allen. And we'll talk with you next time on AIM for Safer Birth.