Welcome to Maternal Health Innovation, a podcast from the Maternal Health Learning and Innovation Center at UNC Chapel Hill, where we connect around culture, measures, and best practices in maternal health. The purpose of these conversations is to authentically explore what's working well and think together about ways to strengthen care for birthing parents for families and those seeking to serve them. I'm Tanisa Adimu, Assistant project director at the Georgia Health Policy Center, where we provide evidence-based research program development and policy guidance to improve health status at the community level. Today, I'm excited to be talking with Mariluz Martinez and Dr. Anna Taranova from Texas and Barbara Gleason, Morgan Nesselrodt, Sue Kendig, and Rebecca Burger from Missouri. Both groups from Texas and Missouri have RMOMS programs or rural maternal obstetrics management Strategies programs. So what is RMOMS? RMOMS is a federally funded grant program that seeks to improve maternal health in rural communities. The Texas and Missouri RMOMS representatives with us today that you'll hear from our awardees of the initial pilot between the federal Office of Rural Health Policy and the Maternal and Child Health Bureau.

Today, we'll be talking about innovative solutions. These teams are implemented to address issues facing birthing people in rural areas. So I mentioned several times now the word innovation, and when we think about innovation, what comes to mind? So, Dr. Anna Taranova, what is innovation?

Anna T

What is innovation? Let's just get back to the kind of general definition before we apply it to the rural Maternity and obstetrics Management Strategies program. Right. So innovation is a practical implementation of some ideas, and the way I think of it, it's not something like wild and unsustainable, but a rather practical implementation that actually results in the introduction of either some type of new services or perhaps an improvement in providing existing services, and that definition fits really well to Texas RMOMS. So the innovation is very much a process that focuses on either a novel approach or improvement of existing steps actions. What have you and definitely dissemination of those ideas or processes, and unfortunately, at this point in time, we're in urgent need to use those keys of innovation to make the difference and improve maternal health. Why? Because, unfortunately, based on statistics such as National Center for Health Statistics, Texas is one of the 50 States that ranks at the bottom of the 40 States, with the maternal mortality rate being very high at about 34 per 100,000. Furthermore, the American Journal of Managed Care reports that the United States
actually has the highest maternal mortality rate, which is really high for a developed world, and we also have a relative undersupply of maternity care providers and no guaranteed access to provider’s visits or paid parental leave. At this point, there’s a lot of conversation, but we still don’t have it. Moreover, maternal deaths have been increasing in the United States for the last 20 years, and what is alarming is that two-thirds of those deaths are actually considered to be preventable. So we can’t just continue doing the same thing over and over again. We have to make that difference, and we have to make the difference to reverse that trend and to address the high maternal mortality rate, which is too high for us to have as a nation. So we need those new ideas to improve current processes, and so, by definition, this is the innovation, as it would be applicable to RMOMS program.

Tanisa A

Thank you for sharing those statistics. Clearly, a lot of work to be done and innovation to be implemented. So what do innovation and maternal health look like? What does that mean to you, Barbara?

Barb G

I feel like Dr. Anna Taranova gave a beautiful outline of what innovation is as well as how it fits into maternal care. But when we think about that in Missouri as well, it’s bringing together new and exciting ideas, why we are leveraging the programs that are already in place and how we enhance those programs and provide the support for them to work together and bring all their great outcomes together into one process. Is there anything you want to add there?

Sue K

I'm going to go way bolder. I think innovation is really changing things, and sometimes that means changing things a lot. We know that we have high maternal mortality rates. We have had high maternal mortality rates for a number of years, and they have been rising, whereas in other parts of the world, they have been decreasing. So clearly what we have been doing doesn't work. And opportunities like the RMOMS program provides providers communities in rural areas the opportunity to really look at the system and change things up so that it is a business as usual, and I think that's the exciting piece of the RMOMSs program.

Tanisa A

Thank you, Barb and sue, there’s a lot to be changed and improved, and we talked about issues facing birthing people in rural areas, and there is a variety of those, whether or not it's life-threatening complications that rural communities are experiencing at a higher rate when compared to urban or provider shortages, transportation challenges. There's a lot of issues facing birthing people in rural areas. Mariluz In what areas, based on all of the challenges and the ideas for change, what areas do you believe innovation is most needed, particularly in rural areas?
Mariluz M

That's a great question, and I really feel that there is not anyone specific area that innovation would help us in terms of maternal health throughout the continuum of care. But as others have stated, the innovation that addresses preventable maternal mortality and severe morbidity are definitely needed, and, for example, preeclampsia, if we had improved diagnostic tools to treat preeclampsia, we could help those at risk women and even help them to receive low-cost treatment before it became the problem that it is for 20% of the women who deliver well.

Barb G

To add to what Mariluz was saying is a very simple, cost-effective, let every mom have a blood pressure cuff in connection with her physician's office so that she can get recordings to make a change in that preeclampsia number and the number of preterm births and maternal and poor maternal outcomes.

Sue K

I think the other piece of that is also not just looking at what's happening during the pregnancy, certainly during the pregnancy, and in some cases, postpartum, we do have to look for those warning signs and diagnose preeclampsia, but cardiovascular issues, hypertensive crises can occur after the birth, and we sometimes forget that forming those partnerships and deploying our partners in the community, particularly during that postpartum time after birthing people have left the hospital can really help to assess not only for social and material risk and support, but also follow up on some of these really important clinical factors that emerge during the pregnancy, but continue on after postpartum.

Anna T

I also wanted to add that the focus on rural areas is very important because historically, we've been experiencing the expansion and centralization of services in urban areas and attempt to address those rising numbers of maternal death. But I think this is not the right way to approach it, and we would rather need to focus on leveraging and expanding the existing services and using technology, in particular, telehealth and specialty care using telehealth for those high-risk pregnancies. So innovation is kind of improving, something that we should be doing more and bigger and greater so, with the focus on technology and telehealth, that would be a potential answer.

Tanisa A

I feel like you're all hinting at some of the great work that you're doing already. You're mentioning some strategies, many of which you're implementing, but let's talk about that. share a little bit with the audience what programs or policies or initiatives that you're specifically working on through your mom's grant. We'll start with Barb, Missouri.
Barb G

At a very basic level, we are bringing the clinical and the community pieces together. We want to integrate those into a model that allows for assessment of social determinants of health and other risk factors, whether they are in the hospital or being seen out in the community by WIC or any other support services that they may be using and providing those moms with the information and the education to embrace support systems. But then the other piece of them is also just finding ways to pay for that and making it valuable to funders for those initial assessments and those initial engagements with the moms to find out really what they need to be successful during their pregnancy. We have put in place a system care coordinator who meets with our moms and just has a conversation with them to find out what is important to them right now and what kind of social determinants of health are they struggling with? Do they need transportation? Do they need housing? And through that process, we're learning a lot and having to remember that what we feel like is a crisis may not be a crisis to that mom because she has lived in that situation for so very long that that's her normal life, and so we have to really dig down deep and find out what it is that she would need at that moment. Rebecca, would you like to add anything about the system care coordination and what you're seeing?

Rebecca B

Sure. Yeah. You kind of hit the nail on the head when they come in to see me. There may be something that others around them, I think, is a big issue that we need to focus on and work on when in reality, it may be a very basic feed that to them is really overpowering or overshadowing the other need, and so having that conversation with them to get their story and what their need is, and if that's where their focus is today at this moment, if we help them, give them the resources to tackle that challenge, that then builds them in many ways, it's kind of empowering them. So they have the tools to continue to tackle other things that they're seeing.

Sue K

No, and Barb is a little bit too modest in this. But the care system coordinator was really a stroke of brilliance because what we heard when we were writing for RMOMS was the community members did not want another program, because when we did our asset mapping, we found there are a lot of programs many grants supported, but there are a lot of programs that offer navigation and so forth. But there isn't necessarily that linkage. So what the care system coordinator does is really do that first assessment and then hands off to our partners the opportunity for the care coordination and bringing in the other agencies, and Barbara, Morgan, isn't that sort of the premise for all of this?

Barb G

Absolutely, and right now, while we're looking for ways to create this value-based model around the initial visits, we're also looking at ways that we can work around limited FTEs and limited staff by doing some self-assessments with the mom, having an iPad with just a few questions that allow them to get connected with the system care coordinator and have further in-depth conversations to what kind of support that mom needs during her pregnancy and after.
Morgan N

I would like to lastly, touch base in regards to the system care coordination. I think one big piece that we saw in the beginning and one thing that we saw was a very high need and not just within the clinical settings, but also the social service settings, with finding those gaps, where are those women falling at what touchpoint are they falling through the gaps and we lose them within our coordination services or our navigation services. So we are looking at a referral and resource platform that's going to be a cost agency that will hopefully cut down on that, and also we're approaching it within a collaborative effort. So we're looking at it through graded funding and whatnot so it will be beneficial not just in the clinical setting, but definitely in the social and community-based settings as well.

Tanisa A

Thank you, Missouri. Certainly a great example of care coordination system improvement meeting patients where they are. So thank you for sharing. Mariluz, what are you doing in Texas?

Mariluz M

In Texas, we are using telehealth in several ways to increase access to care for our high-risk patients, typically, and to give you a point of reference. Our group partners are about an hour and a half to 3 hours from San Antonio, where most patients who are referred to our maternal-fetal medicine doctors are located, and so throughout telehealth, we are doing several things. One is reducing any barriers that patients have to transportation because we have learned that some patients want to know or want their primary care doctor obstetrician to refer them. But yet when they know they have to set up an appointment and then might involve a three-hour drive back and forth, it becomes a real challenge for them. So by utilizing telehealth, our maternal-fetal medicine team has developed twelve indications for telemedicine referrals where before we would just have them come to San Antonio. Now, if they fall under one of those categories. Something like gestational diabetes. They don't need to come all the way to San Antonio to see one of the specialists, the perinatal case manager that is at the partner side can schedule a telemedicine consult, and with that also comes increasing the education that we provide to our world providers for using telehealth and entreating those high-risk maternal cases. If there is a co-managed part of the care and also to just educate them in terms of responding to the early warning signs of Obstetric emergency, or other conditions that it may exist. For example, one of the things combined with the telemedicine training for the doctors is that we're training phenomena at the rural site so that they can do a more complete and higher they call it advanced anatomy screening versus a basic anatomy screening with our moms, where they'll be able to really tell if there are any complications that are cardiac associated with the babies, and we're working with our fetal cardiologists at University Health in order to train the sonographers as well as the maternal-fetal medicine team. So we're excited that we are able to provide the education to the providers to the sonographers, and of course, we also have added funds in the program to supply telemedicine cards to both hospitals in our rural areas.
Anna T

What I hear from the Missouri team saying is that their partners did not want another program and that's the cost of maps everywhere. Nobody wants that yet another program. So the innovation here is pretty much to leverage and expand the existing resources, existing partnerships and tackle that program as a team, and that approach is not the practical side of the innovation that will basically in turn remain sustainable, and being that stronger network that now is equipped with better knowledge of all the existing resources. Plus telehealth is that's what will give us the ability to address the existing issues and tackle the existing problems as a team and approach them better and faster. The network is not a new idea. The partners were always there. We just did not have that habit of working together. And I think when we form the working together habits. That's what first, better, and more efficient approach to tackling the issue that's good and leads me to my next question.

Tanisa A

But first, I want to just say, Kudos to you all for how you are building capacity in rural areas through your training and through telehealth because I think that that certainly helps position what you're doing and what they're doing for sustainability. But when you talk about the network was there and it's so important to partner and to have formal partnerships so that we can't do this work along with a single agency. There are so many others in the States that can support the work that we're doing, which brings me to my next question, how do you think state payers in States, public health policymakers, social and human services can support the innovative work that you all are doing?

Sue K

I think one of the key factors there is the opportunity to look at innovative payment models, and one of the things I thought was brilliant about our moms’ application is that the state Medicaid agencies are required partners. Payment models primarily look at providers and health care organizations, and yet to really get the outcomes that we want, we need to look at our community partners who provide transportation who address social determinants and structural determinants like food insecurity, make sure people are linked to mental health services, and all of those things that we know are number one drivers and contributors to maternal mortality, and we are learning more and more about how all of that contributes to the disparities, the disparate outcomes in pregnancy as well as newborn outcomes. So we are really working with leaders in the state to talk about innovative payment models where our clinical services are supported, but also those community-based organizations and partners that most often rely on soft money are somehow looped in to be able to access payment, whether it's in a value-based model or other ways in order to keep them viable as well. Because if our community partners who are providing these services go away, the program will not be sustainable. I'm going to take us back to before the grant was actually written. There has been tremendous interest in areas in Missouri that have high maternal and infant mortality in Boot Hill. That region is among the highest. So there are partners mainly because of the people in the Boot Hill who participate in our Perinatal Learning Action Network, which is the precursor to our PQC, our participants in our maternal mortality review processes, and so forth that really bring that story, and Conversely, as we have
been building the collaborations necessary to be successful with our moms, those partners from across the state were rooting for the Boot Hill and helping to provide information, and they are still rooting for the boot heel and very involved in these programs. So I think that's the other thing is people in the rural communities assuring that state policymaker, social service agencies, whatever payers are assuring that they have rural representation and everything. So that when these opportunities come about, we are all working together as a state to make it happen.

Tanisa A

That's great because solutions can be tailored for rural communities and not tailored for other communities and then back fit or try to right fit for the rural context. So that's really good. You mentioned high with Toronto mortality. I know Barb and Rebecca touched a little bit on just providing I don't know if you use these words, but I know you're doing culturally competent care, and we're hearing a lot about just equity, and how do we do our work with work in ways that are more equitable, and Sue mentioned that in certain regions of Missouri, there's higher mortality rates in some instances that might be higher among certain populations. So how can we innovate the way that we do our work in ways that make it even more effective and really bring about more equitable solutions? Barbara, I'll start with you.

Barb G

I think that it goes it's part of educating at the very basic level of what equality and equity look like, and for me, that when I finally got the right word, it was so easy to explain that to others that I did home visiting for 20 years, and the conversation would always fall to why do they need more than one home visiting program, and I never really get myself expressed the way I wanted to, and now it is. Everybody gets one because it's equal. But the mom that gets two or three, that's the equity piece that builds her up and lifts her up and gives her the support she needs to reach the same level as the mom who got the one home visiting program, and so just educating on that and really coming back to that point frequently so that people understand that equity and equality are not the same things. So they sound very similar, and we believe a lot of times that they are the same thing that gave me chills. I wish you could see my phone. That's good.

Tanisa A

Morgan, do you want to add some more to that?

Morgan N

I think when looking at the equitable approach, one thing that we did realize is that we were missing certain populations that we really wanted to target, and going back to what Bob said earlier, these iPads, implementing those within these offices where we are actually reaching those populations that otherwise possibly have been missed. So we're working daily with our equity workgroups and doing lots of education and training on our own as well, and not just implementing those out to our workgroups, but really on the back end to really look at the equitable approach and how we implement that within our project, and it's important to know that even our partner organizations are also equitable.
approaches are the driving force for their initiatives for their programs and whatnot? So we're all moving in a parallel direction. And I think that's where we're going to see a lot of change.

Tanisa A

So let's think about lessons for others who are working to advance maternal health, who are working to design innovative solutions in this area based on your own experience, your practice wisdom. What would you say is one of the greatest lessons that you've learned that you would share with them. So, Rebecca, I'll start with you. What's the lesson for others working to design innovative solutions in these areas?

Rebecca B

So, one of the lessons that I think for me is continued patience and not being afraid to express what you truly feel to be that voice to help carry these moms along.

Barb G

I'll add on to lessons learned for me. I take it very personal when things don't go the way they're supposed to go, and so I've had to accept that just because it looks like it failed, it is not a failure. I was actually on a call recently that talked about the invention of the light bulb, and then it was like 1000 attempts before the light bulb was developed, and it was like, do you fail 999 times? And it's like, no, it took 1000 steps to make this happen, and so I have to remember that when we hit something, a wall and we're struggling to understand it, that it's just a learning moment and we regroup and we move forward again.

Morgan N

I once read, and it has been many years now, and I've actually tried to Google quickly who the offer was in a cable that has resonated in this line of work, especially over the past couple of years during the implementation of the care coordination and really getting in on the ground level with these moms with our partner organization. I know that Texas, our moms mentioned earlier, innovation has changed, and so change is uncomfortable at times, and it's going to be that doesn't mean that it's long being able to take it by the war and run with it, and then also, I think listening to your community, that is one thing that we've really tried to do, really listening to what their needs are, and at the end of the day, it's empowering not just the organizations and agencies, but it's the groundwork in these communities and letting them drive the work.

Sue K

Well, Morgan, you took the words right out of my mouth, and my role is a little bit different because I'm a technical consultant to the project. I actually live in St. Louis, even though I've worked in the Boot Hill for a number of years, and I think it's honoring the wisdom in the community that is the absolute most important, because many of these brands do have people like me from the outside the community, and I think honoring the wisdom is really important. The other thing is really looking at all of the services and organizations that touch birthing people throughout the pregnancy and
postpartum, because, for example, when we brought the initial group together to talk about our moms and the opportunity, we brought the required partners together and they sat in the room and said, we want our health departments represented in the grand. We want our mental health providers represented because two of the key drivers of maternal deaths in Missouri are overdose, accidental overdose, and suicide. So they build a very large network because they did not want to leave anyone out, and I think that is a really important message.

Mariluz M

You have to have a lot of players as part of the program and not just who is initially on the program, but bringing the people that will be sustaining the program after the grant personnel will no longer be there in terms of our agency. What I mean is there are people that started when we first were writing the grant and might have taken a step back. But I'm bringing them back to be involved because they are the ones that are going to be here to support those rural partners because they're the ones that are on the outreach team or the maternal-fetal medicine team that maybe initially weren't as active. But now they're starting to really do more, and they're the experts, especially when it comes to maternal care, and they really know and they are just as passionate as you are about maternal health, and I saw Barb nodding. So I feel like I'm not the only one who was going through that.

Sue K

What Morgan and Mariluz have said is the local stakeholder partnership involvement is really crucial, not just in the planning, timing of the program, but also in the implementation and being somewhat flexible and being able to adjust and adapt to the change. That's the key to sustainability, and we have learned that no matter what, we have to continue working cold it or not cold or even in Texas slowed it or not snowball, we have to continue to stay in touch, stay with the partners. We have to continuously navigate our patients to the services that they need, and that's actually the core of culturally tailored and culturally appropriate services. When you do listen to what the community needs, thank you all.

Tanisa A

Thank you all. One final question that anyone from your programs can answer, is there any way for people to support your efforts, and if they're interested in supporting or joining you in your efforts, where can they find you? How can they get in touch with you?

Sue K

I do believe that information on all of the programs is available on the HRSA website under the rule of maternity. So we're all listed and there is a little explanation of what the focus of each program. So that would be probably the easiest way, and I would also encourage everyone to ponder and consider the importance of maternity and maternal health because this is the future of the nation. So we really have to address maternal and new Natal health now and stop the trend of rising mortality numbers and talk to the local politicians, taking it to the Hill and explaining the need to improve funding, improve
and expand Medicaid services. I think those are the components that would be helpful for us.

**Tanisa A**

Anybody from Missouri. Would you add anything Sue called, Barb, if you're interested in anything in Missouri, what else would you add?

**Barb G**

Well, just like it. We've heard it takes a village to raise a child. It takes a village to do this type of work, and so we need different perspectives and different lenses, and different voices so that we are making sure that we reach everybody and being inclusive. So yeah, absolutely, call Barb. The email is probably easier to remember. bgleeson@SFMC.net, but like Dr. Anna Taranova said, we are on the HRSA website and you can find it through there.

**Tanisa A**

Thanks so much, everyone. Thank you all for taking the time to join us today and to share your experiences and thank you all for listening, everyone. For more podcasts, videos, blogs, and maternal health content visit the Maternal Health Learning and Innovation Center and the website is maternalhealthlearning.org. I'm Tanisa Adimu, and we'll talk to you soon about Maternal Health Innovation.

[This project is supported by the Health Resources and Services Administration, HRSA of the US Department of Health and Human Services, HHS under Grant number U7, CMC 33636 State Maternal Health Innovation Support, and Implementation Program Cooperative Agreement. This information or content and conclusions are those of the author and should not be construed as the official position or policy nor should any endorsements be inferred by HRSA, HHS, or the US government.]