Video Transcript: High Impact Practices to Address Cardiac Conditions and Improve Maternal Health Outcomes

Meg Sheahan:

Welcome, everyone.

My name is Meg Sheahan. I'm with the Reproductive Health National Training Center, and I'm so excited to welcome you to today's webinar focused on high impact practices to address cardiac conditions and improve maternal health outcomes.

The RHNTC developed the High Impact Practice Set that we're going to discuss today in collaboration with the American College of Obstetricians and Gynecologists, you may know them as ACOG. And this set is adapted from work developed by the Alliance for Innovation on Maternal Health.

I have a few announcements before we jump in. First, everyone on the webinar is muted. There are a lot of us. We'll have time for questions at the end of the presentation, so please feel free to type your questions into the chat anytime.

A recording of today's webinar, the slide deck, a transcript will be available on rhntc.org within the next couple of days.

We've enabled closed captioning today. So to view that, just click on the CC icon at the bottom of your screen.

And finally, your feedback is extremely important to us. It helps us improve our work and hopefully support you better. So please take a second to open the evaluation link that's in the chat and consider completing the evaluation in real time.

To obtain a certificate of completion or CEUs, you have to complete the evaluation and you have to be logged into rhntc.org when you do it.

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So now I'd like to introduce our speakers in order of appearance. My name is Meg, as I said. I'm a senior clinical consultant at the Reproductive Health National Training Center. I'm a certified nurse midwife and among other endeavors, I've been hospitalist midwife for years and I directed the Title X program in the Virgin Islands for about 10 years before joining the RHNTC.

Joining me today is Miasha Gilliam-El. Miasha is a woman of many talents. She's a best-selling author. She's an international speaker and she's an advocate for peripartum cardiomyopathy awareness who survived a near-miss in 2012.

Dr. Wolfe is also a woman of many talents. She has a dual academic appointment at Albert Einstein College of Medicine in the Departments of Obstetrics and Gynecology and in the Division of Cardiology. She established the Maternal and Fetal Medicine-Cardiology Joint Program at Einstein Montefiore Medical Center in New York. And she was a core contributor to the Alliance for Innovation on Maternal Health patient safety bundle on cardiac conditions in obstetrical care.

Miasha, Dr. Wolfe, thank you for joining us.

Our hope is that by the end of this webinar, you'll be able to describe the impact of cardiac conditions on maternal health, including their impact on racial disparities in maternal morbidity and mortality.

Also describe the high impact practices that sexual and reproductive health providers can implement to address cardiac conditions for improved maternal and overall health outcomes.

And finally, describe at least two resources that sexual and reproductive health providers can use to implement these high impact practices to address cardiac conditions.

So before we dive in, we want to take a minute to just take a pulse check and see where we're all at in terms of our confidence to do the first two of these objectives. You know I'm going to be asking this question at the end of the webinar as well.

So we're going to launch a poll. I think you can see it in front of you. Please rate your confidence from one to five where one is not confident at all and five is very confident.

Let's give you a minute.

Okay. I'm seeing some responses start to roll in.

It looks like almost half of us are at about a three. Almost a third of us are at a four, feeling pretty confident for the first objective.

And similar-ish results for the second objective, about 20% feeling a four and about 44% feeling a three.

All right. Thank you.

Okay. So thanks for participating in that. Let's get into it here.

The United States is in the midst of a serious maternal health crisis. Our maternal mortality rate far outstrips that of our peer nation, and it continues to increase precipitously year after year after year.

Maternal mortality rates are highest by far among non-Hispanic Black women and women over the age of 40.

Most pregnancy-related deaths are preventable. In fact, more than 80% of all pregnancy-related deaths between 2018 and 2020 regardless of the cause were preventable, including those caused by cardiac conditions. And those are the reasons that we are all here today.

So this graph that we see depicts racial disparities in recent maternal mortality rates. So what we're looking at here is each bar serve the number of deaths per 100,000 live births in a given year, separated out by race and Hispanic origin. So we can see a few things here.

First, the number of deaths is rising steadily and steeply year after year after year. Second, the rates for non-Hispanic Black women are rising much more precipitously than the rates of non-Hispanic white women and Hispanic women. And third, the maternal mortality rate of non-Hispanic Black women is much, much higher than that of the other groups.

So how do cardiac conditions fit into this picture? Why if we want to decrease maternal mortality is it imperative that we understand and address the role of cardiac conditions?

Well, first, cardiac conditions are the leading cause of maternal mortality and morbidity in the first year postpartum. Cardiac conditions account for approximately a third of all pregnancy-related deaths with a disproportionate number of deaths among non-Hispanic Black people. Morbidity and mortality from cardiovascular conditions in pregnancy mirrors maternal morbidity and mortality overall in that deaths from cardiovascular conditions continue to rise, and the majority of deaths caused by cardiovascular conditions in pregnancy are preventable. This prevention requires early identification and coordination of care.

So if the nuts and bolts of what I've just shared don't convince us that we need to take this on, I believe that the experience and story of Miasha will. With that, I'll pass it over to you, Miasha. Thank you.

Miasha Gilliam-El:

Thank you.

Good afternoon, everyone.

As a survivor of pregnancy-induced cardiomyopathy, I stand before you to speak on this critical topic that affects the lives of many women around the world and its profound connection to the importance of outpatient services.

As I stated, I survived PPCM or pregnancy-induced cardiomyopathy in 2012. I was two days postpartum when I went into pulmonary edema. I had to be transported via ambulance to the ER where I coded and had my heart stopped for 10 minutes. I'm very grateful to have survived being placed on a ventilator for three days and not breathing on my own.

Many of you may know that PPCM or peripartum cardiomyopathy is a rare form of heart disease that occurs during the last month of pregnancy or within five months after giving birth. This condition strikes at the very core of a woman's health during what is supposed to be the greatest moment of her life.

Its exact cause is not fully understood, but what I do know from my own experience as well as from the experience of others is that it is a serious, sometimes fatal consequence if it's not managed effectively.

I believe one of the key aspects of addressing this condition and many others, such as preeclampsia, is the provision of comprehensive outpatient services.

When diagnosed with many of these conditions, it is essential to have access to ongoing medical care and support outside of the hospital setting.

This is where outpatient services can play a vital role in the continuum of care for patients like myself.

For many women like myself dealing with or recovering from conditions such as this, outpatient services can include regular cardiac checkups, medical management, dietary and lifestyle counseling, psychological support, and education about signs and symptoms of various conditions associated with pregnancy.

The importance of outpatient services provides a lifeline for women who are navigating the complexities of a heart condition while also caring for a newborn or other young children or both.

By offering regularly scheduled appointments with healthcare providers, outpatient services ensure that women receive ongoing monitoring and the care that they need to manage their condition effectively and minimize the risk of complications.

In my situation, I believe outpatient services would've prevented many of the complications that I experienced by detecting them early and making me aware of warning signs.

Outpatient services will promote a continuity of care, enabling healthcare professionals to closely monitor the progress of each patient, make timely adjustments to their treatment plans, and provide critical education and support to both the patients and their families, which I could have used in 2012.

I hope that by reaffirming a commitment to promoting the significance of outpatient services in the context of maternal health and critical conditions, such as PPCM, we can contribute to improve outcomes, enhance quality of life, and better overall health for women like myself who are confronted or have been confronted with these challenges.

Thank you for your attention and dedication to this vital issue. Together, let us strive to make a meaningful and lasting difference in the lives of women who are affected by these critical maternal health conditions like PPCM. Thank you.

Meg Sheahan:

Thank you, Miasha.

So we would like to build for a minute on the information that Miasha just shared about why to focus on value of focusing on cardiovascular conditions, specifically in the outpatient sexual and reproductive health setting.

For one, one review showed that a majority of pregnant and postpartum people who died of cardiac conditions didn't have a cardiac condition diagnosis before death, but most had underlying risk factors and had presented with signs and symptoms suggestive of cardiac disease, which could possibly have been identified and acted upon earlier.

Also, the majority of maternal deaths caused by cardiovascular disease occur in the postpartum period when clients may be more likely to present to the outpatient setting.

So there's this opportunity here for outpatient sexual and reproductive health providers, yourselves, including and especially those who provide care to clients who have been pregnant within the past year. That's a really critical timeframe, that year, to reduce maternal morbidity and mortality by recognizing risk factors, signs, and symptoms as potentially cardiac in nature and intervening in a timely, appropriate, effective way.

These clinics, the outpatient sexual and reproductive health clinics are often clients only or usual source of care, including within one year of pregnancy. And so as we just mentioned, the majority of maternal deaths caused by cardiovascular disease occur in the postpartum period, in this timeframe.

Outpatient sexual and reproductive health settings provide preconception care and pregnancy testing and options counseling and contraceptive services, and there are opportunities within all of these service realms to screen for cardiovascular risk and provide timely intervention.

And finally, outpatient sexual and reproductive health providers engage with partners and in the community, and so they're able to provide effective referrals and linkages to care, including to prenatal, primary care, and specialty services that might mitigate the risk of morbidity and mortality related to cardiovascular disease.

So when it comes to addressing cardiac conditions in the outpatient sexual and reproductive health setting, we've got a few pearls to share.

First, involve multidisciplinary teams, including teams who care for people in the postpartum period.

Second, based on the priorities in your setting, start small by testing a few ideas. Every team is going to be in a different place with this work, and that's absolutely fine, it's expectant. Start where you are and build from there.

And then finally, if you're wondering where to begin with this, consider the evidence-based practices presented in the High Impact Practice Set that we're discussing today as a menu of options that you can pull from for specific actions that you can take to address cardiovascular conditions in your setting.

So by now, you may be thinking, "What are these High Impact Practice Sets?"

Okay. Well, the High Impact Practice Sets are a series of five sets of evidence-based practices to address the leading known causes of preventable severe maternal morbidity and mortality in the United States. The RHNTC and ACOG worked together to adapt patient safety bundles created by the Alliance for Innovation on Maternal Health to the outpatient sexual and reproductive health setting. And these High Impact Practice Sets, they're building blocks or a roadmap to improving maternal health outcomes and reducing maternal mortality.

So I just mentioned the High Impact Practice Sets address the leading known causes of preventable severe maternal morbidity and mortality in the United States. And so these include hypertension, cardiovascular conditions, which we discussed today, substance use disorders, mental health conditions, and the postpartum transition.

The support programs in implementing the high impact practices on each of these topics, the RHNTC offers a package and the package includes a webinar, just one, a job aid, and a data sheet.

The screenshot on this slide is the job aid that outlines the high impact practices to strengthen hypertension services. So this is what it looks like.

More on all of this in a bit. I just wanted to forecast a little and provide a little context.

For now, without further ado, it's my pleasure to pass the mic over to Dr. Wolfe, who is going to discuss the high impact practices for cardiovascular conditions.

Dr. Wolfe, over to you.

Dr. Diana Wolfe:

First of all, I just want to express my gratitude to Meg and colleagues for this opportunity because those of you on the call today are really at the front lines of this problem.

And furthermore, I want to express my gratitude and thank you to Miasha for sharing your story because listening to you and your story motivates me and others to do more, to really turn the needle of what's going on in this country and elsewhere around the world. So thank you.

Without further ado, I want to present the Cardiac Conditions in Obstetrical Care Bundle that was produced after many, many Zooms with folks from all over the United States. So it consists of five Rs. There's readiness, recognition and prevention, response, reporting and systems learning, and respectful care.

Respectful care is enlarged because we felt that respectful care really should be included all over in each of the Rs. So hopefully, you'll see that as I go through them.

These are recommendations for every institution to implement and endorse in their community and in their hospital where possible.

So first of all, readiness. The readiness... The key points in readiness include trained clinical staff to conduct key screening tests for monitoring cardiovascular health according to guidelines. Identify and respond to potential pregnancy-related cardiac conditions.

So what do we mean by this? There's many different screening tests, and right here to the right, we have an example of recognizing red flags for pregnant and postpartum individuals, such as shortness of breath at rest, severe orthopnea meaning that patients who say they have to sleep on more than or equal to four pillows in order to feel relieved at night, a resting heart rate greater than or equal to 120 beats per minute, a resting systolic blood pressure greater than or equal to 160 millimeters of mercury, a resting respiratory rate greater than or equal to 30, and an oxygen saturation less than or equal to 94%.

Really, if it's less than or equal to 96%, there should be further investigation. And this should result in a prompt evaluation and consultations with maternal-fetal medicine and cardiology or primary care depending on where you are.

So identify and responding to potential pregnancy-related cardiac conditions. Really have a system in place of where you're going to refer your patients, whether you're in a rural or urban setting throughout the United States.

What I have here is... This was developed by the California Maternal Quality Care Collaborative. And just a little background on this.

So the CMQCC is a group of physicians, nurses, epidemiologists, public health officials who came together and reviewed the maternal deaths in California between 2002 and 2006. And what they found is they found the same trend that's going on in the U.S., and that is that the majority of these deaths were caused by cardiovascular conditions.

So they looked in detail at these 64 patients who died from cardiovascular disease, and they summarized the most common risk factors, vital signs, and symptoms and constructed this algorithm as a result.

And this algorithm basically is a combination of symptoms, vital signs, and risk factors, whereby if it consists... If you look at it as three buckets. So you have to have one symptom, one vital sign, and one risk factor to screen positive or any combination adding to greater than or equal to four to screen positive.

And if you screen positive, then this results in the recommendation to consult with maternal-fetal medicine and cardiology or at your institution if you have a cardio-obstetric program to refer your patient.

Now this algorithm is undergoing validation. Actually, we have it integrated into our EMR here in the Bronx at Montefiore and University of California Irvine as well. And so far, we've screened more than 3,000 patients and we're trying to validate this study and work out what the sensitivity of it.

Further going on with readiness, train healthcare team members on strategies to mitigate the impact of biases in order to enhance equitable care. Develop and maintain a standard policy and protocol to identify and respond to potential pregnancy-related cardiac conditions.

So in other words, on your labor floor, make sure that you have a code cart, make sure that you have a way to consult cardiology, heart failure team, electrophysiology. If you're in a rural setting where you don't have those subspecialists, have a way of transferring your patient rapidly.

Establish or strengthen your system for timely and effective consultation and referral or transfer to the appropriate level of care.

So for example, many institutions have a transfer form. They have a transfer call center. Many institutions will have a sort of sister or brother institution that has a tertiary center. So these systems should really be in place.

Develop and maintain a set of referral resources and foster communication with other health and social service providers to enhance support for clients with or at risk for cardiac conditions.

For example, here at Montefiore, we have community health workers. We have a screen for social determinants of health, and we can refer patients readily to a community health worker. And most institutions have social work to provide support for patients.

Moving on to recognition and prevention. Obtain the client's pregnancy and cardiac histories.

I cannot emphasize this more. We need to spend more time with our patients. Just like Miasha Gilliam-El was saying in her testimony of her story. In the outpatient setting, we need to sit with our patients and fully hear their history, their surgical history, their prior x-rays and imaging and EKGs. And we need to be really prudent at looking at this for signs and symptoms, warning signs and symptoms, of heart disease or risk of heart disease.

Assess and document if the client is pregnant or has been pregnant within the last year.

Very important. Now, this is really for the primary care folks or the folks working in the emergency room. "Are you pregnant or have you been pregnant in the past 12 months?" Because this can really change the management and narrow down your differential diagnosis for whatever your patient is feeling or presenting with.

Assess if warning signs of cardiac conditions are present and respond according to protocols.

So to the right here, there's something called MEWS. These are the early warning signs in pregnancy and postpartum. And you can see here they include swelling of the feet, headache, persistent severe abdominal pain, high blood pressure, and fever. This is very important to have in the outpatient setting.

Response. Offer reproductive life planning discussions and resources, including access to a full range of contraceptive options for which the client is medically eligible.

Now, I just want to take a moment here and remind everybody that most contraceptive options are completely safe for most cardiac conditions. There's something called the MEC. It's otherwise known as the Medical Eligibility Criteria and you can google it. It's very easy to access. It's found on the CDC website. It's also been published by the WHO.

And what it is it's a table. Most of you on the call are probably fully aware of this as you're in reproductive health anyways, but it's very important to have this table readily available and even to share with patients to affirm and reaffirm and reassure them that they have options for contraception that are safe.

Many folks outside of OB-GYN will automatically think that cardiac patients are really not eligible for hormonal contraceptives. And the truth is, is that the majority of them can really have any of the contraceptive options. Often, we avoid anything with estrogen because of the risk of thromboembolism, especially in the immediate postpartum period. And many of our patients have hypertensive disorders as well.

Educate all clients who are pregnant or who have been pregnant in the past year on postpartum complications and early warning signs. Provide instructions of who to notify if they have concerns.

So I cannot emphasize this more. We spoke in the previous slide about the early warning signs, but also in the first year postpartum, patients are at risk. They're at risk for cardiomyopathy, they're at risk for myocardial infarct. For most patients, it takes about 12 weeks for the hormones and the fluid status to return to normal, but some patients, it requires more time.

Furthermore, we know that preeclampsia, for example, is a very common condition in pregnancy, at least 7% of all pregnant women develop preeclampsia. And we're learning that preeclampsia, it really predicts for many patients premature mortality due to cardiovascular disease.

And so these patients with preeclampsia and other adverse, or we call it APO, adverse pregnancy outcomes, such as gestational diabetes, intrauterine growth restriction, intrauterine fetal demise, preterm delivery, all these patients are at risk for cardiovascular disease down the road.

So the first year postpartum is this window of opportunity to intervene and refer your patients to appropriate people to mitigate this risk in the immediate period and long term.

Moving on to reporting and systems learning. Monitor outcomes and process data related to cardiac conditions.

So what do we mean by this? At your institution, it's very, very important and informative for providers to look at their outcomes and data.

One of the advances that the State of California has is they've really invested financially, but not just financially, many stakeholders have invested in processing data in OB-GYN facilities so that every institution can look and see their outcomes and make quick changes or decisions for policymaking and systems learning.

And as a matter of fact, California has the lowest maternal mortality rate in the United States right now.

Disaggregate data by race and ethnicity, given known disparities and rates of cardiac conditions experienced by Black and indigenous, pregnant and postpartum people.

This is very important. We have a really, really serious health disparity in this country, and we need to change the process. We need to learn and do something to change this and to mitigate these very at-risk populations.

Respectful, equitable, and supportive care. Screen for structural and social drivers of health that might impact clinical recommendations or treatment plans. Link the client to resources that align with their health literacy, cultural needs, and language proficiency.

So I mentioned before. Measurements of social determinants of health, the screen that we have at Montefiore. I'd like to think that every institution would have that and that every institution would be able to employ community health workers. Obviously, this requires funding and investment, but it's very, very helpful.

Also, language proficiency. Having interpreters readily available so that patients can communicate with their health provider.

Health literacy is very important. Trying to educate patients, taking the time to draw pictures and spend time with patients so that they understand the meaning of preeclampsia. We take it for granted that we understand the biochemistry and the molecular biology behind the disease.

I personally find myself... I have this multicolored BIC pen that I use to draw a picture of the uterus and the placenta and the fetus, and I go through the whole pathophysiology of preeclampsia with my patients and to explain why I am recommending aspirin as a prophylaxis for mitigating risk of preeclampsia. And I'm often surprised at how engaged patients are when you take the time to draw pictures and to explain the science behind it.

Addressing cultural needs of patients. Really adapting to their needs and their manners for which they can hopefully understand and build health literacy is very important.

And all of this takes time, and I think that we as a healthcare system need to figure out how to meet those needs.

Provide person-centered trauma-informed communication and care to support the client in understanding recommendations and options.

We talk about a multidisciplinary team, and we have all these beautiful figures where we have the maternal-fetal medicine doctor, the cardiologist, the anesthesiologist, the labor and delivery nurse, the NICU nurse, the NICU staff.

But you know what? The patient is the center of the team. Everything has to be centered around the patient. We have to communicate with our patient. We have to support them.

Especially patients like Miasha who went through a traumatic immediate postpartum period and communicate with her family. Patients like her when they're intubated, it is very important that we communicate with the family, explain what we think is happening, communicate with them, update them on what's happening.

Then patients like Miasha who when they're extubated and recovering and dealing with being on all these medications to help their heart recover and dealing with that immediate postpartum period where you have a newborn and all of these demands, it's very, very important that we meet the needs of these patients who've just gone through this traumatic period of being told that their heart is failing, the heart is weak, and that their life is at risk. This is traumatic, and we need to do as much as we can to support these patients.

I think this is where I turn the mic back over to Meg. Thank you for listening.

Meg Sheahan:

Thank you. Thank you, Dr. Wolfe.

Okay. So we've got some great resources to share with you to support your implementation of these high impact practices that Dr. Wolfe discussed specifically in the outpatient sexual and reproductive health setting. We'll chat the links into these resources, and they'll also be in the slides that you can download off of rhntc.org in a few days. And of course, you can always search them and find them on rhntc.org.

Okay. So this job aid that you're seeing on the screen here available on our website, it presents the high impact practices that Dr. Wolfe just explained.

A key thing too is it also includes resources next to each high impact practice to help you support implementation of this. So we're not just saying train staff, we're saying, "It's a high impact practice to train staff, and here is a resource that you can use to do that."

The High Impact Practice Set is organized around the five Rs that Dr. Wolfe discussed.

Your agency may not be able to implement every high impact practice. We know that, that's absolutely fine and expected, but start with those that make sense and that are feasible in your context.

What I would also recommend... And you're going to have to look close at this job aid to see it on the screen, but you'll definitely be able to see it when you're looking at it on your computer screen in front of you.

What I would also suggest is pay special attention to the starred high impact practices. There's literally a little star next to it, a little star icon. We think that those practices have the potential to be the little hinges that swing the big doors, the attainable actions.

So next, a second resource that I want to share is it's a cardiac conditions measurement tool. Dr. Wolfe had explained the importance of collecting your data, tracking your data, so this is what can help us do that. It's an Excel spreadsheet that we designed in collaboration with ACOG to help you collect and use the data to address cardiac conditions during pregnancy and during the postpartum period.

And this sheet, notably, it allows disaggregation of data by race and ethnicity to help you identify any disparities, disparities that might be happening in your program's activities and outcomes so that can help you identify where to place some focus.

Next, the Hear Her Campaign. It's a CDC project and it really centers on the fact that women know their own bodies better than anyone, and they can tell when something isn't right.

The Hear Her Campaign supports efforts to prevent pregnancy-related deaths by sharing potentially life-saving messages about the urgent maternal warning signs that women may communicate when they're experiencing them.

The campaign encourages everyone who supports pregnant and postpartum women that her partner, family, friends, coworkers, providers. It encourages everyone who supports pregnant and postpartum women to really listen and hear her when she expresses that something doesn't feel right and it shares information about how to help her access timely care.

So this next resource that I want to share. This one's a goldmine. The improving health care response to cardiovascular disease in pregnancy and postpartum toolkit. It was developed through the California Maternal Quality Care Collaborative or CMQCC that Dr. Wolfe also mentioned.

This toolkit includes an overview of clinical assessment and comprehensive management strategies for cardiovascular disease based on risk factors and presenting symptoms.

So in this toolkit, you've got an algorithm to guide your initial workup. Dr. Wolfe highlighted this specifically. You've also got clinician resources on contraception counseling, cardiovascular meds, and breastfeeding, all tailored to the cardiovascular condition context.

You've got educational handouts specifically for clients on contraceptive options and planning a pregnancy within the context of a known cardiovascular disease.

And you've also got in this toolkit, information and infographics. Dr. Wolfe was discussing the importance of pictures and graphics in helping clients understand what's going on. So this toolkit has information and infographics designed for women diagnosed with or at risk of a cardiovascular disease.

You can download this toolkit after logging in to the CMQCC's website. If you don't already have an account with them, you just need to complete a short survey to initialize an account. It's free. It's really easy.

All right. So here we are. We're at the Q&A portion of this webinar. We invite you go ahead and enter your questions into this chat. I'll give a minute to do that.

I do see one question that came in.

Can these resources be emailed out to the attendees?

All of these resources will be available in the slides that will be posted to rhntc.org in the upcoming week. You can also find all of these resources on rhntc.org. If you search cardiovascular conditions or if you search High Impact Practice Set or even high impact, you'll find all of these resources and you'll also find the resources for the hypertension High Impact Practice Set.

Okay. So okay, I'm seeing a question from Jill Hughes. Would Dr. Wolfe share the drawing she does for patients in four color pens and describe how aspirin helps them? I know it sounds casual, but I'm interested.

Dr. Diana Wolfe:

Absolutely. I'd be more than happy to. I am not an artist, but I'd be happy to draw something and send it over.

Meg Sheahan:

Okay.

Dr. Diana Wolfe:

And it's true. Patients... I also think it's not just seeing the picture, but I think it's the process of drawing it out and explaining the spiral arteries coming from the mother and how the fetal blood takes a bath in between the spiral arteries and this is how the exchange occurs. And then in preeclampsia, those spiral arteries are stiffened and it impacts their ability to do that. So I think that that really resonates with patients.

Meg Sheahan:

Okay. We have a question also, and maybe I will direct this one to Dr. Wolfe if that's okay with you, Dr. Wolfe?

Dr. Diana Wolfe:

Sure.

Meg Sheahan:

Why are cardiac conditions so prevalent in birthing and postpartum people, especially lately?

Dr. Diana Wolfe:

It's a great question.

I don't think we know the answer completely, but from research studies, what we've noted is that the birthing population of advanced maternal age is increasing also, but more so younger people with comorbidities including obesity, diabetes, and chronic hypertension is on the rise. So with that, the composite of those conditions really increases the risk factors for heart disease.

Meg Sheahan:

Thank you.

So we have another question. I think I'll also direct this to you, Dr. Wolfe. Those who were diagnosed with cardiac induced myopathy and who survive, what are the lasting effects on the heart?

Dr. Diana Wolfe:

So yeah, another great question.

What I've learned from working... So I worked together with several cardiologists at least twice a week since 2015 and so I've learned a lot over the years.

And what I've learned is that the majority of patients bounce back. These are young patients, which is why it's really very, very tough to be so sick, especially when you just gave birth.

What the heart failure people do is they have four main medications that they... It's their goal to put patients on these four medications that remodel the heart.

And there are some patients who don't bounce back, who need a device in their heart, some need a heart transplant.

But what I have seen is that majority of patients recover, but they have to keep on taking the medications forever. Patients I've seen who feel better, and so they stop

taking the medications, their ejection fraction, their heart failure goes right back to being worse. So it is a lifelong disease that requires close followup and medication, but with good adherence to the...

So here are the things that predict the good outcomes. Early diagnosis, catching these cases quickly. A delay in diagnosis results in a worse disease and a more likelihood for going down that pathway of transplant.

Adhering to the medications and adhering to close followup with heart failure, that together results in good outcomes and good recovery for the majority of patients.

Meg Sheahan:

Thank you. Thanks.

Okay. So we've gotten another question. I'm thinking that maybe I can take this one first and then Dr. Wolfe and Miasha, if you have anything to add, I'll ask you to chime in.

The next question is, if we don't have a formalized program at our employer, do you have suggestions of where to start and what groups should be included in the initial discussion?

So here's some thoughts. If you don't have a formalized program with your employer, my first thought would be lay your foundation for the why. Why do we need this program? And we need this program... And start to build the information that you're going to present.

Similar to what we did in this webinar today introducing the concept of our maternal mortality rate in the United States and how cardiovascular conditions contribute to that and is mirrored in that, how common a cause of maternal morbidity and mortality that cardiovascular conditions are and that they're mostly preventable, and that there are evidence-based practices that can be used and high impact practices that can be used to reduce maternal morbidity and mortality related to cardiovascular conditions and improve health outcomes.

And then the next logical discussion point will be, "Okay, well, what are those? What can we do?"

And what I would recommend, what I would suggest as a place to start is go to the RHNTC website, search cardiovascular conditions, or go to the link that we shared, the High Impact Practice Set to address cardiac conditions. And it is literally a list of

practices that can be implemented by a program and resources that can be used to implement those practices.

And I would recommend looking at those practices with your team and saying, "Okay, which ones make sense for our setting, for our specific setting? Which ones are feasible as sort of a phase one in this?"

And then consider creating a work plan like, "How are we going to do this? What are going to be our steps to make this happen?"

And then once you've gotten some progress there, maybe then consider your step two practices that weren't necessarily action steps that you could take or high impact practices that you can implement in the beginning, but they're your building steps.

In terms of what groups should be included in the initial discussion, I think that really depends a lot on the nature of your setting. Certainly, I would recommend including your clinical team and by this, I mean not just your providers, I mean nurses, health educators, community health workers.

I would also include programs that might be outside the direct sexual and reproductive health setting, including your prenatal provider, your WIC providers programs that provide services for this population of reproductive age women. Also, your primary care and your specialty services, your cardiology services and your OB-GYN services.

And I would also include, if you can, people who have experienced cardiovascular conditions to get their input on what they perceive as most lacking or most needed and how to address those gaps.

I'll stop now.

Can I pass it over to you, Dr. Wolfe and/or Miasha, to see if there's anything else you might want to weigh in with?

Dr. Diana Wolfe:

Sure. Miasha, anything you want to answer about the programs?

Miasha Gilliam-El:

I was going to say, once the foundation is laid, like Meg was saying, you could bring in individuals from the community to actually speak on what is actually transpiring with

them and some of the things that they think may benefit other patients like themselves in the community. Just give the community a voice as well.

Dr. Diana Wolfe:

Yeah, agreed.

Thank you.

So I have one way of interpreting this question, and I'm not sure if I'm interpreting it in the way that it's asked.

But if we're talking about a cardio-obstetric program, most of these programs are at tertiary centers where you have subspecialists like maternal-fetal medicine, cardiology, anesthesia where you can deliver some very complex patients and do a full workup.

On the other hand... And to develop the program...

So at my institution, I started talking about this idea in 2012 when I was right out of fellowship and I met a cardiologist while caring for a 21-year-old who was in heart failure at 10 weeks gestation and...

Anyhow, I had done my fellowship in Los Angeles and I had seen many, many patients with Marfan syndrome. And we had this combined program at the county hospital where I worked as a fellow in L.A. And so I mentioned to my cardiology colleague that maybe we ought to do this at Montefiore.

Well, it took us a few years to convince our chairs of our departments and for them to... It requires investing, finances, and clinical time for us to be able to build upon this program.

So you really need the support of your departments.

You also need them to work out the billing issue. So each of us could bill for the clinical encounter.

But we have our outpatient arm where we see our consultations, but we also have our inpatient monthly meetings where we develop delivery plans for our most at-risk patients and we've been able to mobilize cardiac nursing onto our labor floor.

And I'm very proud of this because our labor and delivery nurses now want to learn, now they want to rotate through the CICU and the CICU nurses want to rotate through the L&D.

So we have this combined cross interest not only at the MD level, but also at the nursing level, and also at the trainee, our fellows and our residents and medical students.

I would say in the rural setting, it's much more difficult to develop a program like this because you don't have the specialists, but you do have primary care physicians, you have midwives, you have emergency medicine doctors, and you have resources.

And I think what's important is to figure out how you're going to mobilize your emergency team and how you're going to transfer your very ill patient quickly, or at least how are you going to communicate with a tertiary center to manage your patient in the immediate period.

These patients aren't always stable to transfer. You ship them off in an ambulance. It may be worse than trying to care for them immediately wherever you are.

Meg Sheahan:

All right. Thank you.

We've got two more questions here so far.

First, I'll send this to you, Dr. Wolfe. Do you recommend a baseline EKG on all pregnant patients?

Dr. Diana Wolfe:

I think that every pregnant patient should get an EKG and an echo, but I'm biased, right?

An EKG is pretty easy to get. The problem is that OB-GYNs aren't trained to interpret EKGs.

And EKGs often have false positives, especially in women who are pregnant and in women in general because oftentimes the leads are misplaced. You have to place them under the breast and the heart, where the heart is with respect to our ribcage can be different in a pregnant patient and most people...

All these sort of EKG protocols are based on men that aren't obese or whatever. So now here you have a pregnant woman and it's like the EKG tech misplaces them all over the place.

So I think getting an EKG on all pregnant and postpartum patients is realistic. I don't think we would have to worry about insurance, and I think it could be informative, but I worry about who's going to read them and the misinterpretation.

I've had referrals for things like an abnormal EKG, and I don't mind seeing a patient like that and finding out that it's nothing. I'd rather get all the false positives and catch that one. Preventing one death is everything.

Now an echo, I would really love for our country to invest finances so that we don't... I can't tell you how many times... Today, I'm running a high risk clinic. I've had at least four patients that I've sent for echo, and the insurance won't cover it. It's ridiculous.

So I think that as much as I'd like everybody to get an echo, our stakeholders won't... At least in the State of New York where I am, it's very difficult.

Meg Sheahan:

Thank you.

We've got one last question. We've got just a few seconds for it.

Dr. Wolfe, what meds are often prescribed long term?

Dr. Diana Wolfe:

Right.

So there's something called GDMT. That's what the heart failure folks call it and it's a combination of a beta blocker and ACE inhibitor. There's also a medication called Entresto, which is a newer medication, that's really had very, very good outcomes in remodeling the heart and then usually diuretic.

So many patients are on oftentimes a medication called Coreg, which is a beta blocker, which also helps remodel the heart. The Entresto. And then perhaps one of the enalaprils, one of the ACE inhibitors, and oftentimes, a diuretic like spironolactone.

It really depends on the patient's blood pressure because what I've seen is they can't throw all these medications at the patient at once. You have to do it slowly and

gradually for the patient to tolerate it. But there's been very, very, very positive results from these medications in terms of prediction of recovery for the heart thankfully.

Meg Sheahan:

Great. Thank you.

Okay. As I promised you, let's revisit these poll questions. We're going to throw this poll back up one more time and ask you again now that we're at the end of this conversation how confident are you in your ability to describe the impact of cardiac conditions and how confident are you in your ability to describe high impact practices that sexual and reproductive health providers can implement to address them.

All right. We're going rapid fire here. I see some improvement.

We've got about 62% saying that they are at a four and about 27% saying that they're at a five, which is a lot higher than when we first started. So I feel like we've done a good job here.

All right. Take a second if you're willing in this last minute to type into the chat, what is one thing that you'll do or do differently as a result of this discussion? We just want to hear what your thoughts are now.

And then while you're doing this, I want to thank you so much for joining us. Please reach out to us with any questions or ideas. Sign up for our newsletter for all the latest from the RHNTC.

Join me please in thanking our speakers, Miasha and Dr. Wolfe.

And remember, we'll have the materials from today's session available within the next few days, will be emailed to you and posted on rhntc.org. If you have any questions, email us at rhntc@jsi.com.

And finally, my last bit. Please take literally a minute to complete the evaluation. We really value your feedback and we use it to improve our work.

Thanks, everybody. Have a great day.