Award Ceremony Transcript
2023 Bernard J. Tyson National Award for Excellence in Pursuit of Health Care Equity

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Welcome, everyone, and thank you for joining us for this live award ceremony for the 2023 Bernard J. Tyson National Award for Excellence in Pursuit of Health Care Equity. Next slide please.

Allow me to introduce Joint Commission and Kaiser Permanente leaders that will be speaking today, including Dr. Jonathan Perlin, President and Chief Executive Officer, The Joint Commission, Dr. David Baker, Executive Vice President, Health Care Quality Evaluation and Improvement at The Joint

Medicine as the 2023 awardee for their exceptional work. Congratulations, and many thanks to the University of Chicago Medicine Team.

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Good afternoon. I would like to welcome and introduce the recipients of the award who are joining us today from the University of Chicago Medicine. Brenda Battle, Senior Vice President, Community Health Transformation and Chief Equity Officer. Dr. Ernst Lengyel, Arthur L. and Lee G. Herbst, Professor and Chairman, Department of Obstetrics and Gynecology. Dr. Sarosh Rana, airm1 (C)-1 (T)3 (sf)6.1l1 (o)1 (r)1 (m) (f)Terisf0.002 Tj-0.25.564-38.125 -1.

job selecting one recipient from a pool of many excellent applicants. Overall, the panel sought initiatives with a well-defined population, with data to show disparate outcomes and a specific intent to focus efforts to improve outcomes for that population. The panel assessed how the organizations targeted their specific interventions and solutions to the identified barriers. We also sought applications that thoughtfully explained how the interventions were implemented. Applications also needed to include data to show that the strategies indeed worked and improved the target populations outcomes in real life. Finally, the panel also assessed whether the initiative included sustainment plans and provided clear lessons learned or strategies that could be used to replicate those efforts and be used by others in concept.

The panel found all those elements within the University of Chicago Medicine's application for its initiative, Systematic Treatment and Management of Postpartum Hypertension. We were impressed by how holistically the disparity was approached, including the implementation of a comprehensive multi-level bundle of interventions, engagement across departments, convenient ways patients could access information and care, and patient education and empowerment. The use of telehealth and remote patient monitoring, in addition to the clinical interventions, resulted in improvement across all populations, but most significantly decreased the disparity for Black patients. The panel perceived that postpartum hypertension is a very specific and actionable clinical area, and the University of Chicago Medicine team addressed that disparity in a way that could be replicable, like a roadmap for other organizations to implement similar interventions to reduce disparities for their postpartum hypertensive patients. And with that brief introduction to the team's work, I'll now invite the representatives from the University of Chicago Medicine to describe their initiative and their impressive outcomes.

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So, thank you very much. I would like first to thank The Joint Commission as well as Kaiser Permanente for this extremely prestigious award. And I'm really hopeful that people will perhaps, you know, obviously carry on. And I'm very happy to take questions. And on my email after we do this presentation.

So, very briefly we are going to talk about this program, which we are calling STAMPP Hypertension, which essentially stands for Systematic Treatment and Management of Postpartum Hypertension. So essentially this should not be a surprise to people. But just for non obstetricians, and for in general, the context is that maternal mortality in the United States is on the rise. And one of the things metrics that we can measure maternal mortality is called PAMR. So, it's pregnancy related maternal mortality ratio. And essentially it is the number of maternal deaths that are occurring every 100,000 live births. And when you look at this graph, what it shows is that in the US it's about less than 20, it's about 18. But there's just very clear that people in Illinois have a much higher rates of maternal mortality. But if you look at the White and the Black, this is very, very high in women who are Black and living in Chicago and in Illinois.

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So, this was a graph that was published by CDC a couple of years ago. And when they were talking about the maternal deaths in women, they divided that up between deaths that are occurring during pregnancy and postpartum. And as you can see, a large majority of deaths are actually occurring postpartum.

tangible things. So, one is Hypertension Education and Awareness. So, making people aware either the providers or the patients about the perils of of of hypertensive disorders of pregnancy during pregnancy postpartum. Reduction of structural racism. I'm not going to talk about that, but that's a strategy of the University of Chicago does a very good job globally training the providers as well as well as physicians. Then we thought that perhaps creating not just like one thing, but creating a program bundle.

So, bundle approaches are when you take several interventions and apply it all together. You [know] the negative of a bundle is you'll never know what single intervention helped. But then bundle approaches are good because even if one intervention in part of the bundle is not very effective, as a as a whole thing, the bundle is probably has a much higher chance of being successful.

And then we thought perhaps including some of these innovative solutions which are actually not that innovative. They're very well used in outside of pregnancy and postpartum, such as telehealth visits and even home visits could potentially be another intervention that we can combine into one program.

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So, before we did this, we kind of this was in 2018 and I studied hypertension in the clinical context of preeclampsia and hypertension. So, what we sought out was we tried to look at what are the problems that are at the level of our hospital or at the level of the patient as it pertains to hypertensive disorders of pregnancy. And we, you obviously won't be surprised, but we found several problems. So, one of the things we found was at the time of admission and discharge. So, the people are coming in, patients are coming in, and they get diagnosed with high blood pressure and pregnancy, and they're being discharged home or they're being admitted for labor and delivery. We found there was a really a general lack of knowledge among patients. So, patients themselves did not know that they had this hypertensive disorder. And now they are at risk, almost like for the rest of their lives. Actually, there's literature that they are at risk.

We had no organized effort to educate our patients. So, it will depend if I'm rounding, I'll educate the patients more. If my partner is rounding, they forget to educate the patients. We were not giving them discharge instructions universally pertaining to specifically about preeclampsia.

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ACOG in about 2018, 2019 came out and says, well, anybody who has high blood pressure in pregnancy should come back and have a postpartum hypertension visit in about 7 to 10 days after their delivery. But really, in our hospital, we had no dedicated postpartum clinic. So, just to tell the patient to go make an appointment in 7 to 10 days was really was just like not a strategy. So, we had no dedicated postpartum clinics for easy access to patients. And then what we found was that the patient is discharged now, and she wants to come back to the hospital. They had to go through the ED. Now we have a level one trauma. So, our ED is very, very busy. We went down and you know, we talked to the ED and we did some Kaizen

events. And what we found was that in the ED,

again, I'm pointing all these out because we did go out and kind of, you know, act against each of these specific goals. Obviously, our long-term goal is to improve long term outcomes for these patients and ultimately follow with the right kind of doctors, which really is a cardiologist or a PCP.

So what did we do? We did a lot of clinician buy in and put a lot of procedures in place. And I'm going to point them here. So, one of the first things we did was we created this video. It's about five minutes 52 second video. And it's very simple. Let's talk about the perils of pre-eclampsia. It has me, several of the nurses, my medical students... and every patient who gets admitted to our family birth center who has any kind of hypertensive disorder pregnancy has to watch the video before she can even switch on the TV. So that was a little bit of a you know, it actually caught on very, very easily. The nurses will tell the patients that have high blood pressure, 'You have to watch this video.' And a lot of times when I round now the patients say, 'oh we saw you in that video.' So, I think that was a very good strategy.

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Then we were very heavy in terms of involving all our nurses at the family birth center. One of the things we did, we started routinely giving out these tear pad sheets. So, there is a misconception in the world of OB that delivery treats pre-eclampsia. In fact, if you go back and read some literature and books, it says that the cure for pre-eclampsia is the delivery. That's a wrong statement. So, we obviously are trying to rewrite that in the textbooks. But the general concept that somehow you get delivered and your pre-eclampsia is going to miraculously disappear is wrong. So, we went out and specifically bought out. And this is from the Preeclampsia Foundation, these tear pad sheets, which highlights that you are at risk after your baby is born. So, specifically talking about postpartum period, we started giving our patients written instructions. So, we created phrases in our EPIC which we have to put pre-eclampsia and then kind of, you know, has this tear pad sheet in it embedded, but also talks about specific instructions about pre-eclampsia.

We bought these bracelets, which are very cheap, but we made it specific too, we engraved it with postpartum pre-eclampsia.

And then one of the things that we found early on was when talking to patients, they would say that insurance does not cover the blood pressure cuffs. And we found that patients found it really difficult to go out and find a blood pressure cuff. You know, she has a one-day old neonate in her house. So, we literally went and bought hundreds of blood pressure cuffs and started giving out blood pressure cuffs and monitors to our patients for free.

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And then we created this pre-eclampsia discharge checklist, which kind of goes along with a little bag that she gets very simple. It talks about symptoms of pre-eclampsia. The other barrier we noticed was that patients again, it's a large institution. So, we don't we have this call center. So, patients found it really difficult, especially transfer patients who are coming from outside or patients who don't seek care here. They found it really difficult to navigate the system to make a postpartum appointment within seven days of their discharge.

what medications you're taking, what blood pressures you have, and then schedule any subsequent appointments before six weeks, if that needs to happen. But mostly talking to them about long term cardiovascular risk. And then, they, all my Pas, are following these very standard hypertension management protocols that are created for outpatient management of blood pressures in the postpartum period, along with a lot of input from our cardiologists.

And then obviously, if nothing happens, she comes back for her six-week appointment. At that time, we kind of hand it over. We tell her how important it is for her to follow with cardiology and PCP, but in the meantime, if she needs to be readmitted, we have readmission protocols and any time in the postpartum period, if anybody has severe hypertension, they go directly to labor and delivery because we have protocols for management of severe hypertension.

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So, what did it do? Obviously what it did was this led to significant reduction in postpartum blood pressures and improvement in postpartum follow up. So essentially this was the first data that we published. This was published in Green Journal. And we looked at about a thousand patients from the from the cohort of women who were enrolled in this program. So, as you can see here, the majority of our women are young. So median age was 28. Majority of them are nulliparous 52%. They have a higher BMI and 65% of patients are Medicaid. So, those are the very identified risk factors that have been identified traditionally for people who have poor adherence and people who are not going to follow up, but they are at high risk for adverse outcomes.

The other thing that we noted was that a large majority of patients who have hypertensive disorders of pregnancy are actually African American Black, about 80%. And then again, a large majority of these patients had some sort of a new onset diagnosis. So, they had either pre-eclampsia or gestational hypertension. Again, there's data that patients who have chronic hypertension, for example hypertension outside of pregnancy, have a much higher rates of following up postpartum because they kind of know the importance of hypertension. But these young moms, they come in, they have preeclampsia. You know, they're they will be one who are at high risk because they just got that diagnosis quickly. And they are they are they will perhaps not follow up.

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So, this is the graph that we created. As you can see, in the bottom, those are the different time points. So, September to December 2018 was when we had no protocols in place. STAMPP did not exist. It took us about nine months to put all these different things: education, all these flyers, pamphlets in place. So, by September 2019, STAMPP was actually in place.

So, we took kind of October to November 2019 will be the epoch when everything is happening. And as you can see here, all these different lines, they represent different time points. I'm going to show them to you, but th( )Tj[(A)1 (na)-1 (c)1 (e)1 (.)]1.-1 Td( )Tj0.001 Tc -0.2 (in)3 (d o)1

blood pressure was going low. So, these are the patient's blood pressures. Hypertension more than 140/90 within 24 hours postpartum. Because you can see that dropped from 80% to 46%. Rates of hypertension at the first postpartum hypertension visit dropped from 40% to 18%. Rates of severe hypertension prior to discharge dropped from 32 to 7%. And then even at the six-week visit, the rates of hypertension dropped from 25 to 14%.

So essentially, we didn't really discover a new drug or anything. We just gave people easily accessible protocols to manage hypertension. In terms of follow up. So, this was very very nice to know. So, you're a little bit of a busy slide. But again, the same four epochs on the x axis. On the y axis is proportion of patients who are coming for their postpartum hypertension visit. Now as you can see here there are three different colors. So, let's focus on the middle color. So that's an average. So, on average we have 33% postpartum hypertension follow up. Before we started we went to 59.3. So, we almost doubled our rates of postpartum hypertension [follow-up]. So, then obviously that looked good. c pwe aA1 Tc 0 Tw 18. (

And for the RPM we started enrolling in July of 2021. So essentially this is kind of an overview of a workflow that we are currently using for the remote patient monitoring. So essentially the patient goes home at the time when she's being discharged. My team goes and enrolls her into the program, essentially gives them the blood pressure cuff, helps them download the app, and then we actually take one blood pressure while she's still there, so that she can see how the blood pressure goes through into the into the EPIC. And then so she checks at home, she's checking her vitals. We tell them to check 1 to 2 times a day, and then she gets a daily survey of any of those symptoms that she has to check off. You know, do you have a headache? Do you have shortness of breath, chest pain, all those things, all this information is directly being sent to EPIC.

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Now, the beauty about the RPM is that all of this data is continuously 24/7 monitored by telehealth nurses. So, any of the escalations that we had to work on blood pressure escalation, symptom escalation, then the nurse will then escalate it to the UCM provider. So, I'm on call. I'll get this phone call and say your patient logged in severe hypertension. Or your patient logged in headache and then call the patient again. The beauty of having RPM is all her blood pressures are already in the EPIC. Every communication that anybody had with the patient is in the EPIC. So, I can quickly look up her chart and see, okay, what's going on and treat her appropriately.

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So, my last slide of the data. So, what this is kind of what I presented today. We started out here when nothing was happening. This was our STAMPP program, the original version. When we did not do telehealth with telehealth we saw amazing results in terms of not only improvement in follow up, but also reduction in disparity. And this is where we are now with SoSobpr chau(sl)1.1 (ide)2 (o)1 (f)1 (t)-1 (s 0 Tw Tc -0..001 1 (b)3 w ( )Tj-0.0 Tc[(A)2 (n)3 4o83-1 (n)1 (is is

adequate control of blood pressures during pregnancy. There's so much data that controlling blood pressure during pregnancy actually improves pregnancy outcomes. We are conducting behavioral interviews with patients and community health workers to really understand what are the barriers that obviously we don't know. I was just in recently in talk with so the next initiative that the Illinois Perinatal Quality Collaborative wants to do is called Birth Equity Initiative. And we're kind of saying that I feel personally feel if you deliver, you have a right to have control of your blood pressures if you had hypertension during pregnancy. So, we're going to try to see if we can push this out to all hospitals in Illinois as a Birth Equity Initiative.

Obviously, I'm trying to expand it to any health care system that's interested in this program, and you don't even have to do remote patient monitoring. If you don't. If you don't, you can just take the education and take the blood pressure cuff program. And then we just recently approached by CDC and ACOG, they wanted to put this as a good clinical practice in their in their brochures.

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So, before I end I want to thank my team. Obviously I work with great MFM physician. So my team is really day and night. We are on call and we take these pagers. My PA's are essentially running my postpartum hypertension clinic. My research fellows who collect all the data so we can publish, and my clinical fellows, my research assistants, especially Erin here, she literally enrolls every patient my clinical nurses, more nurses, more nurses who are on the floor. And they're just so proud of this program. And then last but not least, Dr. Lengyel has always been extremely supportive for all the ideas that that we kept going.

I get this question frequently, so I'm just going to go through people ask me, how did we get this funded? So like I said early on, I just got some money from the department and I went and bought some blood pressure cuffs. Subsequent to that, we got some amount of money from the Chicago Women's Board. Chicago Lying-in Board of Directors, Preeclampsia Foundation gave us some money, and then the HHS actually were giving out cash prizes. So we once we got that, we went out and hired a couple of research assistants, but also just bought more blood pressure cuffs. Currently, this whole program is funded through the UCM Health Equity Initiative, through the IT Strategic Program. So, it is free of cost to all our patients. And it is really standard of care for every patient that delivers here at our institution. Like I said, we enroll about 70 to 90 patients per month. And since its inception, we have enrolled about 5000 patients in this program. So obviously everything we do is for our moms.

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And this is recent celebration. This is my last slide. Is we just took the board around. Lots of my nurses, my fellows, my co-attendings. We have some cake and we had a really great time. So, thank you everybody for listening and I hope I'm still in time.

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That was fantastic, Dr. Rana. So, thank you so much for sharing your (d.)]TJ0s of

other people to adopt and implement similar improvement efforts.