

Mathematica Role for Medicaid in Reducing Low-Risk Cesarean Deliveries Improving Outcomes
and Reducing Disparities-
Webinar Date: March 31, 2022

[Doris Lotz] I am a senior fellow here at Mathematica. Thank you for attending today's webinar, the first webinar in the series focused on the role for Medicaid in reducing low-risk cesarean deliveries. Today we'll talk about improving outcomes and reducing disparities. Next slide, please.

Before we begin, we want to cover some housekeeping items. All participants logged into this webinar have been muted for the best sound quality possible. If you have any technical issues, please use the Q&A window located at the bottom right of your screen. Select "Host" in the dropdown menu and click "Send" to let us know how you might need help.

We also welcome audience questions throughout today's webinar, also through the Q&A window. If you'd like to submit a question, please select "All panelists" in the dropdown window and click "Send" to submit your questions or comment. We'll monitor the Q&A window throughout today's webinar, and we'll address as many questions as possible at the end of the presentation.

Last, we want to let everyone know that this meeting is being recorded and will be posted to Medicaid.gov after the webinar, along with the slides and a transcript. It takes about two weeks to get the slides, the transcript, and the recording all pulled together, so that's the time interval that you'll be waiting until you can access that on the website. Next slide, please.

Today, we'll hear from several distinguished speakers. We'll start with Kristen Zycherman, the CMS lead for the Maternal and Infant Health Initiative. I'll speak a bit to why reducing low-risk cesarean deliveries is important for Medicaid and CHIP agencies. We'll then hear about successful strategies deployed in two states, Ohio and California. First, from Dr. Mary Applegate, the medical director for the Ohio Department of Medicaid, and then from Dr. Elliot Main, the medical director for the California Maternal Quality Care Collaborative and a professor of OB-GYN at Stanford University.

We'll have time to answer questions, and then Kate Nilles will have some announcements about what's coming up next in the webinar series. Next slide, please.

At the end of this hour, you can expect to know about CMS's Maternal and Infant Health Initiative, and specifically the LRCD Learning Collaborative, the importance of reducing LRCD for Medicaid and CHIP beneficiaries, and some of the variation within Medicaid and CHIP programs, and specific strategies that you can consider in your state work to reduce LRCD births. Next slide.

I'd like to turn it over to Kristen Zycherman from CMS. Kristen, you have the floor.

[Kristen Zycherman] Thanks, Doris. Next slide, please. The Maternal and Infant Health Initiative (MIHI) initially launched in 2014, based on recommendations from an expert panel to improve access to and quality of care for pregnant and postpartum persons and their infants. Five years into the MIHI, CMS decided to take stock in progress and chart a course for the future. In 2019 and 2020, an expert workgroup provided updated recommendations on areas of focus that were both high impact in maternal and infant health, as well as within Medicaid's area of influence. They include increasing the use and quality of postpartum care visits, increasing the use and quality of infant well-child visits, and the reason why we're here today, improving maternal health by reducing the rate of low-risk cesarean delivery. Next slide, please.

This visual shows the three focus areas of the MIHI today and how they interconnect and affect both maternal and infant outcomes. You can see that decreasing low-risk C-section deliveries is associated with decreases in severe maternal morbidities, postpartum complications, as well as C-section rates and complications on subsequent pregnancies for those people. As well as future NICU admissions for infants. Next slide, please.

This is a description of the webinars that we will have in our webinar series. This is webinar one, and then two and three, we are working on finalizing speakers and dates for. But webinar two will focus on the importance of collaboratives, specifically on state Medicaid and CHIP agencies' role in leading,

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convening, and coaching quality improvement partnerships, focus on improving maternal and infant health by reducing low-risk cesarean deliveries.

In webinar three, experts will give examples of data sources and analyses that can help identify disparities and opportunities and focus strategies to produce the most impact. Then there will be an informational webinar, which will provide more information on the expression-of-interest process for the affinity group. Next slide, please.

States will be given the opportunity to participate in reducing rates of low-risk cesarean delivery by participating in an action-oriented affinity group that will support the design and implementation of a quality improvement project in their state. The affinity group will be led by a quality improvement advisor and their team and will include one-on-one coaching for state teams and their partners, as well as monthly workshops to aid in group discussion and peer-to-peer learning.

More information is found on our Medicaid.gov site linked here, and I believe Derek will drop that in the chat so that you guys can get that information easily, just a click away, and we will also send out an e-mail announcement once the expression-of-interest form is posted. Now I will hand it back to Doris.

[Doris Lotz] Thank you, Kristen. So, why focus on low-risk cesarean deliveries in Medicaid and CHIP programs? Why Medicaid, why now? Let's start by looking at some facts. Next slide, please.

Cesarean delivery poses a greater risk of maternal morbidity and mortality for low-risk pregnancies when compared to vaginal births, a risk that ideally should be avoided. Let's remind ourselves of what a low-risk delivery is. It can be described using the initials NTSV, which uses medical terminology to describe a first birth for the mom, a birth that is at term, only one baby, as opposed to twins or more, and has its head down in the birth canal, as opposed to some other position, such as breech. So those are the descriptions for the words nulliparous, term, singleton, and vertex.

Because of the opportunity for preventative care and risk avoidance, there is a healthy people goal to reduce LRCD births to 23.6% by the year 2030. Currently, slightly more than half of all Medicaid state programs are over that rate. There are also notable disparities. Pulling out just one gap in care for 2020, and from a national perspective, CDC data tells us that black birthing persons have an LRCD rate of 30.6 compared to a white rate of 24.7 percent. And as a reminder, Medicaid on average pays for 42 percent of births in the U.S., much higher in many states, so there is a Medicaid and CHIP imperative to participate in improving maternal and infant outcomes. Next slide, please.

LRCD rates were going down in the U.S., until they started going up again. This is national data, all births, so not limited to Medicaid data, and the median line here shows the healthy people goal of 23.6%. So, we have a ways to go to improve care. Next slide, please.

Again, looking at national data from 2020, and from the CDC, all births, we see the disparities across race and ethnicity, and an overall rate of 25.9%, with a range of 23.6% for Native American, Alaska native populations of birthing persons, to a high of 30.6% for black birthing persons. Next slide, please.

So, part of answering the question of why Medicaid why now, part of finding any quality improvement opportunity is to look at variation. Using the CDC Wonder data from 2018, the most recently published state Medicaid data, we see a range of LRCD rates in state Medicaid programs from 14.9% to 30.5%, a doubling of the rate from the lowest state to the highest state. So, we know we can learn from states that are doing well, seeing what improvement efforts they're applying and what's succeeding for them. To learn more about what states are doing, we asked representatives from two states to share their approaches to improving maternal health outcomes.

Next slide, please. And I now invite Dr. Applegate from Ohio's Department of Medicaid to share her experience. Dr. Applegate.

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[Mary Applegate] Good afternoon. I'm indebted to CMS and the Mathematica partners for inviting Ohio to share our story as it relates to low-risk cesarean deliveries, so thank you so much.

It's very encouraging to note the progress that CMS has made, starting from, I think it's been a few years ago, when we started the Maternal Infant Health Initiative, and have pulled that together in a way that culminates in these various learning collaboratives that you described. You'll be happy to know that states are also moving forward, based on the information that's become available, and we're very much partners with you in trying to improve outcomes for birthing persons and their infants. Next slide, please.

So, talking about successful strategies, Ohio has embarked on a next-generation of managed care that focuses on population health management. We are definitely taking a step away from fee-for-service, not just to managed care, with the opportunity for care management, but to population health management so that we really understand in much greater detail what swaths of patients need in their journey in the health-care system as part of their overall holistic health.

So, what you see here is a basic framework. [Questions we asked ourselves] Did we develop a system? How do people get into the system? How do we minimize term? How do we identify, then, higher-risk populations or sub-populations, and this is where birthing persons might fit in with disparities in mind in particular, as Doris described. And then how do we support best-evidence care? And that's actually where the low-risk cesarean deliveries comes into play, anchored then in a foundation of the expectations and supports for health in general. Next slide, please.

I'd like to acknowledge that it's actually quite difficult. This work is quite difficult. We have entrenched patterns and cultures of care so, for us to get someplace different, we must acknowledge that we ourselves must change, so that's Medicaid agencies, its managed care plans, its hospitals, to try to get to a different place, and in this case, it relates to cesarean deliveries. So, instead of just looking at in numbers that Doris just reviewed, what do things look like in our neck of the woods, in our types of hospitals, whether they're academic, independent, or rural hospitals, and what can we do to drive health care in a way that our members actually like? Next slide, please.

We want to get beyond crisis and headlines and really think about what the mothers are asking us. Within Ohio, we've developed a suite of changes based on what we've heard from moms, and what you see in this graphic here is that we have birthing persons absolutely engaged in every aspect of the care, including the integration of behavioral health services, with physical health services, with obstetrical services, with pediatric services. Those are four different areas, and oftentimes we lose families at some point of connection. So, we are trying to embed health education, emotional supports, cultural competencies, and a broad and holistic view to get to whole-person care for our mothers and infants across the state. Next slide, please.

We had a series of focus groups, and what we learned from the mothers and birthing persons is that there was a general lack of trust in the health-care system. So, before we get to how do we lower C-section rates, we have to find out what do the mothers need. And many of the mothers mentioned that they didn't feel like they had a voice in the decisions of what happened to them, even though they were inside nationally regarded health systems.

There's a lot of discussion around empathy, and certainly the racial and ethnic divide between the health-care workforce and the people that we serve was quite evident. So, they also wanted an alternative -- not an alternative workforce - an enhanced workforce that might include workers such as doulas, who we know are associated with lower cesarean deliveries. Next slide, please.

So, what I show here are the suite of things that we've done [in Ohio's Maternal and Infant Support Program] to try to follow birthing persons, actually, all the way from when they were young to their pregnancy and postpartum periods to inter-conception parts of their lives. And what we're trying to do is to get a real-time risk assessment form or report of pregnancy so that the managed care plans actually know where and to whom to zoom [provide] resources at a time that's so critical, because the clock is

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ticking if we have moms who have many health challenges before their babies are born. Then we harness the IT system to link to eligibility, to link to home visiting with our Department of Health, and to link to additional services, such as WIC [Women Infants and Children program].

We also now cover group pregnancy care, so not just the trademark centering, but group prenatal care in general, in addition to offering funding for the nurse family partnership version of home visiting for the highest risk women. In addition, Ohio was one of the states that does not have full lactation consulting services, so we've added that as well.

Starting tomorrow, we actually have a 12-month postpartum eligibility that's starting, so we're very excited about that. And what I'll talk about most today is the comprehensive Maternal Care Program, which essentially is a maternity medical home or a pregnancy medical home, that is the PCMH [patient-centered medical home] version for obstetrics like we have in primary care. That's actually where the measure related to cesarean deliveries will count the most. We have community efforts as well, and what's coming up next are the mom and baby dyad, care together, as well as welcome home visits for every birthing person in our state. Next slide, please.

So, it's in that context that we're doing our work, with the same focus areas that you heard CMS describe today, reducing severe morbidity/mortality, improving infant outcomes, and definitely improving the experience of care coming from a place of cultural humility. Next slide, please.

This will require cross-system collaboration. And what's unique about having a pregnancy medical home is this idea that every single person counts, and they get attributed to somebody who then is accountable for the results, like the low-risk cesarean deliveries. So, I just have a description here about how we identify individuals, how we risk tier them. This works very much as comprehensive primary care does, in which there is a pre-member pre-month configuration of care that is coordinated and includes closed-loop referrals and reaches into behavioral health and other social supports on behalf of the families.

The idea here is that we take care of the birthing persons before pregnancy, during pregnancy, during labor and delivery, postpartum and beyond, so that we are connecting to primary care, OB, physical health, and behavioral health, as well as pediatric care. So, all those things coming together are part of what we're trying to achieve. Next slide, please. So, we have a whole process here, but the outcome reporting and monitoring is where we pay attention to this particular measure related to mode of delivery. Next slide, please.

What you see here are the measures that we have in our program. On the left-hand side are many of the ones that you recognize related to HEDIS [Healthcare Effectiveness Data and Information Set] or other benchmarks. We have included public health-type measures, such as population level state term birthrates for example, or the CHIPRA [Children's Health Insurance Program Reauthorization Act] low birth weight measure as well. On the top right-hand side, that's actually where you see NTSV. We're still calling it that in Ohio. But the LRCD works just fine for us as well. We have included other things, such as infant well care, dental visits, maternal depression, and WIC enrollment as well, and have an eye out for disparities across all of these measures for women in the state.

Next slide, please, I think we can actually skip because Doris actually covered the NTSV definition. So, if we could go to the slide after this, we do have a perinatal episode of care in which we have standardized definitions from prenatal, labor, and postpartum periods of time. Here what we looked at was an overall C-section rate, not first time low-risk c-sections, and what we saw is along the risk tiering that I described to you, the point of focus for low-risk cesarean delivery would be those in the light blue along the bottom, that 30 percent of the cesarean deliveries that are actually the most important. As women are higher and higher risk, and also as they're older, the cesarean sections are more likely to be repeat cesarean sections. You'll hear more about that from Dr. Main, but I did want to point out just this view of overall C-sections and how it lines up with the population health view of the birthing persons in Ohio. Next slide, please.

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We did a dive into who is actually getting C-sections, realizing this is all C-sections and not just the low-risk ones. And the most important factor is here on the left-hand side, which is age. The older the birthing persons are, the more likely they are to have a cesarean delivery in Ohio. The other thing I'd like to point out here is that last bottom stripe. It doesn't seem to matter who the payer is. It's all over the place.

So, in conclusion, on the next slide, what I'll actually note for you is that the primary locus of influence for cesarean deliveries actually is not necessarily the payer. Next slide, please. It really is within the hospitals. So, who has influence over the hospitals and the hospital procedures? Much like before anyone does surgery, there must be a history and physical on the chart, can we set up a system similar to that so that low-risk cesarean sections do not happen unless there's more than one person that agrees? We realize in some more rural areas, where there's only one obstetrical entity or access issues, that may be some of the situations, so we want to make sure that we don't just have kind of a uniform inflexible way of looking at this, but really come at this in a way that provides resources where they're needed.

So, low-risk cesarean delivery is part of the suite of markers for high-quality care in perinatal health. The hospitals are the locus of influence, so hospital associations and perinatal quality collaboratives are key and hopefully, can work with managed care entities to drive to the healthy people goal that Doris, Dr. Lotz, just described. Medicaid programs can have some influence, however.

In Ohio, we pay the same for vaginal deliveries as cesarean deliveries, but that may not be true across the board. So at least eliminating that as a potential negative influence might be a consideration. And then there also may be value-based models, such as the maternity medical home that I described, where there may be enhanced payment for expert QI, quality improvement, work related to cesarean deliveries, and then how contracting happens with hospitals, favoring those that actually have the highest quality marks may be part of that as well.

Another influence is that of an expanded workforce, so having more midwives, more family doctors doing deliveries, more doulas, and other support personnel may actually help this as well, because in all of those circumstances, we've heard from our moms and birthing persons that they are empowered and more able to have their voices be heard in large kind of transactional health systems.

In addition, in some states that have a lot of birthing centers, we actually have heard that the women do feel empowered in a different kind of care delivery mode as well. So, this is support for the perinatal quality improvement efforts, and managed care plans can participate in those as well and try to reduce administrative burdens where they exist, as it relates to perinatal care.

So, with that, I will cede the stage to Dr. Elliot, who will tell us more about California's efforts. Thank you.

[Elliot Main] Thank you, Dr. Applegate. It's always fun to speak with Mary at meetings because she always does a great job of looking at the global view. Now you can take the focus view, and that's what we're going to do today.

This is a hard topic because there are entrenched medical approaches. In the locus of controls both at the hospitals, but, also, as we're going to discuss, at the provider level, so we have to be able to reach both of them. I'm going to discuss today what we did in California that actually led to a very significant drop in our entire statewide rate of low-risk cesarean deliveries.

We actually like to reframe it, and framing is important. Our initiative is called "Supporting Vaginal Births" to make it into a positive and I think that's an important lesson. Our second frame is this really should be about all births, not just Medicaid births. As a physician, I don't know what insurance my patients have, and we don't treat patients, really, that differently, so you really want to change the mindset of the nursing staff, the mindset of the physicians in the hospitals for all births, and that means, to be successful for any hard topic, that you have to pull together a very large group of partners and a broad spectrum of interventions that you can pull. So, we're going to talk about the importance of levers as we go along today. Next slide.

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So, one of the things that's of note is that we haven't been high that long. So, this is from the National Standards of Health Statistics, the overall total C-section rate in this country, and then the low risk, which our National Standards of Health Statistics started measuring a good number of years ago. They call it low-risk first births C-section, emphasizing the first births, and we're going to talk about the importance of first births in a moment.

I should caution folks, though, that doctors don't like the name "low-risk," because there are patients in this grouping that have risk, that have hypertension or diabetes, and why are they low risk? The reality is that they are at significantly lower risk for C-section, and the really high-risk moms actually deliver before term. So, the fact that they're at term, really sets them aside. But we've had a 50 percent rise in the C-section rate over the last 10 years, 15 years, and you can see we, as a nation, were down in the 18 percent range as recently 20 years ago, and, actually, in the '80s, it was considerably much lower. Overall, it's gotten so that C-section accounts for one out of every three births in the United States, the most common hospital surgery. These are all stats that I'm sure you're very familiar with in the Medicaid office. But this is a lot of numbers, and an increasing number of these C-sections are repeat C-sections. Next slide.

One of the take-home messages today and for any QI opportunity, particularly in obstetrics, is the huge variation in care. This is looking at national data, by Katy Kozhimannil documenting that there's ten-fold variation in hospitals in their cesarean rates. That obviously has implications for quality and costs, and really opens our eyes to what we can do for QI. I'm going to show you California data, where we saw pretty similar types of numbers, with variation for NTSV, cesarean or first birth C-section. Next slide.

Why does it matter? And this is always an important thing to drive home. Yes, primary cesarean sections associated with infections, hemorrhage, transfusions, operative injury, that's the light green column here, primary C-section. I want you to compare all of these to the dark green, which is vaginal delivery. What I'm showing you here emphasizes the CDC data is that once you've had a C-section, now you're in the purple category, you have two choices for delivery: either a vaginal birth after C-section or a VBAC, or a repeat C-section. Neither of those is a good option.

You can see the two purple columns are much higher than the dark-green column for all the subsequent opportunities here, all the subsequent measures, either the risk of ruptured uterus, the risk of unplanned hysterectomy, ICU admission with transfusion, they're all multiples much higher than that of a normal vaginal delivery. So, once you have that C-section, you're looking at significantly higher risk for everything going forward. Next slide.

So, this gives us -- I grew up in New England, and lived in areas that look just like this, with a path going through the woods. Grew up with Robert Frost and the roads not taken, this is really where we are in the first labors and births. If a woman has a C-section in her first labor, over 90 percent of all subsequent births will be cesarean births. Since that's the national rate, the VBAC [vaginal birth after cesarean] is about 10 percent. But if a woman has a vaginal delivery in her first labor, over 90 percent of all her subsequent births will be vaginal births. This is really an important point in a woman's reproductive life, how we handle that first labor and birth. Next slide.

So, NTSV C-section, or low-risk C-section actually has been around for a while, about 20 years. It is risk stratified. Risk stratified not so much for overall risk but through the risk of cesarean. It was picked by ACOG [American College of Obstetricians and Gynecologists] in 2000 it was probably the best C-section measure, adopted by HHS [United States Department of Health and Human Services], both for healthy people 2010, 2020, and now 2030. Called it low-risk first-birth C-section, it's NQF [National Quality Forum] endorsed, it's a joint commission measure PCO2, so almost every hospital in the country is collecting this already, and it's in the CMS child core measure set for a number of years, and it is used by Leap Frog and U.S. News and World Reports, so this is out there. It's in common use.

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There are national data and trends available. States can actually use birth-certificate data to calculate it or if you use the Joint Commission measure, you can use a combination of ICD-10 codes, and you have to capture parity and gestational age from the medical record. So, in Aim, which is another project that I have the fortune of co-leading nationally, we have a national patient safety bundle on the safe reduction of primary cesarean, which I would commend to everyone as a key step for how you actually do a quality improvement project. Next.

So, this is where we started off in California. 2015, we had about a third of the hospitals that met the 2020 goal, which was 23.9. It's now 23.6 for Healthy People 2030. But 23.9 is where we ended up, as a target for our state, for our hospitals in our state. And we asked all the hospitals that had higher rates than that if they would join us in a quality improvement learning collaborative. We have a long history of doing those in California, and we had a big data center that supports that. 56 hospitals enlisted in the first two cohorts. And those are shown in red. We had some high-rate hospitals here, 50-60 percent, as well as some that were right around 25 percent.

Next, we're using key resources here. It's not anything wild and crazy. This was using ACOG committee opinion, ACOG consensus documents, and the safe prevention of primary cesarean delivery. These had guidelines to use to diagnosis active phase arrest, and guidelines of interpretation of fetal heart monitoring. Those are the two subjective areas in C-section, and they are the ones that contributed to the rise.

We have a safety bundle that our quality collaboratives have used in the purple edged one, and then in California, we developed a tool kit for implementation, again, to support vaginal birth, and reduce primary C-sections. This was really a guide for nurses, for physicians, for midwives and doulas, and built on the other resources that you have there. These are all open source, all available, downloadable from our website or others. Next slide.

Before I go to the next slide, the common QI activities that our collaborative used by all 99 hospitals, by the end, was really emphasizing labor support. It was mentioned earlier about the good support within your family or a doula is very, very useful.

The active phase guidelines were widely adopted, and it was impressive to hospitals and physicians how many C-sections did not meet the ACOG guidelines for the diagnosis of an active phase arrest. That's a starting point. It's an important starting point. C-section rate transparency was a really big piece as well, both by the hospital and within the hospital by providers, and that's something our collaborative was able to provide.

We did other guidelines and other techniques, but those were the most important ones that were done in the hospital. Now we're going to talk in a moment about what was done outside the hospital, because that was equally important. But physicians were afraid of lowering C-sections because they were worried about baby outcomes. And so, the next slide, it was very, very important for us early on to be able to show you could lower the C-section rate quite significantly and not impact baby outcomes.

So, here is the first 56 hospitals, who had an aggregate rate of 29 percent. We reduced it to 24, a big drop, and that was over a two-year period. Actually, it was about a year-and-half from when we started, but we have that baseline for the first 12 months. And you can see in the bottom set of lines, which are balancing our safety measures, that included the rates for the mother of chorioamnionitis, transfusion, lacerations from perhaps greater number of more difficult vaginal deliveries, and importantly, the orange diamond, which is severe unexpected newborn complications. This is babies with sepsis, intercranial head injuries, asphyxia, all the things you worry about, and that actually did not change in this time period, even though some of the hospitals dropped their rates by ten percentage points. So, this was really important. Next slide.

It's been published in the Green Journal that has made a difference. So this is the statewide rate for California. California has 450,000 annual births, 220 hospitals. This is a pretty big undertaking. One out of

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every birth in the United States is in California. So, you can see in the red line, California stayed pretty much the same, right around 26 percent. It's dropped a little bit as we got to 2019. But largely because California dropped, we had the same rate as the U.S. at the beginning of 2014-2015, and dropped it down to 22.7, well below the 23.9 target.

The green line is our safety measure, the unexpected severe newborn complications. It actually improves statewide over this time period, which was, again, very reassuring. This is published in "JAMA" a couple of months ago, and I would certainly recommend it be used as an example from where you go. So, this is statewide. So how did we such achieve statewide effects? I'm going to say this multiple times the last few minutes, it was pulling every lever that we could. On the left-hand side, you could see intrahospital activities, a data-driven quality initiative. We've got professional organizations behind this, ACOG, nursing midwiferies associations, family medicine associations. We had tool kits and safety bundles, and we had some videos we made for women about asking your doctor about how to avoid a C-section.

I want to draw your attention to the green side, and this is really important for any large-scale collaborative, which is all the partners I spoke about at the beginning slide. We had Medicaid, our Medicaid agency very involved, both for fee-for-service and for managed care organizations. I'm going to talk about that in a subsequent slide. Our health plans were engaged. Our purchasers talked about it. So, if you start getting employers talking about it with hospitals, that catches their attention. Our public health departments gave awards, and we did public reporting. We'll get to that in a moment because that was super important. Next slide.

So, when you look at a QI initiative, you always again, see the variations in care, and looking at this histogram of hospitals, this is the hospital count by the rates. Let's look at the blue here first. The blue is 2014. The blue turns to purple in the overlap, so you have a blue distribution curve. That one up there. In some hospitals that was even as high as 50 percent. And in the blue, there were some that were in the teens. So, over the course of the collaborative, we shifted the curve, the red curve, which is pink, and then the purple population overlap, you can see three things. The mean rate was lower. There was a significant narrowing of the distribution, so that was reduced variation, and there were many fewer outliers.

Those are all three things that we were looking for to achieve. It also shows you that there is still room to improve because even though our mean rate is 22 for the entire state, our median rate was 22, and our mean was 23 percent, there were still a lot of hospitals that were in the high 20s, and even a few over 30 though there was a much fewer in number than before. Next slide.

So, again, what did we do to get recognition and transparency? Starting at the top where you see the mother and baby, this was Cal Hospital Compare. So, we had a website that we worked with. The CMQCC provided data for, for every hospital in the state. They used this as one of five quality measures for maternity care, and this was publicized pretty widely. Though to be honest, people who go to websites to look things up are largely hospital administrators. You don't get as much patient attention as you would like.

So, we actually took it a step further and contracted with Yelp to put it on the landing page for every hospital's maternity services in the state. So, this is where patients go. On the left side you see the comments, the subjective comments. "I liked nurses". "I didn't like the food", et cetera. On the right-hand side, you had the same measures that were on the website, with links to get more information. So, there is actually maternity care data on the website, on the Yelp site for every hospital.

On the far left, we had the Secretary of Health and Human Services give achievement awards to the CEOs of every hospital that met the national target of 23.9. We actually learned very well quickly that hospital CEOs love to get awards. I have grandchildren. They're in first and second grade. It is just like elementary school, everybody loves getting awards, and that actually filtered down, because the CEOs wanted to know why their OB unit wasn't getting an award, and that has actually increased the pressure.

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It's really about doing all of these things together, the recognition, the transparency. We're going to talk about incentives in a moment. But when you put all those together, you can really make a difference. Next.

So, the incentives that we're talking about are with the types of key players in the financial side, including a consortium called Smart Care California, which was purchasers and payers together so that everybody could recognize how this is an issue and how can we each do our share. Again, this is a tough issue. While Medicaid pays for roughly half the births, 40 to 60 percent in the state, hospitals aren't going to pay attention unless there's a lot of other purchasers involved, and payers involved. So, our Affordable Care Act organization started making noise and jawboning hospitals and health plans that they contracted with that they really wanted folks to pay attention and participate if they have high rates.

We had a number of our commercial managed Medicaid health add NTSV C-sections through their quality incentive programs. Sometimes it was recognition for participation in a QI project. Other times, it was actually meeting the target, so that varied. Our Medicaid agency, Medi-Cal, structured their 1115 waiver program to include incentives for their safety-net hospitals, formerly known as disproportion share, to be the NTSV target, and that actually had a lot of dollars on the line for that. But they weren't that high to begin with, to be honest. And then we now have something like 40 MCOs in California for Medicaid. Such a big state, and they're all needing to report their NTSV C-section rates to our Medicaid agency beginning this year. Next slide.

So, this disparity was mentioned significantly. But what's interesting about C-section disparity is it wasn't always that way. I was a resident in the 1980s, just full disclosure, and when I was a resident, black women had the lower C-section rate than white women. That changed in the 1990s. And it's actually gotten worse just in the last decade. So that's something that people like to say, well, you know, black women have higher C-section rates because of obesity, hypertension, or diabetes. That need not be the case, as we'll show in a moment. So, we did not focus our collaborative directly to reduce the disparity. We closed the gap, but it close by a third, from six percent difference to four percent difference. Now we're taking that to heart and really focusing on that and closing that gap completely as we go forward.

Next slide shows you, I think where we have opportunity here. So, this is the histogram again. This is only of black persons. You can see that there were a lot of hospitals that actually were doing well with black birthing persons. Had NTSV rates that were below 25 percent. But there were some that were 60 and 70 percent. And you could see now the red curve has improved, and there are a number of hospitals where the black persons C-sections rates are under 20 percent. But there were still a lot that are in the high 20s and 30s. So, there's real opportunity. But this really shows you what can be done, and it can be done locally. And I would encourage this kind of data in your state to show that it can be done. Next slide.

Okay, this is my closing lessons. First of all, I said several times, don't try this alone. You've got to have as many partner organizations as possible. So, this is not your grandmother's QI project. This is, you've got to get every partner organization you can think of to go with you on this. Hospitals and doctors need to hear that this is an agenda for every payer, every purchaser, and that this is important. It's not just another measure on the pile. This is important. Good and timely data is really critical. And, again, you can harness your birth certificate data, which should be preliminary data, it's just fine. That can calculate it. We use that extensively in our data center. We also can use the same data that they give to Joint Commission.

You really want to work with some physician leadership on this. Perinatal quality collaboratives are better now in 45-46 states through Aim and others are a good place to start. We've done this in California. Four other states are pretty active on this, including Illinois, Iowa, Michigan. Florida has been working on this. New York is about to start. So, there's real opportunity to work with a perinatal quality collaborative on this. And again, and again, and again, you've got to pull every lever in your quiver, in your thinking to make this happen. So, I'm going to turn this back over to Dr. Lotz. Thank you very much.

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[Doris Lotz] Okay, thank you Dr. Main. So, now it's time for some questions. Next slide, please. Let me just remind everyone that you can submit your questions through the Q&A window in the bottom right. Select "All Panelists" in the ask window, write your question and hit "Send," and then I will read the questions out loud, and we'll hear our presenters answer them. We'll try to get to as many questions as we can.

So, let's begin with a question that I believe it's going to be for Dr. Applegate, but I would encourage Dr. Main to answer too, and that's, "what do you think about implementing blended payments, which is paying the same thing for a C-section and a vaginal delivery, and its impact on NTSV section rates?" This particular person is mentioning that the blended rates are going to be a component of their value-based purchasing methodology. Thoughts on that?

[Mary Applegate] So, thank you for that question. I think what may have prompted that is my comment that in Ohio we pay the same for cesarean and vaginal deliveries, and so the question would be, do you want to blend them, and does that make it too complicated? I think, in the end, not providing additional financial incentives for cesarean deliveries may be one of the things that drives improvement.

The other thing that may help is just attention to administrative burden. So, I think that could work if that's how your state is set up. But thinking about the simplest solution that gets us to not inadvertently financially supporting what doesn't seem to be the safest mode of delivery that may be in order.

[Elliot Main] There's two angles to this one. One is what you pay hospitals, one is what you pay physicians. Physicians, in many states, get approximately the same now for vaginal delivery or a C-section. For physicians, it's not really about dollars. They're not going to do more C-sections because they like an extra hundred dollar. So, the C-section is about time and efficiency. Physicians make their living and support their staff by working in the office. They don't get much reimbursement for surgery anymore, or even for labor and delivery. It's office practice. Folks want to be at home with their families. They don't want to work 80 hours anymore a week. So, time management is really important for physicians, and you have to keep that in mind.

For hospitals, there always has been one, because many Medicaid programs pay on a per diem basis. And a per diem is always going to be longer with a C-section than a vaginal delivery, so that's a tricky one. If it's got to be as a package, I would encourage you to pay a little bit -- that the payment be more than the vaginal delivery, but less than a C-section. It could be cost neutral to you as an organization. That way you incentivize a little bit the vaginal delivery.

Now, having said that, that's not going to change things by itself. It really has to be one lever of many, and you've really got to think of that as just one practice in this process.

[Doris Lotz] Thank you. So, I have a question for Dr. Main. "Was there a single intervention that was most impactful? You talk about pulling all levers. But what might that single intervention have been? How did it work? How would you recommend getting started? Or do you really have to do them all?"

[Elliot Main] You'll get some benefits from each lever and some of the other states working in this having been pulling one or two, and they're not getting as much result. So, you'll get the results depending on how many levers you can pull. I think the most important ones are transparency and having all the payers and purchasers speaking in union and having a quality collaborative. So that's three big levers, of which there are sub ones. But I think those are going to be your significant ones. If you want a real change, you want to pull all those three levers of recognizing that they have smaller pieces to them as well.

[Doris Lotz] All right, the next question, I think, Dr. Applegate you mentioned something about doulas in your presentation. But, again, I'd invite either or both of you to speak to "the utilization of doulas and midwives outside of hospital settings? How can those options be centered in birthing supports without a facility-based industry, creating regulatory capture and deliveries?" There we go.

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[Elliot Main] Mary, you want to start on that from your view of as the Medicaid director?

[Mary Applegate] Okay. So, we are interested in offering options that birthing persons feel would work best for them. So, one of the surprises to me, for example, is that we have relatively few freestanding birthing centers for example, and how does it make sense that we have some of the lowest risk women still delivering in the highest cost centers, right? So, one of the things that could happen is freeing not just kind of a broader cadre of folks that can help with delivery, but helping the workforce more broadly, as well as the sites.

What happens in some places is our birthing persons are asked to sign a piece of paper that says they will not bring a doula to the hospital, because the obstetrical community in some places feel that doulas are disruptive, and when heart tones are 30 or 40 [beats/minute], there is a shouting match about the necessity of a cesarean delivery, for example.

On the other hand, women do need support during labor, and the reality is that the nursing staff in hospital settings may not have the time that they'd like to take with each and every single person. So, I don't know that we have figured out the entirety of this. We were watching carefully during the pandemic to see if our home deliveries increased a fair amount. And as a pediatrician being on the receiving end of calls for CPR [cardiopulmonary resuscitation] and whatnot in people's homes, I was somewhat frightened. I think we do want safety first, but we also want what our birthing persons are comfortable with.

So, I don't know that I have all the answers here, except that the dynamic that seems to be polarized: doula and expanded workforce, against the big rich health system, [this] is not the dynamic that we're going for. We'd really like the existing health systems and communities, including doulas and other personnel, to be in arm's length on behalf of the women that they're actually trying to serve. So, our maternity medical home we're hoping gets there and incorporates doulas. We couldn't agree on the pricing, so that's why they're not part of it when we first start. But we do have an independent track for them, and we'll have to let you know how that goes.

So, I think other states, perhaps in the northwest, and possibly, Dr. Main, in your neck of the woods may have more experience in how to successfully implement better care utilizing that broader workforce. Dr. Main

[Elliot Main] Sure. Thank you, Dr. Applegate. There are important goals here that we can't lose, but there are important challenges that go with them. Certified nurse midwives, I think, are finding a niche, and finding a real home, not just a niche, in many, many states. And we have about 12 percent of the births in California delivered by CNMs, and they are welcome in the hospitals. They do some deliveries in birth centers, not many deliveries at home. Many of the home births are licensed midwives, different terms in different states, that have quite a bit less training than a CNM, and that's where there's challenges with the medical profession.

The medical profession largely feels like if you're going to be a birth attendant, like a midwife, our midwives in America should have the same basic training as a midwife in Bangladesh, and that is not the case with licensed midwives by and large. So, we don't have the system by and large for supporting home births in the U.S. like they do in England or the Netherlands, and that has to be worked out.

The doulas are an important role for labor support. Actually, in California, in our registration this year, we are going to be including doula payments in our Medicaid program. It is all about the details however, how much are we going to get paid and so forth, and how do you integrate them in the hospitals? None of that is covered in the registration. It has to be worked out in legislation. And either the amount of payment that's being requested is pushing the same level as a physician would get paid in Medicaid delivery. Medicaid is underpaying obstetric services across the board, and so that's a source of friction right now. We put that off for almost a year to decide what to do on it. However, there is some experience that hasn't been taken up quite as much as expected in Minnesota, in Washington, and Oregon, where they have it kind of worked out, but it's not a good volume, to be honest.

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We do think everyone does need labor support. How doulas work in hospitals, isn't something that Medicaid can actually legislate, because what happens in hospitals is covered by very different rules, and so it gets very tricky very quickly. I think it can be done, but both sides have to give a bit.

[Doris Lotz] Thank you. So, we'll be hearing a little bit more about doulas in one of our upcoming webinars. We will also have a webinar that's going to focus on how to generate this measure [LRCD] using your data, and then how to use it for quality improvement, so two webinars that are coming down the 'pike.

One last question, probably time only for brief answers, but to both Dr. Applegate and Dr. Main, "who are your key stakeholders? Who is a stakeholder you couldn't have worked without?"

[Mary Applegate] Dr. Main, if you like, I'll give a really brief answer, in part, because one of the things you did not highlight [is that] for success with your perinatal quality collaborative and your hospital associations, you created a culture of your obstetrical community all working together, so that's actually not a given across many of the states. That is one of the key values of the perinatal quality collaborative, is the routine convening and relationship building and sharing of data that actually creates a community, all focused on the outcomes that we want. So, I do want to give you props for that.

Perhaps we try to engage as many individuals and provider types as we could. We recognize that as we're working during the pandemic, this was very challenging. We also wanted to invite the community supports, including midwives and doulas to help be part of the solution. And as I mentioned, we didn't totally land that exactly the way that we had hoped, but at least we're making progress forward.

So, the professional obstetrical communities with the Ohio chapter of American College of OB-GYN, for example, the family physicians, as well as the nursing board and others, were absolutely key to our effort here, and I think, Dr. Main you'll talk a little bit more about the perinatal quality collaborative.

[Elliot Main] Well, I think you nailed it really well. I would add, besides the Hospital Association, you've got to get the rest of the payers on board, you know, so that Blue Cross/Blue Shield is talking the same thing as Medicaid, that this is important, and we're going to be judging our hospitals on this, and we may put it in our incentive plans. But that really is very powerful, as is transparency. You know, seeing these numbers in newspapers and on websites is very important, and if you can get Yelp, that's even cooler.

[Doris Lotz] Thank you so much to our speakers. Kristen Zycherman, Dr. Main, Dr. Applegate. Lots of good content here. The slides and the recording will be posted in about two weeks on Medicaid.gov. I'm going to turn it over to my colleague, Kate Nilles, who is going to race us through a few announcements and then wish you all a good afternoon. Kate, what have we got?

[Kate Nilles] Thank you, Doris. As Doris said, the webinar recording and slides will be available on Medicaid.gov in about two weeks. We are working to finalize the dates and times that best accommodate our speakers' schedules for the upcoming webinars in our series. Once we have finalized the dates and times, you will receive an e-mail announcement, just as you did with this webinar with the registration link. Next slide, please.

For additional resources on the content that was discussed today, please visit the Medicaid.gov website and the active hyperlinks listed here. Next slide, please.

We greatly appreciate your attendance and participation in today's webinar. As you exit the WebEx meeting, you will be prompted to complete an evaluation. We would very much appreciate your thoughts on today's webinar. If you have any questions or we didn't have time to answer your question during today's webinar, please e-mail macqualityimprovement@mathematica-mpr.com. That concludes today's webinar. Thank you all again for your participation.