Welcome, everybody. We'll wait here one more minute so that everybody has a chance to join the webinar. It's 2:00. We had about 300 people registered. And I think they're kind of flooding. I'm watching the participant list grow as we speak.

[INAUDIBLE]

You have been muted. All right. We are going to get started. So, welcome everybody. My name is Sherrie Rudick. And I am the Product Coordinator for the HV-ImpACT and I will be your host for today's webinar. And I want to welcome everyone to this webinar. The topic of course, is the emerging crisis of opioid addiction, implications for home visiting. And I know that you all know that this is an important topic. It's one for which there is a lot of interest in the home visiting community.

When our TA specialists conducted the initial regional needs assessments a little while back, this topic emerged command the top 10 topics that people were interested in. And it has also been shared with us as a top HRSA priority. So we have had a lot of interest. There will be over a couple of people joining us on this webinar.

And of course, not only is there a lot of interest in the home visiting community about this topic, but there is really a lot of interest in the country overall about this topic. And I kind of think there's not a day goes by when I don't see or hear some kind of news item about the crisis of opioid addiction. And so it's a very important and timely topic. And almost coincidentally, since we did start planning this webinar quite a while ago without knowing this, we have found out that the president proclaimed this National Heroin and Opioid Awareness Week, so we're right in sink.

I wanted to start off by sharing some of the logistics for the webinar. First, please know that the webinar is being recorded and once we make it 508 compliant, as with all webinars, we will be posting it or it will be posted on the HRSA website. On the left, you see the open chat box. As we've done in previous webinars, please feel free to use the chat box throughout the webinar to post your comments and your questions.

We have a really, really packed agenda today, as you'll see in a couple of minutes when I go over the webinar, so we probably won't have time for verbal questions and answers with these two presenters. But if you put your questions in the open chat on the left, our presenters will try to answer the questions right in the chat box. We'll also be having a number of polls throughout the webinars as we've done before. And when the polls come up, we will temporarily close the chat box so that you'll be answering only in the poll box, and then we'll open the chat again when the polls close down. So that the chat logistics.

Also wanted to alert you to the files pod at the sort of bottom right of the screen. We have three handouts that you can download in that pod, an excellent new publication from SAMSA called the Collaborative Approach to the Treatment of Pregnant Women with Opioid Use Disorders, a recent information memorandum about the Child Abuse Prevention and Treatment Act, and then a simple user friendly handout on pregnancy and opioid pain medications from the Centers for Disease Control and Prevention. And you'll notice we have the links for those in the chat box and we'll also include the links at the end of the webinar.

The chat box also has the link to the evaluation survey, and that will come up automatically at the end of the webinar. We really value your feedback. I think you know that. And we really encourage everyone, including the HRSA Project officers to fill out the evaluation.

I would now like to introduce today's presenters. I'll give a brief intro now and a longer one as I introduce each one later. So we are very excited to have for real experts wtih us today to talk about the issue. Dr. Steven Patrick is a neonatologist whose research focuses on improving outcomes for opioid exposed infants and women with substance abuse disorder and evaluating state and federal drug control policies.

Dr. Trisha Wright is an obstetrician gynecologist and addiction medication specialist. Among other things, she chairs the Women and Substance Use Disorders Work Group for the American Society of Addiction Medicine. And Dr. Leena Mittal is a perinatal psychiatrist, who specializes in addiction in postpartum mothers. And finally, Mary Lynn Hersey is a TA Specialist with the Maine Families Home Visiting Program.

So here is the agenda. Dr. Patrick is going to lead us off with an overview to the emerging crisis. He'll talk about the history of opioid use, current trends, connection between opioid use and substance abuse exposure in pregnancy, neonatal abstinence syndrome and federal policy. Dr. Wright is going to focus on substance abuse disorders in pregnant women, some traditional approaches to addiction in women and some consequences of these approaches that lead to possibly more effective approaches, and about how we can assemble teams to integrate systems of care.

Dr. Mittal is going to talk about pregnancy as a window of opportunity for working with women with opioid use disorder, some challenges faced by these women and ways of mitigating those challenges and a model for helping moms overcome barriers to addressing perinatal substance abuse disorder that's been used in Massachusetts and has the potential, and in fact, is being replicated in other states and has really the potential of offering some ways and building stronger connection with home visiting.

And finally Mary Lynn Hersey is going to provide the Grand Key Recipient perspective and talk about how the Maine Families Program responded to its rising concerns of the opioid use and impact on families with newborns, first at the local level and then at the state level. So we have four objectives for today, explain treatment options

and barriers to care for pregnant women, discuss treatment of infants experiencing neonatal abstinence syndrome. We're going to give examples of what states can do to improve infant and maternal health outcomes for families and identify strategies to integrate home visiting services and into coordinated systems of care.

And we're going to take just a minute to ask you to complete two polls, a ranking poll and a short answer poll. The ranking poll is, which of these objectives are most important to you? Please select all that apply. And the short answer poll on the lower left is a place where you can write in your own open ended objective. And we'll give you just a minute or two to do that.

OK. Don't forget, in addition to the two things, the objectives that are most important are objectives that are most important to you. If you have some thoughts about your own objectives, what you hope to get out of today's webinar. OK. Thank you. I see that some people are starting to type in there own. So that's great So some interest in neonatal abstinence in states, how to attack it. How to know if family are abusing. So a couple of really important questions.

And I'm going to give another few seconds to complete that. I'm noticing we have now over 150 people on the webinar. OK. I don't see the poll moving any more. So let's take down the poll. And we have one more poll activity that we want to look at to get us started. So Betty, if you would close the polls, I'll bring our next slide, which is jump start the brain.

So jump start the brain is a way for us to frame our thinking about the topic and to think a little bit about what you already know about this topic, that as I said, you've been concerned about and has been so much in the news. So we have five polling questions that we'd like you to answer. One is a multiple choice, number two. And then four that are truth or miss questions. And so, we'd like you to answer all of the questions in the next couple of minutes.

All right. So let's take down the poll. And I am going to introduce our first speaker, Dr. Stephan Patrick. Dr. Stephen Patrick is an Assistant Professor of Pediatrics and Health Policy at Vanderbilt University School of Medicine and an attending neonatologist at Monroe Carell Jr. Children's Hospital at Vanderbilt. He's a graduate of the University of Florida, Florida State University College of Medicine, and Harvard School of Public Health.

He completed his training in pediatrics, neonatology, and health services research at the Robert Wood Johnson Foundation Clinical Scholar at the University of Michigan. He joined the faculty of Vanderbilt University in 2013. And he has research funded by the National Institute on Drug Abuse, which focuses on improving outcomes for opioid exposed infants and women with substance use disorder and on evaluating state and federal drug control policies.

He previously served as Senior Policy Advisor to the White House, Office of National Drug Control Policy and have

testified before Congress on the rising numbers of newborns being diagnosed with opioid withdrawal after birth. He currently serves as an expert consultant for the Substance Abuse and Mental Health Services Administration's development of a guide to the management of opioid dependent pregnant and parenting women and their children. So, Dr. Patrick.

Well, thanks for such a great introduction. I'm excited to speak with all of you here today. The work that you all do in your communities is so vital and I think it's really a path forward to thinking how we improve outcomes for both women and infants affected by the rising opioid epidemic. So today I'm going to pretty quickly cover a lot of ground. And we'll kind of break it up like this as you see on your slide.

We'll talk about a brief history of where we've been with opioid use in the US, trends in opioid use, substance exposure in pregnancy, NAS, and then we'll close with some recent federal and state policy changes. Let's get right to it.

So I would think it's important for us as we think about our population that we care for, pregnant women and infants, to really look at that in context. And you know, the Surgeon General recently has been really focused on helping us all understand our roles in the prescription opioid epidemic and how we can combat them. And of my favorite quotes that he says is that the path that we find ourselves on with the opiate epidemic was paved with good intentions.

And that's true if we look back to the early 1990s. When we began acknowledging the pain as the fifth vital sign. You know, there's an acknowledgement at that point that we were likely undertreating pain in many communities. And we saw a ramp up of the perception of pain and how we treated pain, and really a much, much more intense focus on pain at our hospitals. Soon thereafter in 1998, the Federation of State Medical Boards published model guidelines for the use of controlled substances for the treatment of pain. And then shortly thereafter, we started seeing some troubles.

The New York Times in 2003, reported that there was a doubling, actually excuse me, a tripling of opioid misuse among young adults age 18 to 25. In that same year, both the DEA, the Drug Enforcement Agency and the Food and Drug Administration created a task force to crack down on internet sales of opioids. So in 2007, the maker of OxyContin, Purdue Pharma, plead guilty to criminal charges that they misled doctors, regulators, and patients about the drug's risk of addiction potential and the potential to be abused. And that led to a landmark settlement of $600 million.

So what we've seen is, again, we started with an increased focus on thinking about treating pain. And it's a bit of a perfect storm when we think about how drugs were marketed, how we perceive pain, and we saw a pretty rapid expansion of opioid use throughout the United States. And let's talk about that again, briefly.

On this graph from the Centers for Disease Control and Prevention, you'll see on the y-axis is rate, and on the x-axis is year. Over the last decade or so, we've seen about a quadrupling of sales of opioid pain relievers. And it looks like the legend may be missing a little bit on the slide, but the other graph-- so you see the other, the dotted line has opioid pain relievers sales, which have quadrupled over the last decade, a similar rate of treatment facility admissions attributed to opioid use disorder, and a similar increase in deaths attributed to opioid pain relievers.

Really a stark increase. And again, we can see that as we've seen an increase in the number of sales of these powerful medications, we've seen an uptick in requirement of treatment facility admissions and unfortunately in overdose deaths as well. I see a comment that my voice keeps cutting in and out. Perfect. OK. Well I'm going to pick up my phone anyway to see if that helps.

Well, if we take this all together, prescriptions for opioid pain relievers grew by about four-fold over the last decade. But today deaths from opioid pain relievers account for more than cocaine and heroin combined. And more people die in the United States from opioid related overdose deaths than car accidents. And for me, this is striking. Because I think we can relate to car accidents. It's something we see commonly. But increasingly we're seeing more and more of our communities affected by opioid use.

In 2012, there were enough opioid pain relievers prescribed in the United States to give every American adult one prescription, just a staggering amount. In my community in the State of Tennessee, we have about one and one half prescriptions per adult. Again, just striking. If we step back and think a little bit about where we fit in the rest of the world, in the United States, we account for about 4.6% of the world's population, but 80% of the world's consumption of opioid pain relievers. Again, just showing the troubles that we're experiencing in the US.

Here again is a map from the Centers for Disease Control and Prevention. If you look in the bottom right, it's the scale, it shows the legend there. And I think even just looking at this is striking. It's the number of painkiller prescriptions per 100 people. And the high end of that legend goes to 143.

As I said before, about one and one half prescriptions per person in a state. And you can see many of our states, including the states that surround me and where I currently live and where many of you live, we see the middle part of the US with really high rates of prescribing. And these are particularly states, and the state where I live, a lot of short acting opioids, like Vicodin, Hydrocodone products, are sold at a high rate and in the Upper Northeast we see in some cases, higher rates of a long acting opioid prescribing.

OK, I'm moving rapidly ahead. I know I'm talking fast and trying to fit everything into a period of time, and perhaps I've had too much coffee too. But moving on to substance exposure during pregnancy. Again, data from the Centers for Disease Control and Prevention, this is the proportion of women of childbearing age, 15 to 44, who

filled a prescription for an opioid within the last year. And you can see here that about a third of women of childbearing age had at least one opioid prescription in the last year. Again, just showing how common these medicines are.

I also think it's really important that we step back and think about other drugs. Because what we've seen repeatedly throughout even just the recent history, we super-focus on one drug, like cocaine, or now with opioids. And the truth is that our goal should be healthy moms and healthy babies. And that can't be accomplished if we super-focus on one drug and if we over-stigmatize, certainly one in one part of a substance use disorder or substance use disorder at all.

So if we step back and we look at where we are in terms of substance use in pregnancy, it's really not that uncommon. We know that around 18% of pregnant teenage girls use some illicit drugs in pregnancy, and 9% of pregnant women age 18 to 25. Overall about 6% of women of childbearing age who are pregnant use some illicit drug in pregnancy. It's also really important to know that that's much lower in the general population. Certainly in my experience, pregnancy is a time where people are making life changes. It's a time to engage people in treatment, and people are trying to make healthy decisions. And so I think this is reflective of that.

It's also really important for us to talk about legal drugs that are used in pregnancy. Almost 18% nationwide, people smoke during pregnancy, and 9.4% used alcohol in pregnancy. And we know that alcohol use is the number one preventable cause of developmental delay in children. So it's really important that as we approach our public health approaches to stemming the tide of the opioid epidemic, we really have to look at all substances with regard to pregnancy.

When we look at everything together, the Substance Abuse and Mental Health Administration estimates about 440,000 infants are exposed to illicit drugs and alcohol per year. But we only detect about 5% at birth. Again, and just really pushing forward the point that we have to look beyond birth and beyond just one substance. Let's turn it over to Sherri for a quick poll.

OK quick poll indeed. Thank you, Dr. Patrick. So, I think we heard some pretty stark statistics, I was especially struck by the comparison between our country and the rest of the world. And we just wanted to ask quickly, what you're finding out there. So how has opioid use disorder affected your state or territory? And Betty is going to bring up a poll. And we're going to give you a couple of minutes to share some answers.

OK, there's like a little time lag here, and I knew you were typing, but I hadn't seen any answers. But now we see Utah says they're high. There are some issues where there's some disconnect with health care. It's in younger mothers. Just talking about the ease of prescribing, how quickly CPS gets involved. High numbers of substance abuse newborns. CPS is the big theme here. And talking about rural areas in frontier and outlier areas where it's a

problem. Ah, [INAUDIBLE], Virginia, which is the state that I live in as well.

And some fear-- and we're going to really talk about his later in the webinar --of women reporting that they're afraid to go to the doctor, that really relates to some of those treatment approaches that Dr. Wright is going to talk about among others. So, great. Thank you. We've got a lot of quick information there. And I'm going to pass it back now, have the poll come down now, and pass it back to Dr. Patrick.

All right. Thanks, everybody, for your feedback and thoughts. All right. So we're going to move on to talking about neonatal abstinence syndrome. And I think that one of the questions that was brought up earlier on is, does this have other ways to phrase the neonatal abstinence syndrome, and yes, it can also be called neonatal opioid withdrawal syndrome. And we're going to talk about what that means here.

So what is NAS or NALS? Well neonatal absent syndrome is the withdrawal syndrome experienced by a drug exposed infant shortly after birth. It generally follows an opioid exposure. In fact, it almost always follows an opioid exposure. Though there have been other drugs that have implicated. If you look at the literature, you'll find withdrawal syndromes from alcohol, benzodiazepines, which are drugs like Valium and barbiturates, drugs like phenobarbital. But again almost always, withdrawal occurs after an opioid. It's important to note that many drugs do not have withdrawal syndromes, but opiates do.

Around 40% to 80% of heroin or methadone exposed infants develop neonatal abstinence syndrome. From some of our work it actually appears that a much smaller proportion of infants that are exposed to opioid pain relievers. And again, these are drugs like Vicodin or Opana. A lower proportion of those infants end up having drug withdrawal. Well so, it looks like we've sorry about that it looks like-- well, you can imagine what that's what it looked like before. So before I usually have a slide of a baby being handed off to an awaiting pediatrician.

What you can imagine is that an infant's been exposed to an opioid chronically before birth, and then at the time of delivery the chord is cut and then opioid exposure stops. And then sometimes we end up with a baby who looks pretty displeased with us, as they're having kind of drug withdrawal after they've kind have not been exposed to opioids. And then over a period of time, usually 24 to 78 hours, they develop kind of drug withdrawal. What does that look like?

Well, here's some common signs of drug withdrawal or neonatal abstinence syndrome. Poor feeding, vomiting and loose stools, can lead to dehydration and poor weight gain. Certainly you've seen babies lose up to 15% or more of their body weight within that first period of time. You know, importantly, as you all know it's not uncommon for babies to lose a fair amount of weight right after birth but it tends to be more profound in this population. Tremors and hypertonia, which is increased muscle tone and rigidity, irritability and decreased sleep.

I'm sure you can all relate. I usually describe this as a colicky baby times five. I know having my own babies and their fussiness in our house, many of us can relate to what that looks like. They have exaggerated reflexes, like the Moro. And the Moro is the very cute startle reflex that babies do. This can be exaggerated in babies. They can have seizures. Tachypnea or fast breathing, yawning and dilated pupils.

How do we make the diagnosis? Well importantly, not everything substance exposed or opioid exposed infant develops withdrawal. For us as pediatricians, it's really helpful to have a history where we know opioids have been used. And that can come from drug screening information. Hopefully it's come from a relationship with an obstetrician where we can communicate back and forth. But once we know that an infant has been exposed to an opioid, how we make the diagnosis is based upon a scoring tool.

And I'll show you what this looks like. This is something called a modification of the Finnegan score. So this originally was developed in the 1970s. And so you can see somethings that look super objective. So things like fever, I feel like I can diagnose fever pretty easily with a thermometer, right?

But you can see how some things are pretty subjective, things like defining the definition between regurgitation and projectile vomiting. You can see where some of these things can be pretty subjective. And that has actually been documented where we see a lot of differences between scoring from provider to provider. Well, how do we treat neonatal abstinence syndrome? Well, the goal of treating neonatal abstinence syndrome is first to begin with the environment.

And we begin by controlling the environment, keeping mom and baby together where we can, promoting breastfeeding when it's appropriate, and we create an environment hopefully that is not stimulating. You can imagine what a NICU is like, if any of you have spent time in a NICU. It's pretty loud. It can be a really chaotic environment. And that's not the greatest place for an infant who's having drug withdrawal. So we've been trying-- many institutions have been trying to move infants out of the NICU for this reason. But for some infants who have severe withdrawal, we treat them with an opioid, like morphine or methadone and slowly decrease the dose. And that can last up to a few weeks, sometimes longer in our US hospitals.

So this is some work from our group. I showed you guys a bit ago an increase in opiate prescribing and complications. We wanted to know if we've also seen an increase in the number of infants diagnosed with drug withdrawal. And this is from a series of studies. Here on the y-axis, you see rate of neonatal abstinence syndrome per 1,000 hospital births. And on the x-axis is year. And what we've seen is that there's been about a five-fold increase in the number of infants diagnosed with drug withdrawal over the last decade or so. And in 2012, about one infant was born on average every 25 minutes having drug withdrawal, a pretty stark increase.

This is just looking again by US geographic division hospitals, excuse me, communities or states are grouped

together by about four or so. You can see a differential difference between state to state. So certainly where I live and in our surrounding states, we have a rate of neonatal abstinence syndrome that's about 16 per 1,000 births, which is 3 times the national average, similar to the upper Northeast which is about 13 per 1,000 births. You can see a little link that we have to our website as well, vu.edu/naf. This has an interactive map where you can click on different parts of the country and some additional resources as well.

And this is just some recent data if you're wanting to know state by state data. The CDC released a report about a month ago now on neonatal abstinence syndrome and this corroborates. I saw some of the comments that were earlier about West Virginia, my birth state. So West Virginia does have the highest rate of neonatal abstinence syndrome, about 30 per 1,000 births, followed pretty closely by Vermont and Maine. So again, just another resource to point you to. And again, showing how variable this is, West Virginia as an example, has been disproportionately impacted by the opioid epidemic, having the highest rate of opiate related overdose deaths as well.

OK, what about after discharge? I think is particularly relevant to you all. Some of our research suggests that infants with neonatal abstinence syndrome are about two and one half times as likely to be readmitted into the hospital when compared to uncomplicated term infants within 30 days. And for me that's really sort of empathizes, how can we use things like home visitation to really improve post discharge outcomes?

Also it's important to know, and we heard a little bit from some of the polling data, the involvement of DCS. There's some recent data from a collaborative, a national collaborative to improve care for NAS, in that we audited around 4,000 infants with neonatal abstinence syndrome, about 25% of whom were discharged to someone other than a parent, and commonly in foster care. So as we think through how we use home visitation, how we improve post discharge outcomes, involving our child welfare system is important.

I'll turn it back to Sherri. Are you all still with me.

[INAUDIBLE]

So, let's bring up the poll, Betty, and give people a chance, now that we know a little bit about NAS to talk about what you have found again as major challenges and successful strategies in your states or territories. And I know you're typing away. I remember that there's a little time lag. All right. Lots of training. Talking about those soothing strategies and I think that Patrick's point about after discharge being a really important point of intersection with home visiting programs was an important one to pick up.

And we even have a preview of the SBR process that we're going to talk about in a little while and breast feeding. And so you guys are right with us really in terms of some other things that we're going to talk about in the rest of

the presentation. So, it's good to think and to see that you've been really thinking along with us and even before us about these issues in your own geographic area. So I'm going to take the poll down. I told you that we had a really packed agenda. And I want to make sure that we have some time for our experts and I'm going to turn it back to R. Patrick to talk about policy, again an interest for you.

OK, we're going to close pretty quickly with just kind of a brief overview of some recent policy changes. Well, early last year, the Government Accountability Office released a report specifically on prenatal drug use and newborn health. And in part, the biggest recommendation really was around coordinating efforts at the federal level. They found there were 14 different programs that were federal that applied to this population, but they weren't well coordinated.

They also in that report, highlighted a bunch of research gaps that are being slowly addressed. If you fast forward a little bit, there was a bill-- and this is on the third bullet. My apologies for the disconnect there. But shortly thereafter there was a bipartisan effort, a Democrat from Massachusetts, Katherine Clark, and a Republican from Kentucky, Mitch McConnell, put forth legislation called The Protecting Our Infants Act. And that Act basically put forth a lot of the things that GAO found that were lacking, including improving research and coordinating efforts.

I'm going to move ahead here, but lastly you guys probably all heard about the Comprehensive Addiction Recovery Act, which passed both the House and the Senate in the last couple of months. It was signed by the president. It had a broad approach to addiction and to expanding treatment, including pregnant women and infants, and promoting a safe discharge plan, safe plan of care for infants. Importantly however, this was not fully funded. So many of the provisions still await funding from Congress. As I heard somebody put it in the last month, it's as if they built a Ferrari and forgot to put gas in it. Now hopefully we'll see that fully funded in the coming months.

OK in the interest of time, moving ahead, well look, opioid misuse is not new. But the recent rise of opioid use and neonatal abstinence syndrome has really left our health system unprepared. And I think innovations like home visitation are going to be really important in our thoughtful response moving forward. Care for NAS needs to be coordinated across states and across different providers and public health approaches are really needed. Lots folks to be thankful for, including our funders, the National Institute on Drug Abuse, and that's it for me. Thank you all for your attention.

OK, so now I have the privilege of introducing Dr. Trisha Wright. So Dr. Trisha Wright is an obstetrician gynecologist and an addiction medicine specialist. Her research interests include substance use disorders among pregnant women, including barriers to family planning, screening, brief intervention, and referral and treatment, SBR, which you guys already mentioned in the chat, best practices for treatment, and the effects of meds,

amphetamine, marijuana, and tobacco on the placenta. She serves on several important committees of ACOG, and she also chairs the Women and Substance Use Disorders Work Group for the American Society of Addiction Medicine.

She lives out in Honolulu, Hawaii, and she is an Associate Professor of Obstetrics, Gynecology, and Women's Health for the University of Hawaii. Welcome, Dr. Wright.

Thank you for that wonderful introduction. Can you all hear me?

Yes.

OK great. So we'll start with some facts on why women are so impacted by this opioid epidemic. So women were more likely than men to report use of prescription opioids, 29.8% of females versus 21.1% of males. And they were also more likely to be given opioids for pain and at higher doses. So we know that up to 40% of patients given opioids for chronic pain will develop a use disorder. So women are especially vulnerable to opioid use disorders. And so that is why the moms and their babies are so disproportionately affected.

What about co-occurring disorders, which are so of course important in our women with substance use disorders? About two thirds of women with substance use disorders have co-occurring mental health disorders, depression, anxiety, post-traumatic stress disorder. And they are more likely than men have to depression and anxiety. So it's a very important, and I think Leena will talk about the importance of treating the co-occurring disorders. About 80% of women will have a history of childhood sexual trauma or intimate personal violence.

So that it doesn't occur in a vacuum. It's not like women start using substances during pregnancy. They start out with very poor social situations, a lot of abuse and neglect, and then develop a substance use disorder and then become pregnant. And so, programs that tackle women with substance use disorder need to address all of these issues to be most effective. And treatment must account for [? conception ?] issues in women of childbearing age. So women who are started on medication for their co-occurring disorder or for their substance use disorder need to be counseled on contraception and really allowed to think about that before medications are prescribed.

So what do we know about substance use disorders [AUDIO OUT]

--and pregnant, poor diet, homelessness, poverty, and the interpersonal violence that they occur in.

So what are the traditional approaches to addiction in women? So one of the first one, and I think there's a discussion about this, is calling child welfare services because women with addiction are not fit to parent. A second approach is to arrest her. She'll stay clean at least while she's in jail and baby won't be affected. And then

the third approach was to make enrollment in drug treatment a condition of discharge when she is arrested. And these all definitely have some adverse outcomes and some consequences, unintended consequences to all of them, the main thing being that women are afraid to get prenatal care which can ameliorate the bad outcomes from a substance use disorder. If we can treat women, we know that their pregnancy outcomes can be normalized.

So the consequences of this approach, as I mentioned, fewer women get access to prenatal care or treatment. There's motivation if they're made to enroll in drug treatment as a condition to get discharged. They're motivated to get treatment, not necessarily participate in treatment. There's definitely a fear of discovery, fear of disapproval, fear of prosecution, fear of treatment, and fear of losing her children. And there's a [INAUDIBLE] This is a quote from one of my patients. I want to have another baby to fill that hole in my heart from missing those two months that they are separated. And that leads to repeat pregnancies. Myself and others have seen that the number of children and pregnancies that these women have is much higher than the general population.

So what does work, and I'm glad to see this was mentioned in one of the questions, is that SBR definitely works. And this is something that home visitors can play a role in, because we all have the ability once we've-- one of the most important things about SBRs and the brief intervention part is developing a rapport. In Hawaii, we call it talk story with a patient. And if you're visiting the home, you're in an ideal place to develop this relationship.

So what does SBR stand for? It stands for screening, brief intervention, and referral to treatment. So screening can actually be done by anyone. It does not have to be done by a physician. Certainly if it's billed in a medical setting, then the physician has to be at least part of it or a physician extender. But screening can be done with validated screening tools by anyone. And then the brief intervention and the motivational interviewing piece can be done by anyone.

There's models of care that have it provided in physicians offices by the medical assistants or by ancillary health workers. And this is something that I think would be an ideal thing to do if you are seeing signs of it, or if you've developed a rapport with a family and see problems that, knowing what the resources for treatment in the community can be so that you can make these referrals.

So as I mentioned, screening needs to be universal using validated screening tools. The reason for universal screening, even though there might be higher rates of substance disorders in lower socioeconomic class families, there are higher absolute numbers in higher socioeconomic classes. And they actually tend to be more substances with higher effects, such as alcohol and tobacco. You know, in the women who are using alcohol in higher socioeconomic classes are less likely to stop using when they become pregnant.

So brief intervention, using motivational interviewing techniques as I mentioned. And then a referral to treatment,

knowing the referral in the community. And it's best if it's a warm handoff, meaning you make the call yourself, saying, I have so and so who is interested in treatment. Can I give you her number? Or this is so and so. I know him or her personally. Please see this patient.

So talking about treatment and changing gears real rapidly, sorry we have so little time. But switching gears to treatment of opioid use disorders in pregnancy and the three choices that we have. There's Medicaid assisted withdrawal, where the woman is withdrawn from her opioids. Just as the baby goes through withdrawal, so does the mother go through withdrawal. And if the pregnant woman is going through withdrawal, then the unborn child is going through withdrawal, the fetus is going through withdrawal.

And this was long thought to be extremely harmful. Actually it's not a good thing, because just as mom is having these symptoms, and if you think back Dr. Patrick slides and the high pitched screams and all the things that baby is going through, the fetus is actually going through the same thing and we can't really monitor. And there were some reports of stillbirths and things like that. So for a long time that was thought to be avoiding that for the reason that we didn't want to cause a stillbirth.

But the recent reports have shown that it's not necessarily one incidence of withdrawal during pregnancy is not associated with adverse pregnancy outcomes. But however the real reason why it's avoided and it's actually avoided in non-pregnant populations also is because the high rates of relapse to their substance use disorder. After six months of treatment, about 50% of women or without treatment, without medicated assisted treatment, about 50% of women will relapse to illicit opioid use, and by a one year about 90%. So with the relapse to opioid use there's a very high rate of overdose deaths. Because if someone had not been using for a while, their tolerance goes down quickly. However, often when they relapse don't adjust and use less illicit drugs than they were before and so they're much more likely to actually overdose and die.

So the reason why we keep women on opioid replacement therapy during pregnancy is for both maternal and fetal benefit. There's a 70% reduction in overdose related deaths, a decrease in risk of HIV, hepatitis B, and hepatitis C. There's definitely increased engagement in prenatal care and recovery treatment. And the fetal benefits are it reduces fluctuation in maternal opioid levels, reducing fetal stress. We do definitely see a decrease in intrauterine fetal demise and a decrease in intrauterine growth restriction and a decrease in pre-term delivery.

I am not seeing any slide. They're blank.

Oh, I have one that I know you can speak to that is breast feeding and NAS. Oh they're skipping like mad.

Yeah, I'm not-- This is the last slide I can see and after that, they're blank. Oh we can see the slides, OK. I am not able to see them.

What's this slide about and I can just talk about it.

Yeah. That's what I was going to say. This is Sherri and this says Maternal Dose and NAS Severity.

OK, so this is one of the myths at the beginning. What we found is that the dosage of either methadone or buprenorphine is not related to the incidence of neonatal abstinence. So women should be encouraged to report symptoms and not be suffering withdrawal symptoms because that's much more harmful than actually taking more medication--

Here we go.

OK, good. --without any effect on her baby's hospital stay or neonatal abstinence syndrome treatment.

OK. And then opioid use disorder and breastfeeding. So as far as the medications, the transfer of methadone into human milk is minimal and unrelated to maternal doses. And also buprenorphine, the same with that. Amount in human milk is small and unlikely to have negative effects on the infant. And if you think about it, if you know how buprenorphine is taken by people, it's sublingually, under the tongue or mucosally. So it actually doesn't get absorbed when it's taken orally. So if they swallow it, it does not get absorbed. So the same with breast milk, even if there were some in the breast milk, it would likely, very little would be absorbed.

So what about breastfeeding and neonatal abstinence syndrome? This is something that home visiting people can definitely be encouraging women to do, because they have a 30% decrease in the development of neonatal abstinence syndrome, 50% decrease neonatal hospital stay. You have improved mother infant bonding. And it's a positive reinforcement for maternal recovery, because they are doing something that's so beneficial to their babies.

And it can help also with tobacco relapse rates. If they're breastfeeding their babies, just using that as, saying, you don't want to affect your baby. You want to stay in recovery. Mention smoking cessation many times because it really is important. It increases the incidences of neonatal abstinence syndrome and other adverse pregnancy outcomes as well as long term maternal and child health problems. So obviously, we know how bad smoking is for the mom long term, but also for the infant, increased risk of sudden infant death, childhood asthma, and obesity.

It's so important because 63% of all women in addiction treatment smoke cigarettes. And it's traditionally not addressed in these substance use disorder treatment. It's thought to treat one addiction at a time. But when they've combined the two, it actually improve outcomes. Smoking cessation increases abstinence from drug use.

So what about the concept of the fourth trimester? So this is after birth. The role of the home visitor, I think, is very

important. The fourth trimester is a new term coined to encompass the postpartum and intrapartum period. It's extremely important relapse prevention. There's a lot of triggers for relapse during the postpartum period.

Postpartum depression screening can definitely be very helpful because postpartum depression in and of itself can be a relapse trigger, referral to depression treatment. The weight gain during pregnancy, using drugs can often be how they've lost weight in the past, especially with stimulants such as methamphetamine, which a lot of our women on opioids will use both. Obviously, the sleep deprivation, wanting to use drugs for extra energy. As I mentioned earlier, encourage breastfeeding as relapse prevention. And encourage continued tobacco abstinence.

And then also encourage contraception and adequate pregnancy spacing, because an unintended pregnancy can be a very big barrier to long term recovery. If they're just getting back on their feet, getting employment, and then another unintended pregnancy can be very important. And then also, this is becoming less of an issue, but definitely when we have state Medicaid coverage, a lot of them would only cover for up to six weeks postpartum, and so the women would lose their insurance coverage and lose their access to that medicated assisted treatment with either buprenorphine or methadone. And at this vulnerable time, you can imagine that they're cut off from their medication, that just as another relapse trigger.

So I have been asked to cut this short. So we'll just talk about assembling the team, because it definitely takes a village to take care of families affected with substance use disorders and pregnant women with substance use disorders. Obviously working together with the obstetrics provider, the pediatrician, having everybody talking. If the provider of opioid medications is one person in the middle, but obviously the arrows should actually go all the way around.

Having permission from the woman for everybody to talk to each other. A lot of times, we actually need signed permission to talk to each other. So getting everybody on the same team, getting the public health nurses, the home visitors, and child welfare all on the same team, so that we're all giving the same message to women and their family to really support recovery as the goal instead of a punitive approach. It should be a public health approach.

And then so, just what you can do as far as knowing about specialized treatment options, using motivational interviewing technique, participating in warm handoff, case management and care coordination, and engaging parent recovery coaches, which are people that have gone through the program before. All right.

Thank you. I did warn you all that we have a really packed agenda, with four amazing speakers and we want to give everybody a chance to talk. So now, I'm going to introduce our next speaker, Dr. Leena Mittal who's an instructor at the Harvard Medical School and Director of the Reproductive Psychiatry Consultation Service at Brigham and Women's Hospital. And she's also the Associate Medical Director of the Massachusetts Child

Psychiatry Access Project, otherwise know the MCPAP for Moms. And she's going to talk about that and about how that might intersect with home visiting programs. Her Clinical and academic interests include development of programs to provide care for complex perinatal patients with mental health disease and she still works in the field with students and interns and other people. So she's active in the field right now. OK, Dr. Mittal.

Thank you, Sherry. In the interest of time, I'm going to sort of breeze through some of these slides, some of which are kind of reinforcing the content from the previous speakers. But I think one of the-- I have two important point that I always think that are really, really key in doing that work and that I've learned over time. Number one, pregnancy is a motivating time, and that women who become pregnant who are using substances, see it as a time that they can improve their engagement in treatment, that they can attempt to quote unquote get clean, and even outside of substance use disorder, pregnancy is a time where we all think about improving our health related behaviors.

In the National Survey on Drug Use and Health, it's clear that women of reproductive age who are pregnant use illicit drugs much less frequently than those who are not pregnant. And in other studies, it's been shown that women who are pregnant are more likely to seek out treatment. And then even further, more likely after the pregnancy. So it's an important time.

And the other point that I think is the flip side to that is that women who are not able to stop using during pregnancy have a more refractory illness, have an illness that's harder to treat. It is not that they have a moral failing or that they are less strong or less motivated, but in fact their illness may be more severe. And I think if we can try to remember that substance use disorders are indeed a chronic illness, it can change a little bit the way we interact with these women.

What makes pregnancy different? When we think about why does this concept of substance use and pregnancy get people so concerned? How do we approach treatment differently in pregnancy? The focus has shifted from the mother, or from an individual, to a dyad, at a minimum a dyad, or a family unit. Risks will affect the woman and her fetus and eventually her children. Co-occurring psychiatric symptoms or substance use disorder symptoms, i.e, using have risks.

The treatment that we attempt to provide for these symptoms have risks. And then the postpartum period, which is a naturally occurring time will immediately increase risk for decompensation of both substance use disorder or mood disorder, anxiety disorders, a number of mental health conditions. As a recap, there are no FDA approved treatments for opioid disorder in pregnancy, but the main way of treatment is maintenance treatment. So using methadone or buprenorphine as Dr. Wright already described.

The other thing that's really important to think about is that the model of perinatal care is really an ideal time to

detect and treat mental health and substance use needs. At MCPAP for Moms, a big part of our goal is to engage primary care providers and women's health providers like obstetricians and midwives in increasing their capacity to detect and treat mental health disorders. 80% of depression, even outside of pregnancy, is treated by primary care providers, and not so much by psychiatrists like myself.

And the perinatal period is an even more ideal time because there are really a few other times in a woman life where she will be engaging and seeing medical providers as frequently as she will in the prenatal period. And then in addition engaging with community contact, like home visitors, like lactation consultants, like doulas. All of the elements of a team really are each opportunities to engage a woman in mental health or substance use treatment.

So I think we're going to skip this poll and just move on to challenges. So the things that make this population particularly hard and I think that I'm probably preaching to the choir here in this audience, the challenges that we all face in working with these women are the immense amount of stigma and shame that these women face and hold internally. And that can really be a barrier to all of our work and all of our best intentions with these patients or clients. And in particular, I think providers have to recognize their own emotional reaction to these patients, the sort of inherent concern about how quote unquote how could she do this sort of question.

And not to say that we don't all have them, but that they do inherently pose some challenges to our engagement with these patients. And that's what the patients are fearful of. There are currently legal issues that we have all noticed. We reference child protective services in the past. We've also thought about parenting capacity and custody issues and all of those things. Access to treatment is another major challenge to this population, thinking about how many providers are there for substance use disorders that are comfortable seeing pregnant women.

I consider pregnancy and mental health, the co-occurrence of pregnancy, mental health, and substance use needs as one of the most challenging type of patient to engage in treatment or to find treatment for because providers are uncomfortable with some aspect of that trifecta so to speak. And another really important challenge in this population as I'm sure you all know, is that it is really quite common because of all the previously stated challenges for these women to really and up engaged in care with medical providers and community resources later in pregnancy than other patients and clients because of all of the stigma, shame, the way in which they often will present later because of these challenges.

And so that shortens the window of time we have to seize upon this sort of high yield, potentially high yield time. But we also can think about what we can bring to the context. We have to always be aware of the legal variations that are present in our region, thinking about reporting on behalf of the child if we are concerned about involving child welfare services or child protective services on behalf of the child after delivery. But keeping in mind that

psychiatry or mental health providers are part of the team. They can help in assessment for parenting capacity as well as for co-occurring mental health disorders.

Certainly never would any one provider be the decision maker around capacity, but really thinking about the broader way in which we as a team can document the woman's capacities actually and her abilities, encouraging all of us to document and to highlight the things she's doing well, in addition to those risks that we're concerned about as well. And so in Massachusetts, as we are seeing everywhere, and as sort of a backdrop for this entire program, this webinar, we're seeing a lot of opioid associated deaths and morbidity. And so part of the context is that our governor has taken a very strong interest in this opioid epidemic and has convened a working group. And in this working group, the distinct needs of pregnant and perinatal women and mothers with substance use disorders were highlighted.

And that's where MCPAP for Moms comes in. MCPAP for Moms is a state wide perinatal mental health consultation service founded out of the original MCPAP program, which is a child psychiatry program. And the way MCPAP for Moms works was that we are funded by the Department of Mental Health, legislatively funded as a line item in our state's budget to provide real time telephonic and some face to face consultation for providers out in the community who are seeing perinatal women and with questions around mental health or substance use disorders.

So a provider would call our number, the 855 number, reach one of our care coordinators, who will take some clinical and demographic information, and connect the provider with a psychiatrist in real time. The psychiatrist and the provider, whoever may be calling will do a brief conversation, develop a sort of-- in this kind of model of curbside consultation, develop a plan and then our resources, our care coordinators, will help link that patient that the provider is calling about, with resources within her community that are sort of a curated list of resources that fit her needs.

So, the goal of MCPAP for Moms is ultimately to increase the capacity of front line providers to assess, screen for, detect, and engage women in treatment for mental health and perinatal substance use disorder. So, as of February, and actually the numbers are even more-- the updated numbers are, we have enrolled more than 50% of the OB practices in our state. I'll just kind of breeze through this. The unique thing about this program is despite the significant costs associated with perinatal depression and the usual forms of treatment, the cost for moms actually runs at a very, very low cost.

Our overall budget is $600,000 a year, which is really funds 1.2 psychiatrists for the entire state and 2.3 care coordinators for the entire state, making the $0.70 per perinatal woman per month, so a very quote unquote lean program. And ultimately, the goal really is to recoup some of those costs, in fact some of the significant amount of

negotiation took place with the insurance companies in the state, who actually then also chip in, and so the costs are even lower. for Moms has spread to other states. But original MCPAP program, the child program has already been adopted by 32 other states and five, I think approximately five states are now engaged in discussion with us about moving forward with MCPAP for Moms perinatal version of this program. Each state has had different ways of funding and different levels of investment in the program, different elements of the program that they maintain or that they are don't continue with. And so there are multiple iterations in the way that it can be scaled up or down and modeled.

The Department of Public Health here in Massachusetts and the staff within DPH that oversees our grantees for the federal home visiting program where essential in the development of MCPAP for Moms. In 2010, there was a postpartum depression commission established by the governor at the time in our state. And on the commission sit members of the DPH who oversee the federal home visiting program here in Massachusetts. And part of the commission develops MCPAP for Moms. MCPAP for Moms disseminates information that our home visiting groups, home visiting programs, put forward, for example, parenting groups, social isolation support groups for moms.

The home visitors in our state have access to MCPAP for Moms resources, like Mom cards, which are small business cards that we give moms to bring to their providers that say, please call this on my behalf. We created a handout for home visitors to use to help coach women on how to talk to their provider about their needs, either for mental health or substance use disorder questions and to help engage women in the conversation and advocating for themselves. Additionally, we are increasing the capacity of these providers could be resources for these women.

And so ultimately MCPAP for Moms, being a resource directly for obstetrical providers for example, really increases the resource that home visitors have in connecting the mom they're working with with care. So if any of you are interested in learning more about MCPAP for Moms, we have a website. I'm happy to take anybody's-- if you send me an email or the medical director or program [INAUDIBLE] our program is doing a lot to try to help do consultations for implementation in other states. But it's really just one model of broadening the capacity of a state to extend resources for a relatively efficient way.

OK. Thank you, Dr. Mittal. So we're all specializing in fast speaking here as you can see. But I hope as you were listening to Dr. Write and Dr. Mittal, you were catching some of the strategies that you are already using and some other ways to make those linkages to systems of care. And Dr. Mittal just said that other states are going to be implementing the MCPAP for Moms program and that's really a ready made opportunity for home visiting programs to find out where those are happening and try to make some connections.

So we have a final speaker, and that is Mary Lynn Hersey for the great state of Maine as we say in my great state of Virginia. And Mary Lynn is going to help us put this all together. We've learned a lot about substance abuse disorder and NAS. Maine has been confronting this problem and thinking about it for a while. Mary Lynn Hersey is the technical assistant specialist for the Maine Families Visiting Program.

She's been with Home Visiting for 13 years. Started out as a home visitor. Has her bachelor's degree in psychology, with a concentration in child development. And she's been working with children and families for over 25 years, has supervised and supported direct services staff and currently provides programmatic support to all home visiting sites across the state and she's involved in many collaborative initiatives within the state of Maine. And she has a passion for supporting collaboration within the communities and within the workplace.

And I'm just going to start us off by sharing a quote. We're not going to do this as a poll. But I'm going to kind of share it with you to ask you to think about whether this statement resonates with you and whether you have had a similar experience. This came through in one if our needs assessments that we did. And the state grantee said, while 75% of home visitors work with families with substance abuse challenges, only 25% report feeling comfortable working with these families. So, going to turn it over to Mary Lynn to tell you how the state of Maine has handled this crisis.

Thanks, Sherry. And I appreciate the opportunity to share what's been going on with me. And after listening to everyone, I hope that the story here from me helps provide some examples and context to supporting families through home visiting and community collaboration. A lot of the examples that have already been talked about will be some of the things that I highlight here this afternoon as well too.

And really, as I think about how we started in Maine, as Dr. Patrick identified, Maine had a high rate of the epidemic of increased opioid use was very high and babies being born with NAS prior to 2012 was really what we were focusing on in different parts of the state, and providers feeling unsure on how to respond and how to support these families, but really wanting to support them and decrease the stigma for families that are faced with addictions and that problem. And so I will highlight first in Washington County, is really where we started off with the Bridging Model.

And their goal was really to increase collaboration and communication among providers. And so they applied for the LAUNCH Grant and established the Commuting Caring Collaborative and identified the Bridging Model and developed the Bridging Model, which is really a community based wrap around model that offers individualized flexible support through a family driven plan. So it really is everything that Dr. Wright talked about around it taking a village to really identify all the community providers that can help support the family appropriately and match the intensity need of services.

And in addition to that wrap around process, they also developed a five day training in order to address the service providers depth of knowledge around mental health challenges with substance use, poverty, trauma informed care, and really increased their understanding of the wrap around process and the warm hand off. So the trainings were multi-disciplinary, and in order to increase community partnerships and collaboration and increase the providers understanding of how to best serve those families.

And they saw a difference. Really what happened in Washington County as you can see on the map, Washington County is the farthest right community of Maine. And so many families that had [INAUDIBLE] delivered babies that were NAS had to be transported and taken care of at a hospital in Penobscot County, which as you can see is more centralized into local Maine. That was a two and one half or three hour trip.

And so Washington County really saw a difference with the program that they developed as far as decreasing the rate of families having their babies being readmitted to the hospital, supporting families within their community so that the babies were not taken and OCSS involvement was more short term and it was positive outcomes for the families and for the baby as well too. So this led to the development of the Penguis Linking Partnership, which is more in the central area of Maine, where again, some champions at Eastern Maine Medical Center, a lead social worker and a neonatologist doctor really went out in the community and decided that they needed to make some changes first with their policies at Eastern Maine Medical Center to support these families.

And they connected with the substance abuse treatment programs in their facilities within their communities and actually met with moms prenatally to talk about the process of what will happen with their babies being in the hospital, how they will be monitored. And that led to invitations for more local providers to be involved, including public health nursing, and Maine Families Home Visiting, case management agencies, drug courts. Everyone was really committed and dedicated to meet monthly to really learn how to create a system of care around the family. And the mission for the partnership was to link families with substance exposed pregnancies and children through age five in Penobscot and Pescataquis Counties to a well-coordinated trauma informed system of care and to optimize their social development and medical well-being.

And then another program that I'd like to highlight more in Southern Maine, which is in Cumberland County was Snuggle Me Initiative, which was developed by a local perinatal nurse manager and a pediatric doctor at Maine Medical Center, where they worked on specific criteria for supporting and monitoring babies in the hospital, having discharge guidance and including education, including safe sleep, and again, incorporating making referrals prior to the families leaving the hospital to public health nursing and Maine families home visiting as well.

So I just wanted to highlight a little bit, as many of the speakers have mentioned already, we have the opportunity because we're able to engage with families prenatally to really get involved and support families because we are

able to see them within their homes. And so Maine took this opportunity to really model the work that began in Washington County to address that high level of need that families may need, and we call that enhanced services. And we were able to match our service delivery to families needs.

We provided additional support similar to case management work and involved increased time for the home visitor to address the specific needs above and beyond our typical PAP model visit. We met families at a higher frequency or intensity for the duration of the period that they needed that, and then for example, if a family had their newborn in the NICU for a long period of time, many of the state of Maine is very rural. There maybe transportation challenges.

We would again become case managers and attend key meetings and do many other things that needed to be done to help support the family. And as the family was able to stabilize, the baby was able to go home. Those services went back to typical PAT visits, but we would incorporate connections to public health nursing if that was needed or also support the family for any other services that they needed as well.

We know that providers all want to be competent in their work. Home visitors are no different and they identified the need for some additional trainings. And so built into our Maine Families Home Visiting core training, we have included opiate use disorder, basically 101 where there is a general understanding and knowledge of opiate use and prescribed use, the symptoms of dosing, the importance of breastfeeding support and understanding that, the effects and impacts on newborns, and then also learning and understanding the process of monitoring the withdrawal symptoms at the hospital and their scoring process.

In addition to that, home visitors also received additional training through the office of Children and Family Services to understand the drug affected baby, substance exposed newborn law so that we could better anticipate with families. Our hope is to always engage with families prenatally, to be able to increase that conversation and anticipate ahead of time for that family. We've also increased our training around having difficult conversations with families, which would be included in our screening tool that we use a part of the [INAUDIBLE] grant. We implement the behavioral health screening tools.

So we have the opportunity to talk with families about this prenatally and again after the birth of the baby. So it allows for two opportunities for disclosure. And all the home visitors are trained to be able to support families as they have the disclosure and to engage them in the conversations and connect them with additional services. Home visitors really report using that tool has really helped them, and having that training to engage in conversations and really have families trusting them and decreasing the stigma to just have those honest conversations.

We continue to encourage collaboration efforts in each one of the counties to address other medical providers,

office of Children and Family Services, public health nursing and medical assistance treatment programs to really understand that it really does take a village. And we have to understand all of the things that are available for families and incorporate that into our work to be able to talk about that with families as well too.

So in addition to what has been happening local and what home visiting has been doing, statewide efforts, you'll see here that there is a website that has been developed. And I put it there so that you're-- feel free to go to that. It's really an opportunity to see what the state of Maine has developed a Fetal Alcohol Syndrome Disorder Drug Affected Baby Task Force. And through this work, there's been great brochures that have been created that are on that website, as well as some wonderful PSAs targeting pre-natal women in order to encourage support for them facing opiate addiction, to get treatment and support during their pregnancy. And the task force also holds an annual conference each year to help provide updated information to service providers and how to best serve families.

And lastly, I just wanted to talk briefly about a state wide initiative that has started in March. The office of Children and Family Services has identified an ongoing need to address the concerns, they received in 2015, almost 1,000 substance exposed baby notifications, which is a 482% increase since 2005. So about a year ago, they took a real dive into looking at their data and information to figure out whether there are certain areas of Maine that this was a higher-- what was the substance that the newborns were being exposed to, and then looked at the rate of reoccurring report for families.

And what they found was that many of the families were not needing to be opened for assessment and moving on for evaluation with Child Protective Services, but that they were really just falling through the cracks and not necessarily engaging in services, prevention services that were available to all families. And so in order to decrease the stigma and despite the efforts that were going on in different parts of the state as I described some of those programs earlier, they initiated a statewide partnership between Office of Children and Family Services, public health nursing, and Maine Families Home Visiting.

And so all of the partners were trained in the Bridging Model, as I mentioned earlier. And so they were able to increase their knowledge and service delivery to families facing substance abuse and how best to partner with the family and provide those services. There was new internal referral protocol for OCSS and pathways in order to support substance affected perinatal families who did not have the level of child welfare risk to be assigned to an assessment worker. And so all of the referrals that come in now through OCSS now are given the opportunity to receive a phone call from Maine Families and/or Maine Families and Public Health Nursing, depending on the family's level of need and concern. And so from that point forward, Maine Families and Public Health Nursing does their outreach and engages with the family.

And so in addition to increasing families' engagement in services, the goal for the statewide Bridging Program is to increase communication between the three partners, so trying to break down those silos and to work together to make sure that families don't fall through the cracks, and that we're able to provide connections to all the services that they need. Since March, there's been an increase in referrals from OCSS to public health nursing and Maine Families than in the past and an increased engagement in services from families. There is an evaluation that's taking place with this project right now and we hope to provide more details to the outcomes later.

My apologies for rushing. I know that we are running out of time. And there is my contact information. If you are interested in learning more about anything that I spoke about, please feel free to email me.

OK. Thanks everybody. We're in the home stretch and I want to just take a minute to thank our four presenters with their important and packed content and we really did share a lot of information to digest today and provide hopefully a lot of food for thought about how you can continue to build collaborations and partnerships around this issue in your states and territories. And so our summary statement really is that a coordinated multi-system approach best serves the needs of pregnant women with opioid disorders and their infants.

I'm going to-- I know some of you may have to leave and I did post in the chat that we do want to take a few final minutes to put everything together and ask you to do a final jump start the brain poll, so jump start the brain take two over here. Same questions that we looked at the beginning and that I invited you to listen for. Please, add your responses to the poll and I'll give you just a couple of minutes. I see those answers pouring in.

And I'm wondering whether anybody has changed their answer from the beginning to the end, and as you're completing the poll, I'll tell you that look for the issue, the November issue, of our Home Visiting Home Runs Newsletter. We'll be following up on this webinar there and will include some information about the jump start the brain questions in that. I'm going to close this poll. It looks like people have stopped answering now. And do one more poll before the evaluations.

So team, if you would take down this poll and bring up, thank you. This is just a revisiting of our action, possible actions stats. So in addition to hoping that you gained some knowledge during this webinar, we'd like to invite you to think about some take home strategies. And so, we have some possible action steps, some that we thought of, of how you might put what you learned here into action. And what we'd like you to do, as you can see, because some voting is up already, is vote for a possible action step, how soon you might accomplish it. And we've got within two weeks, four weeks, or two months as possibilities.

And then if you have any other ideas, of course, we have a place where you might post other ideas. And we'll give you just a minute. Thank you. I see that people are completing the poll. All right. It looks like-- oh good, thank you. We even have somebody who's going to share the information with coworkers and supervisors within two months.

And yes, we will be posting or HRSA will be posting the webinars so that you can share it and you have the handouts that were in the pod.

Great. Her's somebody who is going to submit a request for multiagency statewide task force a rural health association caucus. So we've got some good ideas coming in the poll. And we'll ask you to keep thinking about some additional take home steps and actions. And if we could take down the poll and share our final slide, and another poll on how well we accomplished our objective today. Completely partially or not at all. And as you do this, think about our objectives and any objectives that you had as well.

And once this poll is completed, I'm going to just put up a slide with the resources that we also highlighted in the chat, so you've had them from the beginning, and they were also in the pod. And then we're going to sign off.

When we sign off, you'll also find an evaluation that's going to pop up, and again, please take a minute, whether you are a grantee recipient or a project officer to complete of evaluation. All right. It looks like people have stopped voting. So, let's take down the poll. Again, the resources were in your initial pod, and I noticed a lot of additional resources that got shared in the pod, chat pod. So we'll find a way to share those with you as well.

And finally, thank you. Join us next month on October 18, from 2:00 to 3:30, for a webinar on Developmental Promotion, Early Detection, Referral and Linkages. And here comes the evaluation. Thank you, everybody. Thank you to our great speakers and thank you to all of our participants. Goodbye for now.