>> MADELINE HALEY: Hi, everyone. Good afternoon. It looks like we have a lot of participants. I'm going to give it a minute or so, so it stabilizes and then I'll introduce our presentation.

All right. Looks like more or less stabilized. Well, people will probably be trickling in. So I'll start. My name is Madeline Haley, and I want to welcome you all to the webinar series Addressing Reproductive Health and Obstetrics/Gynecology Healthcare in Autistic Adults the AIR-P Autism Intervention Research on Physical Health. Thank you for joining us today. Because number of participants, your audio will be muted throughout the call. However, you can submit questions at any point during the presentation via the chat box or on your webinar consul. This entire webinar is being recorded and will be available on the AIR-P website. AIRPnetwork.UCLA.edu. There will also be a short evaluation survey at the close of the webinar. We invite you to provide feedback on this webinar and also to provide suggestions for future webinars. And in the interest of time, let's get started. We first want to acknowledge the Health Resources and Services Administration as the funding source for AIR-P. Now it is my honor to introduce our speaker for today, Jennifer Ames. Dr. Ames is a staff scientist at the division of Kaiser Permanente Northern Clinic and a member of the AIR-P gender, sexuality, and reproductive health research note. Please welcome Dr. Ames.
DR. JENNIFER AMES: Thank you for the introduction and the AIR-P for the opportunity to be here today and to share our research. I'm excited to present work associated with the gender sexuality and reproductive health node. And before I dive in, I wanted to take a moment to tell you a bit about the node and its goals. So it's led by Dr. Lisa Croen and Maria Missolo in Kaiser Permanente Northern Clinic. And the guiding principle recognizes that sexuality and relationships are important contributors to life satisfaction, health, and well-being. And the node's goal is to improve sexual and reproductive healthcare and outcomes for autistic people across the lifespan with a focus on autistic women and LGBTQIA+ people.

So, some of the nodes priority areas are sexuality education, sexual and reproductive health services and sexual victimization and abuse, and LGBTQIA+ health. And activities around these topics are guided by input from our stakeholder advisory group, work we're doing to identify urgent knowledge gaps in these areas, and a focus on workforce development specifically clinicians and researchers working in this area. And so while our node is addressing all of these topics, my presentation today will focus on sexual and reproductive health services in particular.

So I want to start with a note on language. We know that language is not neutral, especially in the context of sexual and reproductive health the language has been historically gendered and this is alienating gender diverse and gender diverse people in accessing healthcare. And so it's important that obstetric gynecological services and OB/GYN services with a vulva, vagina, and/or uterus care should not depend on gender. And node has been working on a glossary of gender-inclusive and affirming language in consultation with the gender sexuality and reproductive health nodes advisory group.

And we're seeking to use gender-neutral and gender-inclusive terms with regards to the healthcare topics in today's presentation. So we'll use terms like gender-expansive and gender diverse, which is inclusive of transgender, non-binary, agender, gender fluid and gender queer identities. We'll sometimes refer to women's health or women when we're describing study which focused on people who were assigned female at birth and identify as female.

Okay. So this is just a quick map of when we'll go in today's presentation. So first I'll start with some background on the intersection of reproductive health and disability. And then I will tell you a bit about a study of OB/GYN services and pregnancy that we are conducting at Kaiser Permanente Northern California. And I'll show you some preliminary data from the study and discuss the ongoing analyses that we have. And then I'll move on to some potential clinical implications of this work for improving access and care.
And lastly, I'll discuss a few major data gaps in the field, and some promising future directions for this work.

Okay. So we'll start with some background. And first off, the intersection of disability and reproductive health is a topic fraught with the negative legacy of attitudes and policies that historically restricted the reproductive autonomy of people with disabilities. And the area is receiving a lot of renewed focus with a lens of reproductive justice. And we are learning from this growing literature that people with disabilities often have less access to reproductive and sexual health resources than people without disabilities. And this includes lower utilization of family planning services such as contraceptive counseling and contraceptive use among people with disabilities compared to people without disabilities. We also see lower screening rates of breast and cervical cancer among people with disabilities compared to people without disabilities.

And it's important to note this body of work has typically addressed the experiences of women and people with physical, intellectual, and sensory disabilities broadly. And few studies have specifically focused on the reproductive healthcare experiences of people with developmental disabilities such as autism.

So, such study is important because autistic people face similar reproductive health challenges to people with other disabilities. But designing effective and inclusive interventions necessitate and investigating and understanding how their experiences may also differ. And this is supported by literature suggesting that autistic people face unique challenges around reproductive health.

So, for example, social and sensory differences in autism are often invisible to providers, which can make it difficult for autistic individuals to obtain accommodations and healthcare settings. Further, autistic adolescents and young adults typically receive fewer education, sexual education, resources, than their non-autistic peers. And this can contribute to hire risk of sexual abuse and engagement in sexual experiences that are unwanted or later regretted. A handful of study have also documented that autistic people have a higher risk of menstrual conditions, including Polycystic Ovary Syndrome also known as PCOS. And sensory and emotions and behavioral problems such as self-injuring behavior that tracks with menstrual cycles.

Furthermore, there's been very little research on pregnancy in autistic people, including obstetrics risk and quality of prenatal care. And handful of study out there suggests that some health risk factors that are associated with obstetrics complications are more common than autistic people compared to non-autistic people. This includes factor around higher BMI around the time of pregnancy, higher likelihood of smoking during early pregnancy, higher rates of anxiety and depression, and other psychiatric
and medical conditions, and subsequently, increased use of potentially teratogenic medications and embryology development and potentially cause pregnancy loss or birth defects. And also there's evidence people with intellectual and developmental disabilities have a lower likelihood of starting prenatal care in the first trimester. And initiating prenatal care in the first trimester is important for doing screening and tests to make sure the birth parent and the baby are doing okay. And also for foreign parting resources of management during pregnancy.

And, there's also one study that has examined pregnancy complications and has noted autistic people, and noted higher risk of preeclampsia, and gestational diabetes and delivery.

One of the studies was in Sweden, and another in Canada. And so far there's been very little research in the U.S. context so far. So, understanding barriers to reproductive health services may inform improvements to healthcare delivery for autistic people. And some of the potential barriers in this area include that adult primary care and OB/GYN providers typically have little to no training in caring for autistic patients. Further, providers may make assumptions about their patient’s sexual activity, and not bring up certain reproductive healthcare topics with them.

Relatedly, OB/GYN initiation may be delayed during the healthcare transition from pediatric to adult care. And some procedures performed in OB/GYN visits can be invasive and patient hypersensitivity and aversion to touch may deter people from going to the OB/GYN visits. And lastly, people with gender dysphoria and gender expansive identities may experience unique barriers in accessing reproductive healthcare, and we know that these identities are more common among autistic people.

So, the study we’re conducting at Kaiser Permanente seeks to address couple of main questions. And these include what does OB/GYN utilization of autistic people look like in a large U.S. sample?

And then what are the factors associated with utilization of OB/GYN care among autistic people compared with people with other developmental disabilities and people with neurotypical development?

Okay. So, we are conducting the study at Kaiser Permanente Northern California. And this is an integrated healthcare system of about 4.5 million members residing in the San Francisco Bay Area up into Sacramento and down to Fresno. And within this member population, we identified 3 groups of adults who are all aged 18 and over. We have an autism group of about 1400 adults. We have a group of other developmental disabilities, including cerebral palsy and intellectual disabilities and that's about 3300 people. And then we have a neurotypical group of about 5700 people. And the neurotypical group was matched 4 to 1 in the age and membership length to autism
group. Everyone in the study was a member for at least 6 months of each year between 2017-2019. So, we're using KP's electronic record to examine medical and psychiatric diagnosis, healthcare visits, prescriptions for medications, and healthcare procedures during the study period of 2017 to 2019. And this presentation will be about our preliminary data related to visits to the OB/GYN providers, excluding prenatal care and preventive care procedures such as cervical cancer screening and mammograms, and hormonal contraception.

Okay. So, I'll tell you little bit about the sociodemographic characteristics of our study sample. So people in the autistic and developmental disabilities groups were more likely than people in the neurotypical group to be white. And so 60% and 54% versus 40% in the neurotypical group.

People in the autistic and developmental disability groups were also more likely to have government subsidized health insurance. So 44% and 69% versus 12%. The people in the developmental disability group was on average 14 years older than people in the autism and neurotypical groups. So 43 years of aiming was the average age in the developmental group compared to 29 in the autism and neurotypical groups, the autism and neurotypical groups were age matched, so that's why the age is the same.

And the people in the autistic group were most likely to reside in neighborhoods of higher socioeconomic position. So about 32% resided in high SCS area relative to 25% in the developmental disability groups. And 21% in the neurotypical group.

And the autistic group was most likely to have gender-expansive identities. So 4% of people in the autism group had gender-expansive identities compared to less than half of a percent in the other two groups.

Okay. So, in the next few slides, I will be showing bar graphs like this to compare the frequency of health conditions and healthcare utilization across the groups. And the first graph here on the left is showing the frequency of depression diagnosis. And 37.8% of autistic people in this purple-ish color had a depression diagnose during this time period. And this is compared to 30.5% of people with other developmental disabilities in red. And 23.2% in people with neurotypical development in yellow. And the asterisks here indicate that the depression rate was significantly higher in the autistic group compared to the other DD group. And also compared to the neurotypical group when we controlled for the variables listed at the bottom of the slide which included age, race, ethnicity, the length of their Kaiser Permanente membership, their insurance payer, whether it was government or private insurance, frequency of their primary care visits, and the neighborhood deprivation index which is an indicator of neighborhood socioeconomic status. So, anxiety, so this is depression, but anxiety,
ADHD, eating disorders, were other examples of psychiatric conditions that were more prevalent among autistic people in our sample relative to the other groups.

So, several physical health conditions including overweight and obesity were more common in the autistic and other developmental disabilities groups compared with the neurotypical group. So here about 61 and 63% of people in the autism and other developmental disability groups were overweight or obese compared to 51% in the neurotypical group. And other medical conditions such as diabetes, epilepsy, and autoimmune conditions were also more common among people in the autistic and other developmental disabilities groups as well.

Okay. So now I will show you some of our preliminary findings with respect to OB/GYN care. So this first graph here is showing the, just going through having a visit to the OB/GYN. And this is excluding visits for pregnancy. And what we see is just under 60% of people in the autism group and the other developmental disabilities group had at least one OB/GYN visit during the 2017 to 2019 period compared to 73% of people in the neurotypical development group who went to the OB/GYN. And so the people in the autistic and developmental disabilities groups were less likely to have an OB/GYN visit than people in the neurotypical group.

And this plot is showing OB/GYN visits broken down by age. And I'm showing the age distribution in the autistic group first. And there is a trend of, let me get my laser here. A trend of increasing OB/GYN use with age before going down again, especially, after age 60.

And overlaying the neurotypical group on this graph, we see a similar trend with age increasing visits to the OB/GYN with age had to goes down at older ages. But a larger proportion of neurotypical people visited the OB/GYN at most ages, especially, in early adulthood.

And lastly, adding the developmental disabilities group on to this plot, the DD group age trends are relatively similar to trends in the autistic group, with the largest differences in visits apparent across these ages of 18 to 39. So this is when we're seeing the biggest difference between the autism and DD groups compared to the neurotypical group. And these disparities in visits do diminish somewhat after age 40. We see less of a big difference there. Okay. So this is looking at cervical cancer screening now. And this is cervical cancer screening are also known as a Pap smear and it's a procedure in which the doctor swabs a person's cervix to collect cells that can be checked for cervical cancer. And these are recommended once every 3 years starting at age 21 through age 65. And what we saw here was about 50% of people in the autism group had a cervical cancer screening within this recommended 3-year time period. About 45.9 people in the other developmental disabilities group had a cervical
cancer screening and both of these are less than what we saw in the neurotypical where 72% of people got a cervical cancer screening in this recommended timeframe.

And I just want to point out these were adjusted for visits, frequency of visits to primary care. And this is also only looking at people age 21 plus. Okay. So this is looking at cervical cancer screening by age similar to how we looked at visits to the OB/GYN before. And what's noticeable right away, this disparity in cervical cancer screening is visible at many ages and starts to diminish at older ages. So it's a similar story as before where we really see some of the largest disparities at these younger ages.

Okay. Let me take a quick sip of water. And now we'll talk about hormonal contraception, what we saw with these data. So all groups used a variety of reversible hormonal contraception options. So these included methods like oral contraceptive pills, which were the most popular method in all of the groups. Intrauterine devices, injections, hormonal patches, hormonal implants, and hormonal rings were other forms of hormonal contraception that were used across all the groups. And what we saw, you know, looking at all these types of contraceptive, only 34.4 groups used this within this time period. That's compared to 23.8% in the other developmental disabilities group. And 46.3% in the neurotypical group. And I want to note couple of things about this. First, the frequency of contraceptive use amongst people are disabilities appears low. Just visually here, because this group was on average older than the other two groups and included fewer women of reproductive age. And so when we adjusted for age, the differences between the autism group and the other developmental disabilities group went away. And I also want to note that these are not adjusted for sexual activity or partnership status, which are typically strong predictors of contraceptive use. And lastly, that these data reflect use during a three-year study period. So people in our sample could have started and stopped birth control or hormonal contraception before or after this window. And also tried multiple types of hormonal contraception, which we didn't look at. Okay, so, there was some interesting variation across the groups in the types of contraception that was used. For example, autistic people and people with other developmental disabilities were more likely to be prescribed depo provera compared with neurotypical people. So these dark parts of the graph down here is showing the proportion of people who were using depo provera. And so it's about 6.9% in the autism group. 6.2% in the other developmental disabilities group. And a bit lower, 3.9% in the neurotypical group. And Depo-Provera is an injection form of hormonal contraception. So it's a shot you get every 3 months. So this was more popular form of birth control in the autism and other developmental disability groups.

Also, the autistic and developmental disability groups were more likely to be prescribed hormonal contraception for therapeutic use. So, again, the dark part of
these graphs is showing the proportion that was using hormonal contraception for therapeutic reason rather than birth control purposes. And so about 13.8% in the autism group. 7.5% in the other developmental disabilities group. And then 2.4% in the neurotypical group. And we haven't explored what the indications for therapeutic use were in our population. But some of the kind of typical therapeutic uses of hormonal contraception is to treat conditions such as dysmenorrhea, which is painful periods or painful cramps during periods. And also used to treat irregular bleeding and acne, and some other types of conditions. And typically, the therapeutic use was for oral contraceptives. We didn't see any therapeutic use for other types of hormonal contraception.

Okay, so now this is looking at hormonal contraception by age. And I think it's rather striking here that the largest differences in contraceptive use is adults age 18-24 years old. And the differences sort of in general fewer people are using hormonal contraception overtime. And the differences between the groups diminish with age.

So lastly here, we examined breast cancer screening which clinical guide lines recommend having every one to two years starting at age 50. Though people who have a family history of breast cancer may start earlier in their 40s. And these screening are typically done through a mammogram which is x-ray imaging of the breast. And we were looking at people 40 plus in our population, and what we saw was relatively high rates of mammograms in all of the groups, which demonstrates the effectiveness of outreach programs. However, there was a small but significant difference in breast cancer screening with both people in the autistic and developmental disabilities groups being slightly less likely to receive a mammogram than people in the neurotypical group.

Okay. So, lastly here, we also examined several sexual and reproductive health diagnosis. So this included menstrual disorders, which is a variety, encompasses a variety of conditions that can lead to heavy or painful, or irregular bleeding. And we actually didn't see, once we adjusted for age and race, ethnicity, and membership length, and insurance payer and socioeconomic status and also OB/GYN utilization, we didn't see a significant difference between the groups. And the reason we adjusted for OB/GYN utilization is a lot of these conditions will get diagnosed by an OB/GYN provider. And so we want to do control for going to the OB/GYN. And let's see, there was some, you know, some of the conditions that go into menstrual disorders, we did see some variations, specifically around Polycystic Ovary Syndrome, PCOS. So a higher proportion of autistic people, 6% had a diagnose of PCOS during this study period compared to 4.3% in the other developmental disabilities group, and 4.7% in the neurotypical group.

And this has actually been seen in several other studies, this higher rate of PCOS.
And other conditions such as sexually transmitted infections were less common among people autistic and developmental disabilities group than in the neurotypical group. So .8% of people in the autism group had sexually transmitted infection during this time period compared to 4.1% in the other developmental disabilities group. And 4.2% in the neurotypical group.

So some of the takeaways of this preliminary research so far is that in comparison with neurotypical people, autistic people have lower utilization of multiple types of reproductive healthcare, including visits to the OB/GYN routine screenings and use of hormonal contraception. And these differences persisted after taking into account sociodemographic factors and frequency of primary care visits. And these disparities have implications for long-term health, including potential delays for example, and cervical and breast cancer detection and treatment.

We also saw that many of these disparities emerged in early adulthood which perhaps points to the transition period as being important to helping or place of intervention to increase utilization of OB/GYN and reproductive health services.

I think it's also important, the last point here that the disparities are present in our scenario of an integrated healthcare system where there are robust outreach programs for OB/GYN and reproductive healthcare screening. And it's likely that disparities are larger in the broader U.S. population where there is less access to these kinds of resources.

So these analyses are ongoing. And we're seeking to answer few additional questions with these data. So for example, what are the shared and unique predictors of OB/GYN care in each of these groups? So factors were examining include co-occurring medical and psychiatric conditions. Medications. Frequency of other types of healthcare interactions, and sociodemographic factors.

We're also asking what does sexual and reproductive healthcare look like during the transition period? So in adolescents, and adulthood, what ages are they first starting to use hormonal contraceptions? Those kinds of questions. And we also have a subanalysis of changing in 2020 when many health services were delivered by telemedicine or delayed because of COVID-19 pandemic.

So, another analysis that is ongoing is understanding pregnancy and obstetric care in our population. And so our objective is to describe the epidemiology of pregnancy and prenatal care in our autistic membership. And we have identified at least 200 autistic people with pregnancy history, and about 340 pregnancies among them who will be comparing them, again, a developmental, other developmental disabilities group and a neurotypical. And some of the factors we'll be looking at include pregnancy complications and birth outcomes. So conditions like preeclampsia,
perinatal, depression and screening for depression, and preterm birth. And we’ll also look at kind of quality of prenatal care and routine screening, so whether people received an ultrasound at 21 weeks, gestational diabetes and management of gestational diabetes, and prenatal vaccination like for Tdap and influenza.

And some of the implications for this research healthcare is improvements are important. So we hope that this work will be towards improvements to accessing healthcare that is neurodivergent competent. And accommodates a spectrum of differences and how people communicate and express and process information, especially, as it pertains to pain and health issues across the life course. We also hope it will inform educational resources to help people with intellectual and developmental disabilities manage reproductive health throughout the lifespan. And this is important such as periods of transition to adulthood and the onset of menstruation, and later, the onset of menopause.

And also potential opportunities for patients and patient and/or provider facing tools for OB/GYN care. And so know what to expect for different types of procedures.

And however, the electronic health record can only tell us so much and for a complete picture and a deeper understanding of people’s experiences, it will be super-important in qualitative study to talk to people about their experiences in accessing OB/GYN care and what they experience during pregnancy. So synthesizing qualitative and quantitative analyses will help generate ideas for feasible presentations. And there have been several excellent qualitative studies published within the last couple of years related to autistic experiences and pregnancy and parenthood, and also menopause that are worth checking out.

And then here in consultation with the gender sexuality and reproductive health nodes advisory group, we’ve also identified several topics where there's just a dearth of information and we hope to explore these topics more with our dataset and hope to see a lot more research in general on these topics. And these include work focused on the experiences of autistic people during puberty and menopause. And LGBTQIA plus health. Including access to gender affirming care. And additionally, making sure that there’s representation across social demographic backgrounds within all of these topics.

So this is a slide of some references that I referred to earlier on in the presentation. I won’t dwell on this, but if you want to check this out, you can come back to the video recording of this presentation and get to this slide. And I also want to thank my fabulous research team at Kaiser Permanente. And also all the feedback that we’ve gotten from the AIR-P node and GSR advisory group around language, data gaps, research direction for the future. And I also want to acknowledge the funding from the Kaiser Permanente community benefit fund and NICHD. And here’s my email address.
But you can ask questions during the Q&A, and feel free to reach out to me with more questions and we can set up a conversation.

And I'll make another last plug for the gender, sexuality, and reproductive health node. So, again, Lisa Croen and Maria Massolo's email is here if you're interested learning about the node's activity. We're eager to help develop and connect, and expand the network of researchers who are working to address these topics. And thank you so much. That's the end of my presentation. And I'm ready for questions.

>> MADELINE HALEY: Thank you so much, Dr. Ames. So, I think we're going to start with the questions that are already in the Q&A box. So somebody asked, I believe this is in reference to the barriers you were describing at the beginning of the preparation. So question is do you think that some of this is related to the clinics not very A.D.A. accessibly ideal? For example, the person doesn't list systems in wheelchairs.

>> DR. JENNIFER AMES: Yeah, some of it, I think the barriers are different depending on the disability. And so some of these prior literatures could be A.D.A.-related. It could be in the actual examining room to go through like a cervical cancer screening. You have to get up on to the table, and put your feet in stirrups, and these can all be not accommodating, depending on what your disability is. So, yeah, I think that's why it's really important to look at disability and understand the unique experiences depending on what your disability is.

>> Somebody in the chat also asked if it would be possible if you could stop sharing the slide so we can see your face better when we're doing this discussion.

>> DR. JENNIFER AMES: Oh, yeah. How do I do that? Give me a second. I'll figure this out. Hi, were you able to see my face during the presentation?

>> MADELINE HALEY: Yes, definitely. So, another question is can you define therapeutic? I believe that was in reference to the contraceptives, the oral contraceptives?

>> DR. JENNIFER AMES: Yeah, therapeutic use is for treating a health condition rather than for birth control purposes. So some people will take hormonal contraception because they have painful periods and they want to regulate their menstrual cycle. And it's not because they're trying to prevent pregnancy.

>> MADELINE HALEY: Okay. And then another question/thing to discuss was we should be looking at premature menopause which may be due to low use of birth control in the 50s. General Yen that's an interesting idea. We should definitely be looking at menopause. Yeah, I really like that hypothesis. That's really interesting.
>> MADELINE HALEY: Another question. Regarding the study sample compared to the neurotypical counterparts, people with ASD and DD are more likely to have government subsidized health insurance but they are more likely to live in neighborhoods of higher SCS. Is that socioeconomic? What would be the public publications of these findings? Why was not prenatal care given in the study given various health factors among people with ASD in the background?

>> DR. JENNIFER AMES: Okay, first question is how someone's socioeconomic status is maybe contributing to these findings? And I think, you know, the higher SCS, that means you're coming from a more resourced background, but not always. It's kind of a proxy measure, and we can't make that assumption, because people who have higher SCS don't always have resources, especially, if there's a disability as well. And so, in terms of government insurance, people with disabilities are eligible for government, with certain disabilities are eligible for government insurance. And so having government insurance isn't always related to someone's socioeconomic status. And so I think we adjust for it to kind of address people who may be coming from a more resource background. But it's something we have to explore more. And I think talk to people and learn like what are the resources that you had in accessing reproductive healthcare? And the second question, can you remind me what it was?

>> MADELINE HALEY: Wondering why prenatal care was not included in the study given health risk factors for people among people with ASD.

>> DR. JENNIFER AMES: It's coming. We started few months ago. So we're working towards it. We're extracting those data right now. And so stay tuned. We just haven't gotten to that step yet.

>> MADELINE HALEY: Another question is do you see more health outcome disparities between ASD versus ID? Sorry, ASD with ID versus ASD or severity levels of ASD?

>> DR. JENNIFER AMES: That's a really interesting question. And one that we will try to understand with our data, I think, people who were diagnosed with autism through the Kaiser Permanente assessment centers, there tends to be a lot more detailed data whether there's a co-occurring intellectual disabilities and, you know, information about their other co-occurring conditions where we can look at that. But for a lot of people in our population, we don't have that kind of detailed information. But, yeah, that's a really good question. And I appreciate you asking it.

>> MADELINE HALEY: Another question is how does medical body sharing intersect with reluctance to get care?
>> DR. JENNIFER AMES: Yeah, I think that's a really good question too. So there is some evidence that people with higher BMI are less likely to go to the OB/GYN, and less likely to receive a cervical cancer screening. And that's certainly a hypothesized factor. And one of those things we can't look clearly with electronic health data. That would be a great topic for a qualitative study and understanding those feelings going into the appointment.

But, yeah, that's a really interesting area.

>> MADELINE HALEY: Thank you. All right. One more question. One question is do you know about any support groups or research study on menstrual irregularities and concerns?

>> DR. JENNIFER AMES: I wish I was more knowledgeable on this. I am sure there are people working on this topic, among autistic people, I'm guessing and not just more generally among people with disabilities. If you want to reach out to me by email, I need to find those studies too. So we can do it together. So just reach out to me by email and I'll let you know.

>> MADELINE HALEY: Another question is did you take into account the age of autism diagnose?

>> DR. JENNIFER AMES: No. Not yet. And that is on our list. I think for people who are diagnosed at Kaiser Permanente will be able to find their age of diagnose. And I think that will be an important factor to consider.

>> MADELINE HALEY: Okay. I think we'll do one more question, unless anymore pop-up. Are there any efforts to look into the implications of IPV and other forms of abuse with OB/GYN access?

>> DR. JENNIFER AMES: Yes. We have been working on extracting those -- so there's screening that happen for IPV. This is intimate partner violence, and there's screening that happens in both primary care and the OB/GYN setting. And I think it's a screening happened, always happens during, for pregnant people. So that is something that we'll be looking and taking a closer look at. Yes.

>> MADELINE HALEY: There's one more. Have you considered including the perspective of OB/GYN healthcare providers?

>> DR. JENNIFER AMES: Ooh, now I will. Yeah. You know, I wonder, we would have to do some work to identify if any of our providers would want to disclose their autism and also participate in the study. But I think that would be really fascinating.
>> MADELINE HALEY: All right. I think that's all the questions. So let me just send the link to the upcoming webinar. So it is our September webinar hosted by the AIR-P genetic research node leader Julian Martinez. I'll go ahead and drop the link to register in the chat. This is, yeah, that was the social media. And then this is the webinar. And then if you could please complete this brief survey, that would be amazing. And otherwise, that's everything. Thank you, again, Dr. Ames and thank you everyone who was able to attend. We will see you in September. Have a great evening.

>> DR. JENNIFER AMES: Thank you so much, everyone. Bye-bye.