

>> Model that we can perhaps take in other spheres as well as continue in the work that you are doing, really a model that perhaps helps to support the families. So maybe thinking a little bit more about the perinatal quality network and those collaboratives, first I'd like to ask our speakers if are there thoughts about taking what's been done a bit in a vacuum and really taking those promising practices strategies to scale and also thinking about some of the structural factors that we might need to modify or change or influence. We did hear about some of those from our first session, in terms of family support, in terms of economic policies in the country, but just thinking more maybe in our public health context. So I'll start there.

>> So I completely agree that this has to take place in a much broader context and healthcare is part of it but it's a relatively small part of it. And healthcare often is in a situation of rescue, which is important. So the collaborative we're developing has a clinical and public health practice group. It has a research and science group to bring more information to the table, also translated into community-based research. We have the health equity group with the specialists there. The fourth group is the policy and communications and that is engaging policies we're looking there largely outside of healthcare policies although they do need to be included. And the fifth one was resources, which I'd didn't talk about, but that's not only resources for CDC, HRSA, Title 10. It's also what are we paying for and what that we -- Are we paying for we should be doing? In many cases no. Very few states pay for group prenatal care. It's been shown in some studies lower in Black infant mortality, Black preterm birth rates by up to 40% or more but very few states pay for it. Are we paying for things we shouldn't be paying for? Absolutely. You know, like early elective delivery still in many places. The other component to that is workforce for example. We need more promatores. We need more home visiting, things like that again so it has to be broad-based, including all those areas. We can't solve this from within medicine or healthcare alone. So our strategy is a much broader one.

>> Okay.

>> Sorry. There are several examples of how this work can be expanded outside of the hospital setting. As I said, this work is relatively young and within the short period that we've worked with state collaboratives over this past six years, it's grown exponentially. It started with about six to ten states when we began

that were actually doing this type of work. Now it's almost every state in the country that are actively engaging in the partnerships and collaborations in the state with care providers and other stakeholders.

So I didn't get a chance to mention all of those stakeholders but they don't just include those within the clinical realm, they include insurers, they include community-based organizations.

One of the examples that I gave with the Ohio Progesterone Project, one of the reasons why that project was so successful is because they had a key partner with the state Medicaid office and a lot of the barriers that they had to overcome for women to get this medication was the whole insurance barrier of actually getting women to actually be able to afford and actually getting it in their hands and being able to use Medicaid as the key partner to get rid of that barrier.

As this work moves forward, we started out low-hanging fruit of like reducing early elective delivery and some of the other projects within the hospital setting. But these collaboratives are now developing these unconventional partnerships and moving outside of the hospital setting. Some examples include the work with progesterone because that work begins before the woman reaches the hospital. It begins with her last pregnancy and knowing that she's at risk for the subsequent pregnancy, it also involves coordinating her care prenatally before she reaches the hospital.

Another example of some of the work being done surrounding safe sleep initiatives and making sure that families truly understand what type of practices put their babies at risk, working with organizations outside of the hospital to make sure that what they learned when the baby was in the hospital translates to what's actually put into practice once they reach home.

So there's lots of potential that I see with using this quality improvement model.

And, as I said before, it's the partnerships and the collaboration breaking down those silos and those barriers

with physicians working with public health.

You would think that we would work together more often but it's not a national collaboration as it should be and those collaborations between public health and getting the data to show the changes that are being implemented and be able to show docs you think you provide great care but here's the data and these are the outcomes.

And docs are type A type people.

They see that they got a bad grade and they want to improve.

So there's lots of opportunity to use this model moving forward.

>> Well great.

I'm told we have three minutes.

So last question.

I'm going to move you a little bit even further along in terms of thinking about how do we make this, how do we integrate this into practice so we don't need to necessarily always have to have a special program, not that federal support shouldn't be there and insurers shouldn't be there but how do we make this as something that's integrated?

>> I think one of the problems we have is we look for what's the one thing to do and there is no one thing to do. The CDC supported ASTHO

when doing the Postpartum LARC Collaborative.

And what that did is it took a look at the entire supply chain, what is every step that has to happen for a woman to receive postpartum LARC.

That includes: How does the pharmacy order it?

How does the doctor or nurse on the floor get it from the pharmacy?

Is it ready on the floor so that it can be used when it is needed because you want to put these things in 10, 15 minutes?

And then how do you bill for it?

And on and on and on.

Medicaid policy, does Medicaid cover it?

Does Medicaid cover a reinsertion because there's an expulsion rate that's slightly higher postpartum period?

So we had pharmacists, Medicaid directors, we had, you know, hospital operations people, we can't just say what do the doctors need to do.

And one of the biggest smokescreens for actual activity is we'll educate.

We'll educate the doctors.

We'll educate somebody.

If you educate somebody in a system that does not allow what you want to have happened to happen, it's not going to happen.

With aspirin, we just discovered working with one group in Boston that they would give their Medicaid patients a prescription for aspirin.

They would then go to the pharmacy and the pharmacy system would kick it out because pregnancy and aspirin in their system were not permitted at the same time. Those are the types of things you need to solve if this is going to work.

That is how actually QI works, the true QI.

>> I just want to quickly add that one of the goals of the work of State Perinatal Quality Collaboratives is to change the culture.

So by having buy-in at the care provider level and having teams be integrally involved in the decision-making and how interventions are implemented within their hospital and seeing the impact has made them be more excited and it has been an incentive for them to really truly work to change the culture.

And that's ultimately what I think will be what --

>> That's terrific.

One last quick question.

You can nod.

Was measurement of outcome critical for them in terms of, you know, their getting onboard?

Did they have to be able to in real time view progress?

>> Well, it's used as I say to --

They don't see the outcomes before they join but they're shown evidence and data of how it's worked in other states and with other projects and programs to be recruited to join.

>> We found that rapid cycle development, rapid cycle evaluation was small tests of change and then you can measure on a very small scale and then expand it, measure again, expand it, measure again, because when people try to do everything all at once, it's going to fail.

So that rapid cycle change is really critical.

>> Thank you.

Well, thank you.

Let's give a hand, a round of applause.

[Applause]

>> As our closing panel presenters and discussants are coming, one quick housekeeping update that I didn't mention in my earlier remarks is all the slides for these presentations will be available on our website, on our Internet page in the next week or so.

Our final panel for today's forum is state and national efforts to promote healthy child development. Our first speaker is Sonesiere Cobb-Souza. Ms. Souza is the current director of the Division of Program Operations for the Office of Minority Health at the United States Department of Health and Human Services. She received the Assistant Secretary Superior Service Award for her outstanding leadership in the development of programmatic initiatives that target hard-to-reach, high-risk, and disenfranchised racial and ethnic populations in order to improve their health outcomes. During her 35-year public health career, Ms. Cobb-Souza has held a number of progressively responsible public held positions at the local and state levels in Chicago, Illinois, Ohio, and Wisconsin as well as here at the CDC. Ms. Cobb-Souza served as the Deputy Director for the Office of Minority Health and Health Disparities here at CDC from 2002 to 2007, where during this time she led the coordination of the initiative to eliminate racial and ethnic health disparities for CDC and assisted in developing and implementing CDC and HHS policies and programs related to racial and ethnic health. Ms. Cobb Souza received her bachelor's degree in health education and master's program in health administration from George Williams College in Illinois. And I would be remiss if I didn't say that I don't think I'd be standing here today

if it wasn't for Ms. Cobb-Souza.

I don't know if that's a good thing or bad thing but the first time I came to the CDC I came to work for her and she was my first supervisor here at the agency. So we've come full circle.

Our second panel presenter is Mrs. Kimberly Stringer-Ross. Ms. Ross is currently serving as the Early Brain Development and Language Acquisition Program Manager at the Georgia Department of Public Health, where she provides leadership in the management and coordination of a statewide multiagency, multidimensional initiative that brings together governmental, academic, and business communities to address language nutrition and development health in at-risk Georgia children. Prior to this role, Mrs. Ross served as Deputy Director of Government Relations and as a Health Communication Specialist for the Georgia Department of Public Health. She holds a bachelor's degree in public relations from UGA Grady College of Journalism and Mass Communication.

Ms. Stringer received her master's of arts and communication and graduate certificate in public health from Georgia State University.

Before becoming to department of public health,

Ms. Ross spent four years

with a private sector research firm constructing and evaluating public health and public policy programs.

And our discussant for this panel is Matthew Penn.

Matthew is the current Director of CDC's Office for State, Tribal, and Local and Territory Supports Public Health Law Program.

In his role as director, he leads a team of legal analysts responsible for the agency's efforts and legal epidemiology and workforce development to support the understanding and use of law as a public health tool at the state, tribal, and local territory levels.

Mr. Penn and colleagues have been shaping new directions for the public health law community with research and publications including Better Health Faster:

The Five Essential Public Health Law Services;

Policy Surveillance: A Vital Public Health Practice Comes

of Age; and A Transdisciplinary Approach to Public Health Law:

The Emerging Practice of Legal Epidemiology.

Prior to entering federal service,

Mr. Penn was a staff attorney serving South Carolina's Department of Health and Environmental Control

as an advising litigation attorney

with extensive experience in the areas of emergency preparedness, disease control, environmental health.

Please join me in welcoming Ms. Cobb-Souza.

[Applause]

>> Okay, yes, we'll almost at afternoon.

Good afternoon, everyone.

Thank you so much.

I really appreciate being here.

It really is a tremendous opportunity to talk with you

about some of the national programs that we're sponsoring in the Office of Minority Health at HHS, as well as to talk with you about some of the disparities data. I know that some of my colleagues in prior panels have covered but I would be remiss coming from minority health and not painting that picture even further with you. So please if you would indulge me. So starting first, the overview of my presentation this afternoon is to provide you with information, updated information from a newly released report, from the Casey Foundation, that looks closely at those indicators of a child's well-being, as well as outlining the contributing factors to the four, first being the economic circumstances, second the health and wellness overall for the children, as well as the mother, the families, third is education, and fourth is family and community. Some of the state and national programs that I'll just touch on this afternoon, because I know that I'm close to standing between you and lunch and I wouldn't want that to happen, starting first with Success By 6, which is a program that is implemented in the state of Alabama. Baltimore, as locals now, I'm a native almost of Maryland. Been there ten years. But Baltimore Health babies or Baltimore City youth.gov which is an interagency working group that's supported by HHS, as well as home visiting evidence of effectiveness and the state partnership initiative grant program that the Office of Minority Health manages. So here, as you can see with this chart, we know that there 73 million children in the US. We know that it's approximately 23% overall of the population and close to half of those children actually represent racial and ethnic minority populations. Understanding this changing demographic really help us in being able to shape policy, plan for programs, as well as looking very closely at what's needed specifically to promote healthy child development that would be culturally competent strategies that we put in place. Now according to the Casey Foundation, they're looking at these indicators. There're a four-set here of these domains. Starting first are the economic circumstances; second, health and health conditions of not only the child and as the presenters or the panelists earlier today have noted, we're not looking's only at the child but we're looking at the family, we're looking at the parents, and most closely looking at the mothers, third is education and education status, and fourth, family and community. Now what we know in terms of economic circumstances, we know that children who live in households where there is one parent at minimum who is employed, gainfully employed as we would say, full-time 12 months

out of the year fair better in many different variables and I'm going to share that with you in just a minute. So here, if you take a look at this graph and I'm going to quickly go through those.

I had to come in with some data.

I know this is CDC.

This is where I started.

So you can't show up without having the charts here.

So we look here in the circles you'll notice that for African-American, for American Indian, and Hispanic children, we know that when we compare the levels of children that are living in poverty, as well as children who have parents that lack secure employment that there's huge disparities across those groups as well as children that are living in households in which we know that there's a higher housing cost.

And so when there is a higher housing cost for the states, we know that there are one very difficult decisions that must be made by the caregivers and by the parents in terms of supporting their families and then the fourth area here is we're looking at the percentage of teens that are not in school and are not working.

Now this next chart here, and excuse me for not having the print a little larger but I was trying to ensure that we get all 50 states represented here, but what you'll see is that the states that rank in the top one through 13 is that we're looking at states in the Northeast; however, when we consider the states that are in lower 50 that are ranked there, we're seeing Florida, California, Arkansas, New Mexico, Louisiana, and Mississippi.

What I can share with you is that in terms of Louisiana, when we look at the percentage of the children that are living in households where parents are either not gainfully employed full-time for a period of 12 months out of the year that children to parents that are living in Louisiana and also Mississippi and West Virginia seem to have the highest rates.

With Mississippi and West Virginia, the rates are about 37%.

Also here when comparing the number of youth that were disconnected from both work and school in 2015, what we know with the latest data is that there's approximately 1.2 million teens between the ages of 16 and 19 that were either not enrolled in school nor employed.

Now key indicators for health and the panelists have touched on this earlier, but I just want to call your attention to where we still see the persistent disparity there for low-birth-weight babies, particularly for African-Americans as well as looking at Asian and Pacific Islanders at 8.4%, children without health insurance.

We still have a huge gap there.

And it's primarily when we see that gap, American Indian children that are without health insurance. Children and teen deaths per 100,000,

that's African-Americans and American Indians that have a huge disparity.

And teens who abuse alcohol and drugs from the latest data is 6% is for Hispanic children and teens. The state-by-state comparison here of health I'm going to skip this because there's other information I'm going to share with you in just a moment.

Education, what do we know about that domain?

We find that there is a huge gap in terms of the number or of young children that are not in school, I should say the percentage, for American Indian children and we're looking at those that are three to four years of age that 56% of them as well as 60% of Hispanic children between the ages of three and four that are not in school. For fourth graders that are not proficient in reading, there's a huge gap again, African-Americans 82%, Hispanic 79%, and American Indians 78%, as well as we continue to see that gap persists for eighth-graders that are not proficient in math as well as high school students that are not graduating on time. And this is just a map that's ranking those states based on those educational outcomes and more information is available from that Casey report online.

Family and community -- Uh-oh.

Family and community.

So here we're looking at the number or the percentage of children that are living in single-parent families, the percentage of children in families where the household head lacks a high school diploma. From some of the latest data we're seeing that for children who live in households where the caregivers or the parents lack a high school diploma, we know that in many instances those children may not be actually engaged in educational programs, you know, three years old, four years old, five years old. They may also have parents that are not gainfully employed for a 12-month period and full time.

And this will impact when we consider in terms of their future educational outcomes in some instances, as well as we're seeing a disparity there for the teen births.

Skip that one.

So state and national programs, I want to share with you starting first with United Way in Alabama. Success by 6, this is a program that actually engages in a partnership with private industry, as well as faith-based organizations and pre-K programs in the public schools in Alabama.

The purpose here is to be able to increase the number of children that actually can take advantage of those three years old, those four years old, those 5 years old, getting them prepared so that they're ready at the time when they enter school which will actually assist them in moving forward as well as increase their proficiency as we are, you know, reviewing their reading as well as math.

They engage community workers with this program to actually to educate parents and also the gatekeepers in the community so that they are aware of and they understand the advantages of the children there in Alabama participating and understand the importance of them being proficient in math as well as reading.

The second one is a program that's actually implemented in the city of Baltimore but the state of Maryland supports and the goal here is to ensure

that Baltimore's babies are born in healthy way.

It's to address low birth weight primarily for African-American mothers that are pregnant.

They start first with a communications campaign with explaining the importance and having grandmothers, if you will, or community health workers that are in the community that actually are able to share this information and get into faith-based organizations as well as other social groups and through their networks so that they can reach those women, one, while they're pregnant as well as those prior to pregnancy so that they can actually get them into prenatal care and follow up for those visits and bring them back in for those who've fallen out of care.

The third example

of the national program here is the Federal Interagency Working Group on Youth Programs.

How many people are familiar with this?

Yes? Okay, great.

Alright, so this is one in which HHS actually through an interagency working group there are representatives across 20 different federal agencies that participate.

The purpose here is to be able to collect the information to collaborate on those programs where we know that they're promising approaches, they're evidence-based interventions and to be able to actually share that information about those programs that are evaluated that have been proven with effectiveness as well as being able to disseminate the results throughout the networks to make it available.

You can actually go online

if you haven't had the opportunity to visit the site.

You can review the information in terms of their outcomes, their publications, review the related resources as well as the information that's available on their federal website and sign up for newsletters for this group.

Next we have the national programs, the home visiting, evidence of effectiveness which is one that's being led by ASPE and the Administration for Children and Families.

I know the representatives from CDC who participate in evaluation.

Any representatives here?

Don't know?

Okay, alright, so this is another national program in which actually it is an overall assessment of evidence of maternal and infant health programs

that have been supported by the federal government.
There is a database that's collected.
They've actually published reports in terms of the domains
of effectiveness and I would encourage you,
again if you have not already, to visit the site here
and the publications because this has been very effective
in assisting community organizations
and examining what are the essential domains,
what do we know that works, what has been modeled or modified
for various communities,
and in addressing the communities' priority needs
because, as we all know, what may be our priority
and our need may not be the communities for most priority
and that must be addressed first.
And so they've actually published
over 20 evidence-based models that by outcome domain
and so it's one that's been very effective
in informing our communities.

Next I'd like to share with you this is a program
that we're very proud of.

It is a state partnership initiative grant program
in fiscal 2015.

The Office of Minority Health actually developed a funding
opportunity announcement in which we wanted to support
that collaborative partnership between state departments
of health as well as state offices
of minority health and health equity.

The purpose in actually supporting the partnership would
assist us in supporting the role and strengthening the role
of our state offices of minority health
so that the health departments would see
that they were actually if they were not already working
with them actively working with them to, one,
conduct a state assessment using existing data to determine
where their gaps health disparities are as well
as to identify what particular health focus areas
or what particular strategies need to be employed
to improve the health status for those populations
where the disparities were greatest.

Secondly, the state was then required to publish the results
from the health disparities profile.

Third, they then are required to implement their plan to be able
to close the gap for specific communities.

Now communities may be defined
as a metropolitan statistical area looking closely
at a strategic planning area.

It might be a census tract in some cases.

There're specific counties.

So would like to highlight there are two states, Virginia
and Georgia is the second one.

So for Virginia, the state actually examined their existing
data in terms of actually identifying
where the gap was the greatest and taking a look
at the high school graduation rate, primarily for Blacks
and African-Americans in the state of Virginia.

They then from the data that they had available were able
to really zero in on a particular county and then

from there Danville, which is one of their cities there. And so they have a partnership where they're working with the public schools to, one, be able to strengthen the curriculum to meet the needs of the kids that are there in Danville. Secondly, in working with the community, the community including the parents. Someone earlier today talked about if we're looking for parents, they're right there in the waiting room. Absolutely and in this case they actually had older women who were members of the community to reach out to the parents to really engage them and bring them in as part of this process and then develop a planning body to assist them in actually implementing this program. It's been very effective in engaging the parents in the program as well as increasing the participation and attendance rate for the youth who are a part of this program because, as I'm sure you're aware, attendance in school is one of the predictors in terms of the not only grades but proficiency when we're looking at reading and math. So Virginia is moving in the right direction. We're expecting to get some of the preliminary data the first quarter of 2018 and for all of these projects they are expected to publish. So we will have the preliminary -- Oh, I got five minutes. Okay. We're expected to have earlier publications by the end of the first quarter of 2018 from their data. And next so there's age-appropriate curriculum, desired outcomes here is to decrease school absenteeism, decrease school inactivity, addressing in-school disciplinary problems as well as increasing the high school completion rate within four years. Next Georgia, so Georgia was one of the states that also decided to focus on a program that is to address nutrition, language nutrition, promoting healthier behaviors, healthy eating, physical activity. And also this is a demonstration in which this program is actually implemented in three different locations in the state of Georgia, first in Clarkston. Everyone knows where Clarkston is, right? Okay, alright. Someone's -- Okay, so Clarkston. The second location is Dalton, Georgia, and third we're looking at Vidalia, Valdosta, I'm sorry, I was thinking Vidalia. Valdosta, Georgia. So these are three very distinct communities, different populations. The emphasis here is again on supporting healthy eating, physical activity, and with parents. Second here we're looking at the accomplishments of this program. We funded it in August 2015. The program actually got up and start running after we got past the IRB requirements and other requirements for evaluation

for all of our projects.
And so they've had close
to about 18 months actual implementation
and they've been able
to actually publish two manuscripts, first looking
at reducing the health disparities among Georgia's
children with integrated food
and language nutrition intervention for early care
and education environments
and also evaluating public/private partnerships.
The project has also been successful in being able
to reach a number childcare centers as well
as engagement appearance and also developing
and strengthening what in some cases there was a public/private
partnership and others actually engaging those parents
and particularly in communities
where you have a greater percentage of parents
where English is a second language.
So this is another program that we've supported
through the state partnership.
And how many minutes do I have?
Do I have one or two?
Okay, I didn't bring any more slides, I promise.
I won't put anything else up.
But I just -- The Resource Center, they made me promise
that I would show this slide in terms
of to learn more information about any of the programs
that I've mentioned as well as to be able to connect
with us through social media.
Please visit our website.
You can tweet.
I don't do social media.
They're trying to get me up to speed
but that's the contact information.
I also -- And if there's time during the Q&A just want
to mention, I only highlighted a few of our programs.
We have a few others that are brand new
that we recently funded, too that I'd like to just mention
that one was competed this fiscal year
and awards were issued in August and that is one
in which we are actually supporting the American Indian
and Alaska Native Health Equity Demonstration.
It is one in which the program is actually addressing
historical, contemporary and generational trauma.
So we funded four tribes and tribal organizations
that are working in partnership.
The requirement there is to be able
to address behavioral mental health issues
to provide the support and it's although the emphasis
in the target population notes youth and the requirements
of the program, it is extended to the caregivers,
to the parents, to the elders, and to the community.
So this is a brand new program.
It just started.
I had to mention that one.
Second one, communities addressing childhood trauma
and I can talk with you about that later.

Thank you.
[Applause]

>> Good afternoon.

I am here today to talk to you about the Brain Trust for Babies, which is Georgia's early brain development and language acquisition approach.

So early brain development and language acquisition has been a priority of the Georgia Department of Public Health since 2014. It's in support of Governor Deal's education goal to increase the number of children who are reading on level at the end third grade, by the completion of third grade.

Currently two-thirds of Georgia's children are not reading on level by the end of third grade.

That's actually 23% if you're looking at children who live in poverty.

So the inverse of that is that 77% of children living in poverty are not reading proficiently at the end of third grade.

And we've talked -- There's been a few presenters today who have dropped this third-grade reading marker and we kind of move on but why third grade reading?

Do we know why third grade reading, what happens in third grade?

There's a switch in third grade from when a child stops learning to read where they then start reading to learn.

So a child takes a science textbook home at night and has to read the chapter on science and then come back the next day and the lesson is about whatever they read that night.

If that child is not reading on level with their peers, they're just going to fall further and further behind.

So if we're looking at the number of children living in poverty who are not reading proficiently at the end of third grade, we're starting to look at that gap grow as they start reading to learn.

You may also be asking why am I holding you back from lunch to talk about something that clearly a literacy issue.

It's because health and education are intimately intertwined. There's a strong link between health and education where more education is strongly linked to longer and healthier lives.

We see a direct connection between college education and living longer for both men and women. College graduates are living at least five years longer than peers who have not finished high school.

Not only do people live longer but babies die less.

This is powerful data when we look at the generational effects of education. So the infant mortality rate for women who do not finish high school is nearly double

that of women with college degrees.

We also know that an additional four years of education reduces a wide range of health risks including the morbidity and mortality associated with diabetes, heart disease, being overweight, and smoking. So as we've identified the importance of education on these health outcomes, it's then essential to look at impacting children's academic success.

So early language exposure enhances development and academic success. Before birth and during the first three years of life, the brain undergoes dramatic development. This early language exposure is critical for brain development and creates a foundation for all future learning. So a child's early language exposure is the single strongest predictor of third-grade reading, which is an indicator, as I said before, of future academic success and lifelong health. So since we know that access to language enhances this development and academic success, how do we ensure that all babies have access to language? The way that Georgia is approaching this is through the development of the Brain Trust for Babies. So the Brain Trust for Babies was first convened in 2015 by then DPH Commissioner Dr. Brenda Fitzgerald. You may all be familiar with her. She is now your director. It is a multidisciplinary statewide collaborative with the goal to redefine infant/toddler wellness to include language acquisition and social emotional health in addition to physical well-being so that by 2020 all children in Georgia are entering school thriving and ready to learn.

This is a quick snapshot of the advisory board for the Brain Trust for Babies that's made up of 19 different individuals representing different state agencies, nonprofits, academia, professional associations like Georgia AAP, the George OB/GYN Society and they focus on five strategic objectives with strategies that are advanced through the work of four subcommittees. So there are subcommittees that focus on access and policy, on data and evaluation, integration and training, and outreach and awareness. The subcommittees are made up of partners from close to 50 organizations, including some folks from right here at CDC.

So I mentioned that there are five objectives. The first one is focusing on reducing the word "gap." Who's familiar with the word "gap?" Few people, yes. So quickly go through.

There was a study about two decades ago by researchers Hart and Risley that looked at families from low-income families, middle income, and higher income. And they went into the home and they gave families who have babies a LENA device. Do you know what a LENA device is? It's like a Fitbit for words. It's a word pedometer. Baby wears a little vest and then the LENA device is in the vest and it records the language that the baby is hearing. It's not going to record if you're watching CNN or if you have the radio on but it's going to record infant-directed speech and any utterances from the infant. They then went in and they can take that LENA device, put it in some kind of sophisticated computer program and it can pull out the number words that baby is hearing. What they found is that babies from low-income families were hearing 30 million fewer words when they extrapolated this data out than babies in higher income families. So that means that they're entering school with a much lower vocabulary, listening and spoken vocabulary, than their peers. So they're already at this disadvantage. So what we've done with the Brain Trust for Babies is realize we need professionals who are already working with these families to know about the word gap and know that the biggest way to close that word gap is to talk with families about talking with their babies. That's as simple as talking with their babies to start closing the word gap. So we do this through a few initiatives. Souza mentioned one, Eat, Move, Talk that we have. We also have a program called Talk With Me Baby that trains professionals who are in our WIC clinic, early education or early care and learning centers, nurses, pediatricians, obstetricians, everyone who's already working with these families and we also support Reach Out and Read which is in pediatricians' offices. It's giving books to families but also connecting it to developmental milestones that that child should be reaching.

So we know that language exposure is important but we also know that just telling everyone to talk with their baby and hearing it from all kinds of workforces is not going to be what helps every child because certain children are going to have barriers that keep them from accessing language. So much of the work that the Brain Trust focuses on is on removing those barriers so that those children can then access language. So second objective focuses on children who are deaf and hard of hearing and it is to ensure that all children are on a path to third grade reading by making sure these babies are screened

for hearing loss by one month, diagnosed by three months, and in intervention by six months.

So this is our EHDI program, our early hearing detection and intervention program.

These 136 numbers research demonstrates that if a child who is diagnosed as deaf or hard of hearing reaches these milestones they're more likely to stay on track with their peers, with their hearing peers, to be able to read on level by the end of third grade. So in Georgia we're doing pretty well around our early hearing detection and intervention markers.

We have 99% of babies leaving hospitals having been screened for hearing loss, which is awesome.

It's also because it's legally mandated that they have to be screened.

So it's a really great way to get things done is to mandate them.

We have 75% of all babies are diagnosed with hearing loss or diagnosed by three months.

So doing pretty well there.

And in 62% of all babies who are diagnosed with hearing loss and then enrolled

in intervention are enrolled by six months.

So we have some work to do there.

A few things that we are doing around both diagnosis and enrollment is we have teleaudiology

in some of our rural areas.

We just started that down in Waycross, Georgia.

In areas where there are not providers who can conduct a diagnostic screen on an infant, we can do that through teleaudiology now.

So the third objective is around ACEs.

It is to achieve breakthrough outcomes for all children by building self-regulation skills, executive function and social emotional health of children and the adults who care for them.

So again touching on that two-generation approach.

We can focus on these children as much as we want, but if the parents have trauma in their life, if mom has maternal depression, we know that that's going to be a barrier to that child accessing language.

One way that we're addressing some of these adverse childhood experiences is through a home visitation program.

So certified home visitors go into homes and provide curriculum to address and help minimize adverse childhood experiences with at-risk families.

This is a voluntary home visiting programs that can help families

by strengthening maternal parenting practices, the quality of the child's home environment, and children's development in a family-friendly manner.

In 2016, in 15 of our counties, we saw 1636 families.

And you'll see that 84 of these families, 84% were screened for depression, 99.4% of children had no verified reports of maltreatment, 93% were screened for intimate partner violence, and 94% of home visits include brain building activities.

We've also incorporated the ACEs screen into our questions into the 2016 BRFSS and then we're doing it again in 2018 so we can start to gather some data on what it looks like across Georgia and then be able to pinpoint some areas of targeted focus. The fourth objective is to ensure that all children in Georgia are screened for autism and communication delays by 18 to 24 months and connected to the appropriate intervention at the time of identification. We have done a lot of work with partners at the Marcus Autism Center and the Emory Autism Center around this work, around training providers both in the screening and building capacity for treatment and intervention. This summer Georgia Medicaid added a modifier to the screening codes so that a provider could bill at visits for both the developmental screen and an autism screen. But previously there was one code and we couldn't sort out if it was a developmental screen that was conducted or it was an autism screen that was conducted or if both were conducted, one was conducted, we did not know. So now there's a modifier. Providers can be reimbursed for conducting both screens, so we hope that that encourages providers to do both screens but we can also start getting those data to see how many screens are being done. But we know that we can screen all we want but if we don't have capacity to do anything with children who are identified at risk, then we're still failing. So a big part of the work we're doing is identifying ways to increase capacity and increase the number of providers that we have, especially in our rural counties.

The fifth objective is ensuring that all children zero to three who are identified with medical or development concerns are connected to appropriate resources as early as possible. So you see here that Georgia has been above the national average for a while in percent of children ages 10 through 71 months receiving a developmental screen using a parent-completed screening tool like the ASQ but you'll see that that's still around 40%. So while it's above the national average, we want to be doing better. One thing we're doing in Georgia is implementing the Help Me Grow model, which we hope to use to increase referrals and close that feedback loop between providers and where the referral is going and to the early interventionists.

So Children 1st program, CMS and project LAUNCH are areas

where we're working to increase screening and connection to intervention. Project LAUNCH is in Muscogee County and they're able to pilot innovative avenues of screening. They're doing screenings in Pre-K programs. They're distributing the ASQ questionnaire in those early care and learning environments and then they're also giving them out in the registration packets for school. So we're looking to see if these innovative different areas, different arenas of screening are going to make an impact on the number of children being screened and connected to services. And then Paul touched on this earlier about the importance of making sure babies are born full term and at 40 weeks as gestational age matters. So in addition to the five objectives I just went through, the Brain Trust identified crosscutting measures and one is reducing the number of preterm births. So overall we know that a third of Georgia's children read on grade level and this study shows the striking relationship between gestational age and early reading proficiency. While 41% of children born between 37 and 41 weeks read on grade level by the end of third grade, only 24% of children born under the age of 28 weeks read on grade level.

We also saw some of these data earlier at the national level but Georgia is echoing it. There is an increase in preterm births, which is not the direction we want to see that going

but we have strategies in place to decrease preterm births. So we offer family planning because optimal inter-pregnancy interval reduced preterm births. We support the regional perinatal centers and the important work that they do and we have programs like baby love and centering pregnancy, that group model of prenatal care that we support some our districts. So all these strategies support better health outcomes which lead to moms having healthier babies.

So I hope this gives you a snapshot of how Georgia is working to ensure every child reaches their potential and read on level by the end of third grade. In conjunction with our partners, we're workforces in the importance of language nutrition. We're increasing identification of children who are hard of hearing and we're helping promote developmental and autism-specific screenings and helping find the consequences of adverse childhood experiences.
[Applause]